

ADVANCED CONNECTION SYSTEMS

# JST CATALOG VOL. 120e



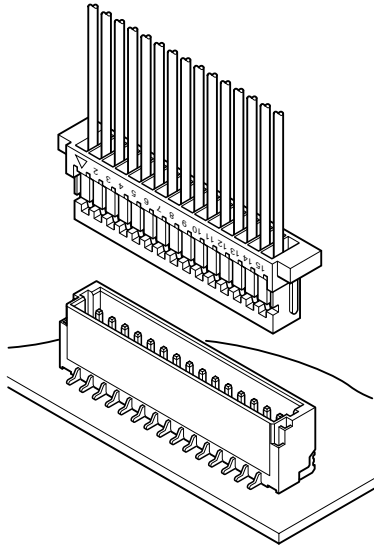
<URL> <http://www.jst-mfg.com>

**JST**  
The Quality Connection



# SH CONNECTOR

1.0mm pitch/Disconnectable Crimp style connectors



The world's first 1.0mm pitch crimp style connector.

- Compact, low profile design
- Compatible with the SR insulation displacement connectors
- Housing lances

## Specifications

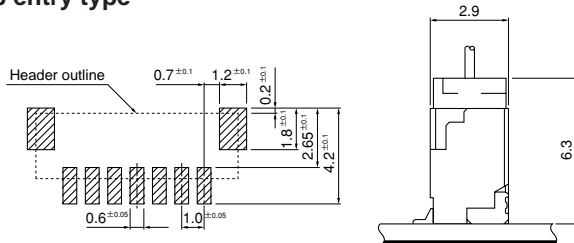
- Current rating: 1.0A AC, DC (AWG #28)
  - Voltage rating: 50V AC, DC
  - Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
  - Contact resistance: Initial value/20m Ω max.  
After environmental testing/40m Ω max.
  - Insulation resistance: 100M Ω min.
  - Withstanding voltage: 500V AC/minute
  - Applicable wire: Conductor size/AWG #32 to #28  
Insulation O.D./0.4 to 0.8mm
- \* RoHS compliant products are published.  
\* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.  
\* Contact JST for details.

## Standards

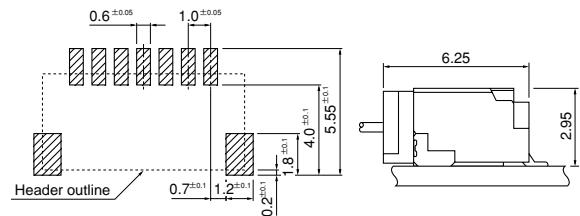
- Ⓜ Recognized E60389
- Ⓢ Certified LR20812

## PC board layout (viewed from component side) and Assembly layout

### Top entry type

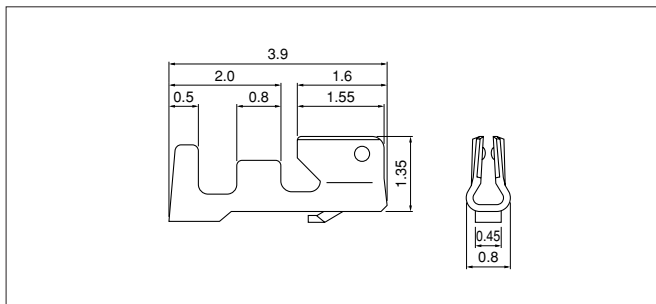


### Side entry type



Note: 1. Tolerances are non-cumulative:  $\pm 0.05\text{mm}$  for all centers.  
2. The dimensions above should serve as a guideline. Contact JST for details.

## Contact



Model No.	Applicable wire			Qty / reel
	mm <sup>2</sup>	AWG#	Insulation O.D. (mm)	
SSH-003T-P0.2-H	0.032 ~ 0.08	32~28	0.4~0.8	23,000

### Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

### RoHS compliance

Note: Contact JST for gold-plated products.

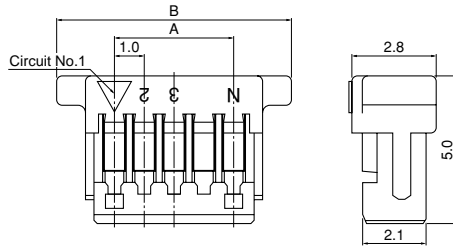
Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SSH-003T-P0.2-H	AP-K2N	MKS-L-10-3	MK/SSH/L-003-02	APLMK SSH/L003-02
		*MKS-SC	SC/SSH/L-003-02	APLSC SSH/L003-02

Note: \*Strip-crimp applicator  
Contact JST for applicable wires in case that it is not usable due to wire size.

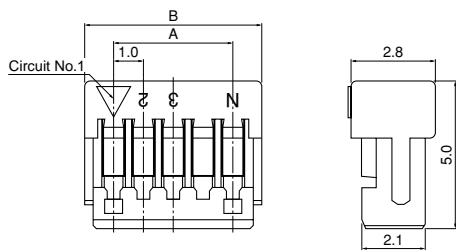
# SH CONNECTOR

## Housing

### With protrusions



### Without protrusions



Circuits	Model No.		Dimensions (mm)			Q'ty / box
	With protrusions	Without protrusions	A	B		
2	SHR-02V-S-B	SHR-02V-S	1.0	5.0	3.0	2,000
3	SHR-03V-S-B	SHR-03V-S	2.0	6.0	4.0	2,000
4	SHR-04V-S-B	SHR-04V-S	3.0	7.0	5.0	2,000
5	SHR-05V-S-B	SHR-05V-S	4.0	8.0	6.0	2,000
6	SHR-06V-S-B	SHR-06V-S	5.0	9.0	7.0	2,000
7	SHR-07V-S-B	SHR-07V-S	6.0	10.0	8.0	2,000
8	SHR-08V-S-B	SHR-08V-S	7.0	11.0	9.0	2,000
9	SHR-09V-S-B	SHR-09V-S	8.0	12.0	10.0	2,000
10	SHR-10V-S-B	SHR-10V-S	9.0	13.0	11.0	2,000
11	SHR-11V-S-B	SHR-11V-S	10.0	14.0	12.0	2,000
12	SHR-12V-S-B	SHR-12V-S	11.0	15.0	13.0	2,000
13	SHR-13V-S-B	SHR-13V-S	12.0	16.0	14.0	2,000
14	SHR-14V-S-B	SHR-14V-S	13.0	17.0	15.0	2,000
15	SHR-15V-S-B	SHR-15V-S	14.0	18.0	16.0	2,000
20	SHR-20V-S-B	—	19.0	23.0	21.0	1,000

### Material

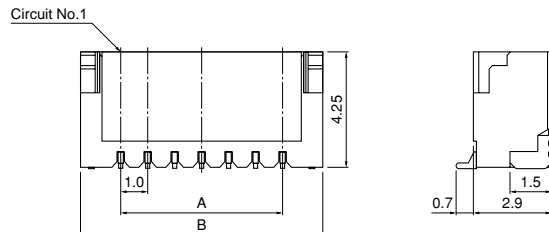
PBT, UL94V-0, natural (white)

### RoHS compliance

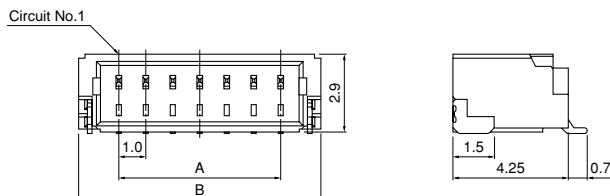
## Shrouded header

The shrouded headers are interchangeable with those of the SR insulation displacement connectors.

### Top entry type



### Side entry type



Circuits	Model No.		Dimensions (mm)		Q'ty / reel	
	Top entry type	Side entry type	A	B	Top entry type	Side entry type
2	BM02B-SRSS-TB	SM02B-SRSS-TB	1.0	4.0	1,500	3,000
3	BM03B-SRSS-TB	SM03B-SRSS-TB	2.0	5.0	1,500	3,000
4	BM04B-SRSS-TB	SM04B-SRSS-TB	3.0	6.0	1,500	3,000
5	BM05B-SRSS-TB	SM05B-SRSS-TB	4.0	7.0	1,500	3,000
6	BM06B-SRSS-TB	SM06B-SRSS-TB	5.0	8.0	1,500	3,000
7	BM07B-SRSS-TB	SM07B-SRSS-TB	6.0	9.0	1,500	3,000
8	BM08B-SRSS-TB	SM08B-SRSS-TB	7.0	10.0	1,500	3,000
9	BM09B-SRSS-TB	SM09B-SRSS-TB	8.0	11.0	1,500	3,000
10	BM10B-SRSS-TB	SM10B-SRSS-TB	9.0	12.0	1,500	3,000
11	BM11B-SRSS-TB	SM11B-SRSS-TB	10.0	13.0	1,500	3,000
12	BM12B-SRSS-TB	SM12B-SRSS-TB	11.0	14.0	1,500	3,000
13	BM13B-SRSS-TB	SM13B-SRSS-TB	12.0	15.0	1,500	3,000
14	BM14B-SRSS-TB	SM14B-SRSS-TB	13.0	16.0	1,500	3,000
15	BM15B-SRSS-TB	SM15B-SRSS-TB	14.0	17.0	1,500	3,000
20	—	SM20B-SRSS-TB	19.0	22.0	—	3,000

### Material and Finish

Contact: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
Housing: PA, UL94V-0, natural (ivory)  
Solder tab: Brass, copper-undercoated, tin-plated (reflow treatment)

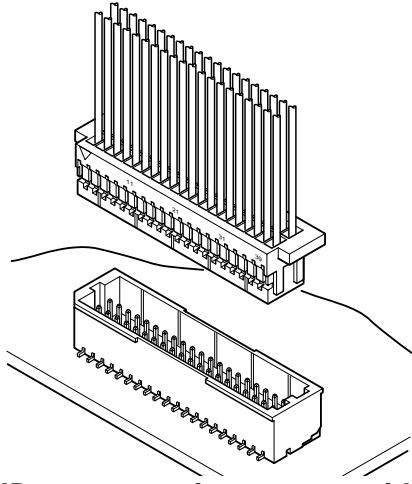
### RoHS compliance

This product displays (LF)(SN) on a label.  
Note: 1. The products listed above are supplied on embossed-tape.  
2. Contact JST for the headers with gold-plated pins.  
3. Contact JST for the top entry type headers with suction cap.



# SHD CONNECTOR

1.0mm pitch/Disconnectable Crimp style connectors



The SHD connector is compact with a mounting height of 6.3mm for top entry type and 5.5mm for side entry type, and a width of 5.0mm for top entry type and 5.1mm for side entry type.

- Compact, low profile design
- Anti-misinsertion feature
- Receptacles with protrusions
- Header designed for vacuum pick and place robotics

## Specifications

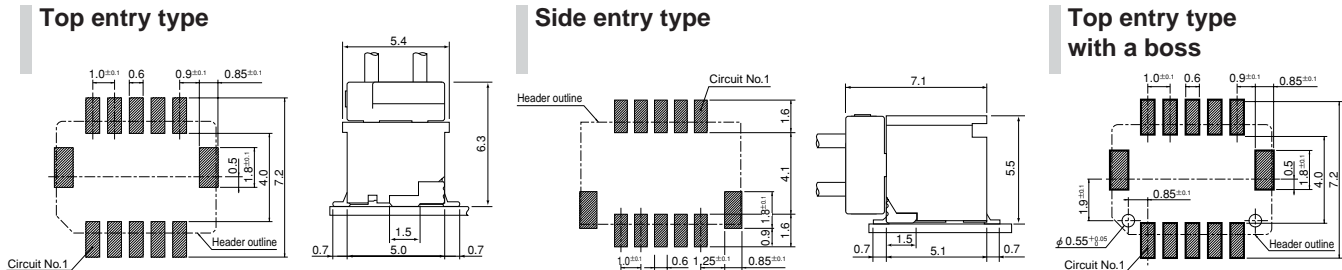
- Current rating: 1.0A AC, DC (AWG #28)
- Voltage rating: 50V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/20m Ω max.  
After environmental testing/40m Ω max.
- Insulation resistance: 100M Ω min.
- Withstanding voltage: 500V AC/minute
- Applicable wire: Conductor size/AWG #32 to #28  
Insulation O.D./0.4 to 0.8mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

Recognized E60389

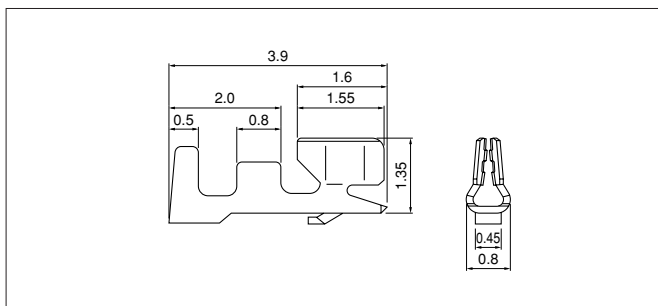
Certified LR20812

## PC board layout (viewed from component side) and Assembly layout



Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.  
2. The dimensions above should serve as a guideline. Contact JST for details.

## Contact



Model No.	Applicable wire			Q'ty / reel
	mm <sup>2</sup>	AWG#	Insulation O.D. (mm)	
SSH-003GA-P0.2	0.032 ~ 0.08	32~28	0.4~0.8	23,000

### Material and Finish

Phosphor bronze, nickel-undercoated, Mating part; gold-plated

### RoHS compliance

Note: Contact JST for tin-plated products.

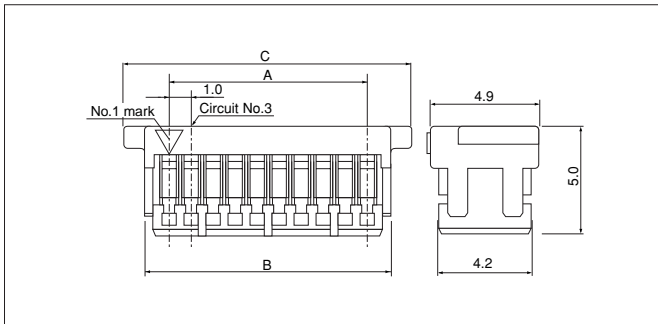
Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SSH-003GA-P0.2	AP-K2N	MKS-L-10-3	MK/SSH/L-003-02	APLMK SSH/L003-02
		*MKS-SC	SC/SSH/L-003-02	APLSC SSH/L003-02

Note: \*Strip-crimp applicator

Contact JST for applicable wires in case that it is not usable due to wire size.

# SHD CONNECTOR

## Housing



Circuits	Model No.	Dimensions (mm)			Q'ty / box
		A	B	C	
20	<b>SHDR-20V-S-B</b>	9.0	11.2	13.0	4,000
30	<b>SHDR-30V-S-B</b>	14.0	16.2	18.0	4,000
40	<b>SHDR-40V-S-B</b>	19.0	21.2	23.0	2,000
50	<b>SHDR-50V-S-B</b>	24.0	26.2	28.0	2,000

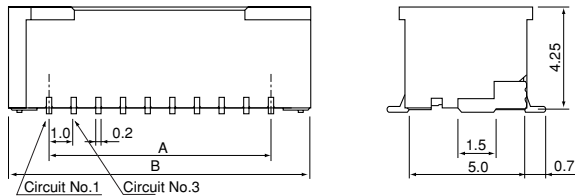
### Material

PBT, UL94V-0, natural (white)

### RoHS compliance

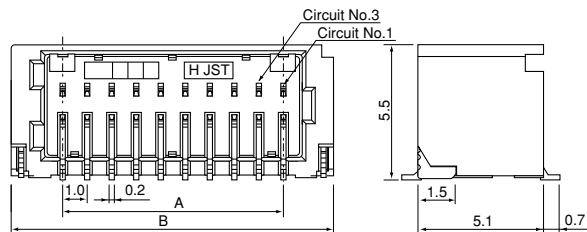
## Shrouded header

### Top entry type



Circuits	Model No.	Dimensions (mm)		Q'ty / reel
		A	B	
20	<b>BM20B-SRDS-G-TF</b>	9.0	12.3	1,500
30	<b>BM30B-SRDS-G-TF</b>	14.0	17.3	1,500
40	<b>BM40B-SRDS-G-TF</b>	19.0	22.3	1,500
50	<b>BM50B-SRDS-G-TF</b>	24.0	27.3	1,500

### Side entry type



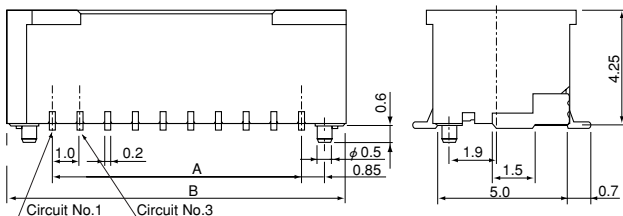
Circuits	Model No.	Dimensions (mm)		Q'ty / reel
		A	B	
20	<b>SM20B-SRDS-G-TF</b>	9.0	13.1	1,250
30	<b>SM30B-SRDS-G-TF</b>	14.0	18.1	1,250
40	<b>SM40B-SRDS-G-TF</b>	19.0	23.1	1,250
50	<b>SM50B-SRDS-G-TF</b>	24.0	28.1	1,250

### Material and Finish

Header contact: Phosphor bronze, nickel-undercoated, gold-plated  
 Wafer: PA, UL94V-0, natural (ivory)  
 Solder tab: Brass, copper-undercoated, tin-plated (reflow treatment)

**RoHS compliance** This product displays (LF)(SN) on a label.  
 Note: 1. The products listed above are supplied on embossed-tape.  
 2. Contact JST for the headers with tin-plated pins.  
 3. Contact JST for the top entry type headers with suction cap.

### Top entry type with a boss

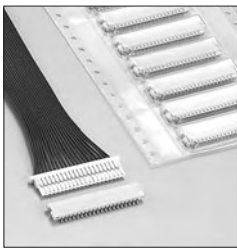


Circuits	Model No.	Dimensions (mm)		Q'ty / reel
		A	B	
20	<b>BM20B-SRDS-A-G-TF</b>	9.0	12.3	1,250
30	<b>BM30B-SRDS-A-G-TF</b>	14.0	17.3	1,250
40	<b>BM40B-SRDS-A-G-TF</b>	19.0	22.3	1,250
50	<b>BM50B-SRDS-A-G-TF</b>	24.0	27.3	1,250

### Material and Finish

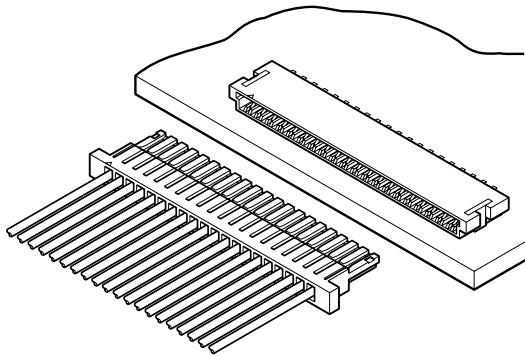
Header contact: Phosphor bronze, nickel-undercoated, gold-plated  
 Wafer: PA, UL94V-0, natural (ivory)  
 Solder tab: Brass, copper-undercoated, tin-plated (reflow treatment)

**RoHS compliance** This product displays (LF)(SN) on a label.  
 Note: 1. The products listed above are supplied on embossed-tape.  
 2. Contact JST for the headers with tin-plated pins.



# SHL CONNECTOR

1.0mm pitch/Disconnectable Crimp style connectors



- **Thin design**
- **Low insertion force**
- **Deformation preventive design**

## Specifications

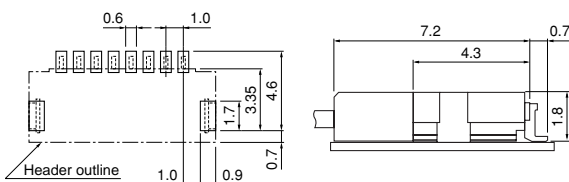
- Current rating: 1.0A AC, DC (AWG #28)
- Voltage rating: 50V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/20m Ω max.  
After environmental testing/40m Ω max.
- Insulation resistance: 100M Ω min.
- Withstanding voltage: 500V AC/minute
- Applicable wire: AWG #32 to #28
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

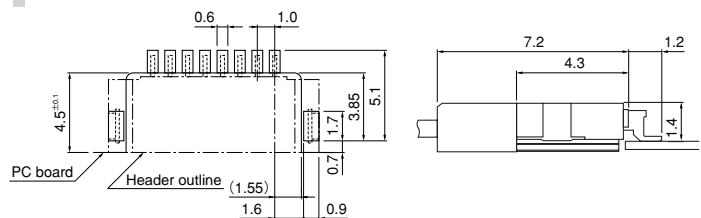
- Ⓜ Recognized E60389
- Ⓢ Certified LR20812

## PC board layout (viewed from component side) and Assembly layout

### Normal type

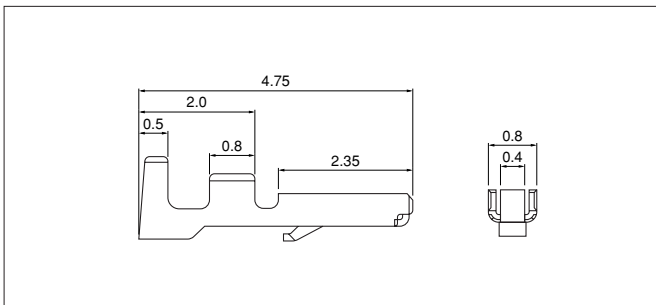


### Offset type



Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.  
2. The dimensions above should serve as a guideline. Contact JST for details.

## Contact



Model No.	Applicable wire			Qty / reel
	mm <sup>2</sup>	AWG#	Insulation O.D. (mm)	
SSHL-003T-P0.2	0.032 ~ 0.08	32~28	0.4~0.8	30,000

### Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

### RoHS compliance

Note: Contact JST for gold-plated products.

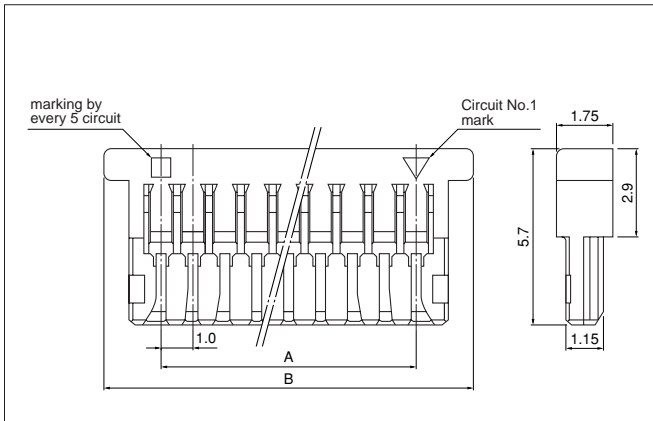
Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SSHL-003T-P0.2	AP-K2N	MKS-L-10-3	MK/SSH/L-003-02	APLMK SSH/L003-02
		*MKS-SC	SC/SSH/L-003-02	APLSC SSH/L003-02

Note: \*Strip-crimp applicator

Contact JST for applicable wires in case that it is not usable due to wire size.

# SHL CONNECTOR

## Housing



Circuits	Model No.	Dimensions (mm)		Q'ty / box
	With protrusions	A	B	
2	<b>SHLP-02V-S-B</b>	1.0	4.6	6,000
6	<b>SHLP-06V-S-B</b>	5.0	8.6	3,000
7	<b>SHLP-07V-S-B</b>	6.0	9.6	3,000
14	<b>SHLP-14V-S-B</b>	13.0	16.6	2,000
16	<b>SHLP-16V-S-B</b>	15.0	18.6	1,000
20	<b>SHLP-20V-S-B</b>	19.0	22.6	1,000
22	<b>SHLP-22V-S-B</b>	21.0	24.6	1,000
26	<b>SHLP-26V-S-B</b>	25.0	28.6	1,000
30	<b>SHLP-30V-S-B</b>	29.0	32.6	1,000

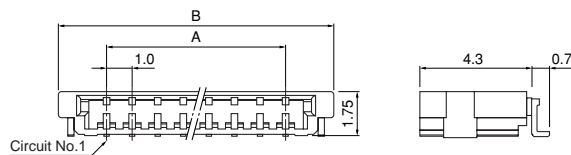
### Material

PBT, UL94V-0, natural (white)

**RoHS compliance**

## Shrouded header

### Normal type



### Normal type

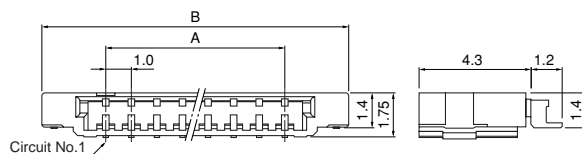
Circuits	Model No.	Insulation O.D. (mm)		Q'ty / reel
		A	B	
2	<b>SM02B-SHLS-TF</b>	1.0	4.8	4,500
6	<b>SM06B-SHLS-TF</b>	5.0	8.8	4,500
7	<b>SM07B-SHLS-TF</b>	6.0	9.8	4,500
16	<b>SM16B-SHLS-TF</b>	15.0	18.8	4,500
20	<b>SM20B-SHLS-TF</b>	19.0	22.8	4,500
22	<b>SM22B-SHLS-TF</b>	21.0	24.8	4,500
26	<b>SM26B-SHLS-TF</b>	25.0	28.8	4,500
30	<b>SM30B-SHLS-TF</b>	29.0	32.8	4,500

### Material and Finish

Contact: Phosphor bronze, copper-undercoated, tin-plated (reflow treatment)  
Housing: PA, UL94V-0, natural (ivory)  
Solder tab: Brass, copper-undercoated, tin-plated (reflow treatment)

**RoHS compliance** This product displays (LF)(SN) on a label.  
Note: Contact JST for the headers with gold-plated pins.

### Offset type



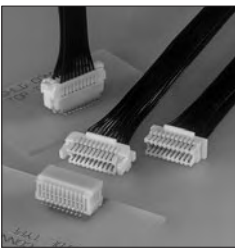
### Offset type

Circuits	Model No.	Insulation O.D. (mm)		Q'ty / reel
		A	B	
14	<b>SM14B-SHLS-1-TF</b>	13.0	18.0	4,500
20	<b>SM20B-SHLS-1-TF</b>	19.0	24.0	4,500

### Material and Finish

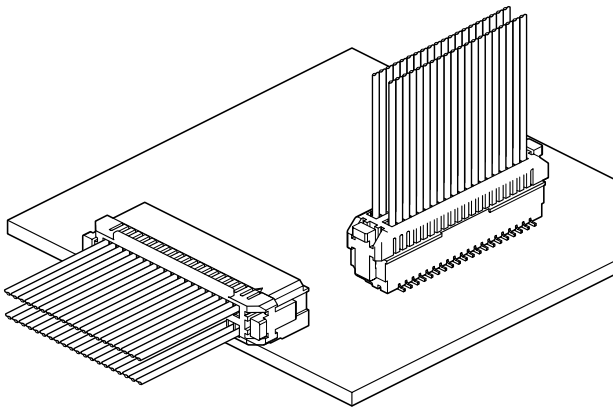
Contact: Phosphor bronze, copper-undercoated, tin-plated (reflow treatment)  
Housing: PA, UL94V-0, natural (ivory)  
Solder tab: Brass, copper-undercoated, tin-plated (reflow treatment)

**RoHS compliance** This product displays (LF)(SN) on a label.  
Note: Contact JST for the headers with gold-plated pins.



# SHLD CONNECTOR

1.0mm pitch/Disconnectable Crimp style connectors



Developed for PDP, LCD or small electronics equipment. This is a dual-row small crimp type connector with a secure locking system or without-designed for different applications. The PC board layout is compatible with that of existing SHD connector, which allows for replacement of the above existing connector.

- Secure housing lock structure (for locking type)
- Prevent deformation of contacts
- A contact lock structure
- Strong structure against external force

## Specifications

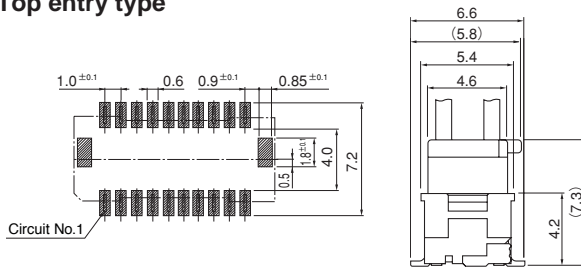
- Current rating: 1.0A AC, DC (AWG #28)
- Voltage rating: 50V AC, DC
- Temperature range: -25°C to +85°C (including temperature rise in applying electrical current)
- Contact resistance: Initial value/30m Ω max. After environmental testing/40m Ω max.
- Insulation resistance: 100M Ω min.
- Withstanding voltage: 500V AC/minute
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

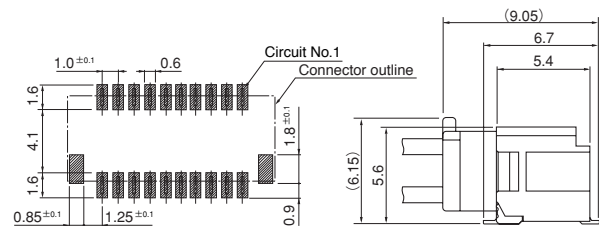
Recognized E60389

## PC board layout (viewed from component side) and Assembly layout

### Top entry type

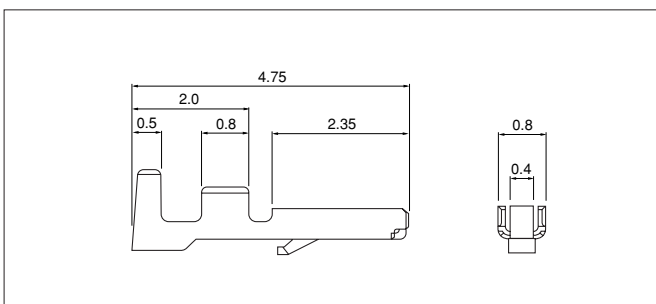


### Side entry type



Note: 1. Tolerances are non-cumulative: ±0.1mm for all centers.  
2. The dimensions above should serve as a guideline. Contact JST for details.

## Contact



Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty / reel
	mm <sup>2</sup>	AWG#		
SSH-L-003GA1-P0.2	0.032~0.08	32~28	0.4~0.8	30,000

### Material and Finish

Phosphor bronze, nickel-undercoated, Mating part: gold-plated, Crimping part: gold-plated

### RoHS compliance

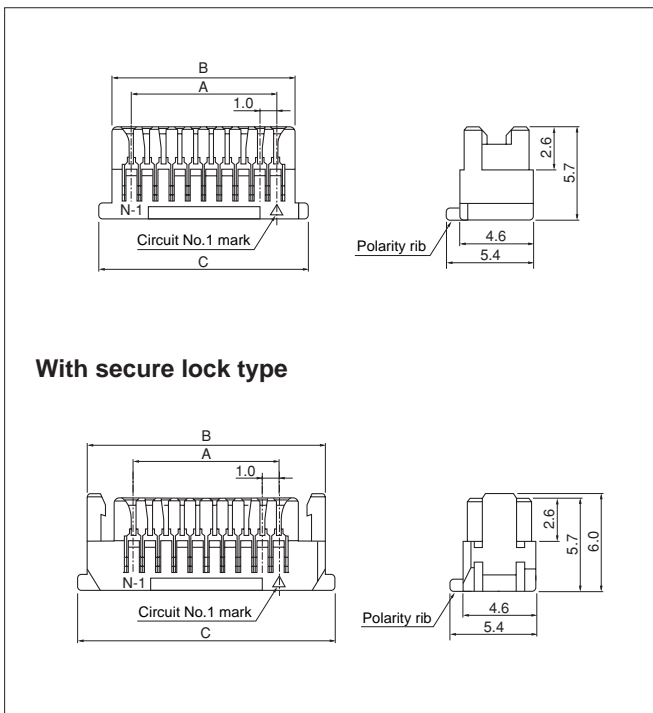
Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SSH-L-003GA1-P0.2	AP-K2N	MKS-L-10-3	MK/SSH/L-003-02	APLMK SSH/L003-02
		*MKS-SC	SC/SSH/L-003-02	APLSC SSH/L003-02

Note: \*Strip-crimp applicator  
Contact JST for applicable wires in case that it is not usable due to wire size.



# SHLD CONNECTOR

## Housing



Circuits	Model No.	Dimensions (mm)			Q'ty / bag
		A	B	C	
20	<b>SHLDP-20V-S(B)</b>	9.0	11.4	13.0	3,500
30	<b>SHLDP-30V-S(B)</b>	14.0	16.4	18.0	2,500
40	<b>SHLDP-40V-S(B)</b>	19.0	21.4	23.0	2,000
50	<b>SHLDP-50V-S(B)</b>	24.0	26.4	28.0	1,500

### Material

PBT, UL94V-0, natural (white)

### RoHS compliance

### With secure lock type

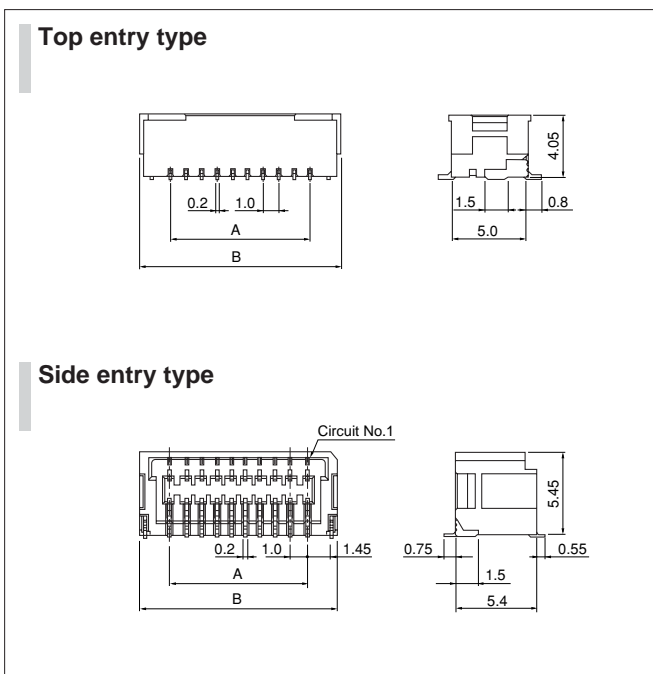
Circuits	Model No.	Dimensions (mm)			Q'ty / bag
		A	B	C	
20	<b>SHLDP-20V-S-1(B)</b>	9.0	14.7	15.7	3,000
30	<b>SHLDP-30V-S-1(B)</b>	14.0	19.7	20.7	2,000
40	<b>SHLDP-40V-S-1(B)</b>	19.0	24.7	25.7	1,500
50	<b>SHLDP-50V-S-1(B)</b>	24.0	29.7	30.7	1,200

### Material

PBT, UL94V-0, natural (white)

### RoHS compliance

## Shrouded header



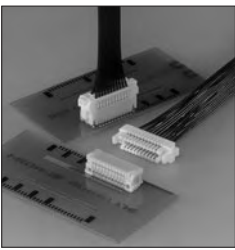
Circuits	Model No.		Dimensions (mm)		Q'ty / reel
	Top entry type	Side entry type	A	B	
20	<b>BM20B-SHLDS-G-TFT</b>	<b>SM20B-SHLDS-G-TF</b>	9.0	13.0	1,000
30	<b>BM30B-SHLDS-G-TFT</b>	<b>SM30B-SHLDS-G-TF</b>	14.0	18.0	1,000
40	<b>BM40B-SHLDS-G-TFT</b>	<b>SM40B-SHLDS-G-TF</b>	19.0	23.0	1,000
50	<b>BM50B-SHLDS-G-TFT</b>	<b>SM50B-SHLDS-G-TF</b>	24.0	28.0	1,000

### Material and Finish

Contact: Phosphor bronze, nickel-undercoated, gold-plated  
 Wafer: PA, UL94V-0, natural (ivory)  
 Solder tab: Brass, copper-undercoated, tin-plated (reflow treatment)

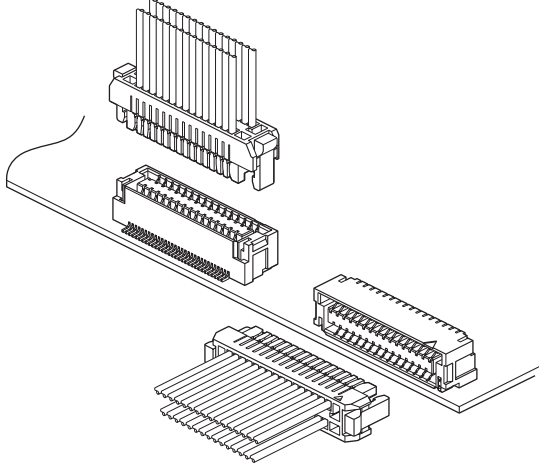
### RoHS compliance

This product displays (LF)(SN) on a label.



# SHLV CONNECTOR

1.0mm pitch/Disconnectable Crimp style connectors



**This is the wire to board connector corresponding to the high frequency transmission (LVDS:Low Voltage Differential Signaling) with a lot of adoption for PDP, LCD - TV and so on. This connector was developed to have excellent workability, strength and cost performance. This connector is used not only for LVDS, but also for multi - circuits connector (small and space saving type) in normal circuit.**

- Corresponding to LVDS (Low Voltage Differential Signaling)
- Secure lock
- Connector strength
- Contact lock structure

## Specifications

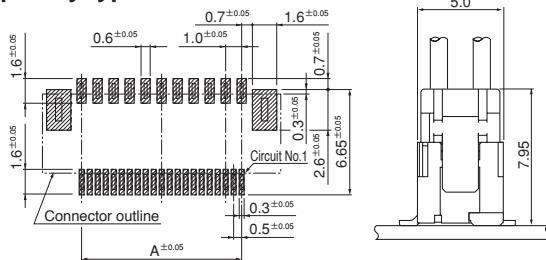
- Current rating: 1.0A AC, DC (AWG #28)
  - Voltage rating: 30V AC, DC
  - Temperature range: -25°C to +85°C (including temperature rise in applying electrical current)
  - Contact resistance: Initial value/30m Ω max. After environmental testing/50m Ω max.
  - Insulation resistance: 100M Ω min.
  - Withstanding voltage: 500V AC/minute
  - Applicable wire: Conductor size/AWG #32 to #28 Insulation O.D./0.4 to 0.8mm
- \* RoHS compliant products are published.  
 \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.  
 \* Contact JST for details.

## Standards

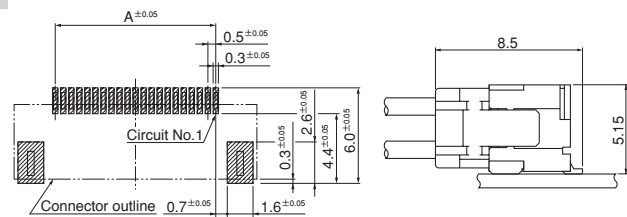
- Ⓡ Recognized E60389
- Ⓢ Certified LR20812

## PC board layout (viewed from component side) and Assembly layout

### Top entry type

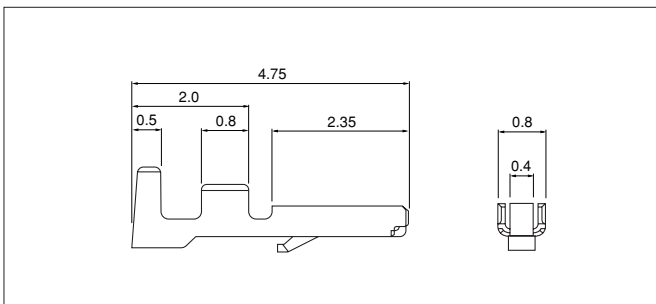


### Side entry type



Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.  
 2. The dimensions above should serve as a guideline. Contact JST for details.

## Contact



Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty / reel
	mm <sup>2</sup>	AWG#		
SSHL-003GA1-P0.2	0.032~0.08	32~28	0.4~0.8	30,000

### Material and Finish

Phosphor bronze, nickel-undercoated, Mating part; gold-plated, Crimping part; gold-plated

### RoHS compliance

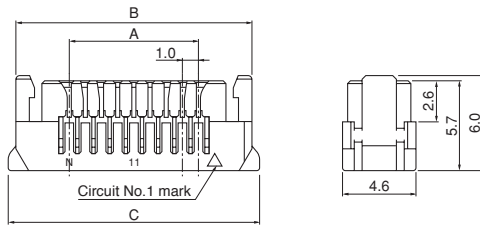
Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SSHL-003GA1-P0.2	AP-K2N	MKS-L-10-3	MK/SSH/L-003-02	APLMK SSH/L003-02
		*MKS-SC	SC/SSH/L-003-02	APLSC SSH/L003-02

Note: \*Strip-crimp applicator  
 Contact JST for applicable wires in case that it is not usable due to wire size.

# SHLV CONNECTOR

## Housing

### With secure lock



Circuits	Model No.	Dimensions (mm)			Q'ty / bag
		A	B	C	
21	<b>SHLVP-21V-S-1</b>	10.0	16.7	17.7	3,000
31	<b>SHLVP-31V-S-1</b>	15.0	21.7	22.7	2,000

#### Material

PBT, UL94V-0, natural(white)

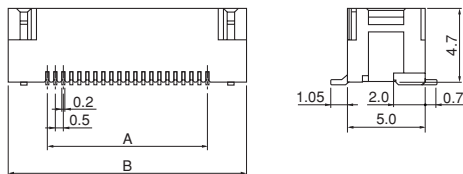
#### RoHS compliance

<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. **SHLVP-21V-S-1**  
 S...natural (white)  
 LE...light blue

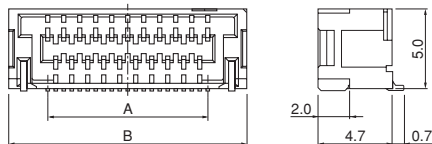
## Shrouded header

### Top entry type



Circuits	Model No.	Dimensions (mm)		Q'ty / reel
		A	B	
21	<b>BM21B-SHLVS-G-TBT</b>	10.0	15.0	1,500
31	<b>BM31B-SHLVS-G-TBT</b>	15.0	20.0	1,500

### Side entry type



Circuits	Model No.	Dimensions (mm)		Q'ty / reel
		A	B	
21	<b>SM21B-SHLVS-G-TB</b>	10.0	15.0	2,000
31	<b>SM31B-SHLVS-G-TB</b>	15.0	20.0	2,000

#### Material and Finish

Contact: Phosphor bronze, nickel-undercoated, gold-plated  
 Wafer: Polyamide, UL94V-0, natural (ivory)  
 Solder tab: Brass, copper-undercoated, tin-plated (reflow treatment)

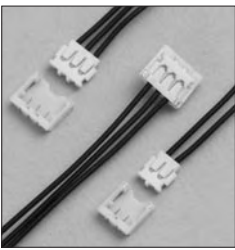
**RoHS compliance** This product displays (LF)(SN) on a label. This products listed above are supplied on embossed-tape.

<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.  
 <Top entry type>

ex. **BM21B-SHLVS-G-TBT**  
 S...natural (ivory)  
 LE...light blue

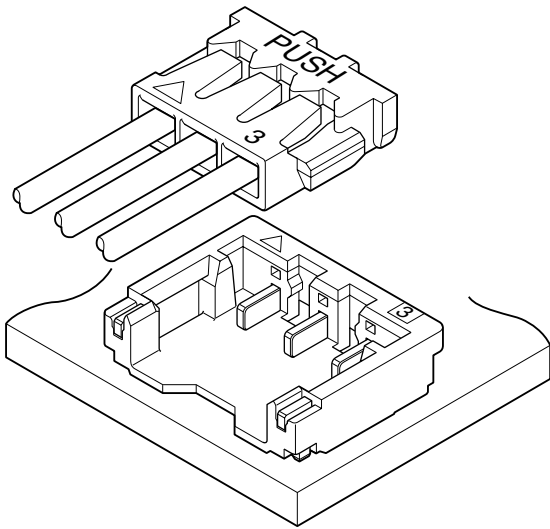
<Side entry type>

ex. **SM21B-SHLVS-G-TB**  
 S...natural (ivory)  
 LE...light blue



# ACH CONNECTOR

1.2mm pitch/Disconnectable Crimp style connectors



**This ACH connector is compact and low profile type, height: 1.4mm and width 4.3mm, 1.2mm pitch wire-to-board connector.**

- Top entry but side feed type
- Connector for DC power supply
- Corresponding to sucking nozzle of pick and place machine

## Specifications

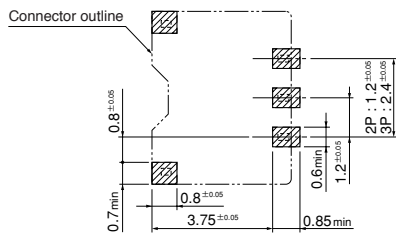
- Current rating: 2A/2, 3-circuit AC, DC (AWG #28)  
1.5A/4-circuit AC, DC (AWG #28)
- Voltage rating: 50V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/10m Ω max.  
After environmental testing/20m Ω max.
- Insulation resistance: 100M Ω min.
- Withstanding voltage: 500V AC/minute
- Applicable wire: Conductor size/AWG #30 to #28  
Insulation O.D./0.5 to 0.63mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

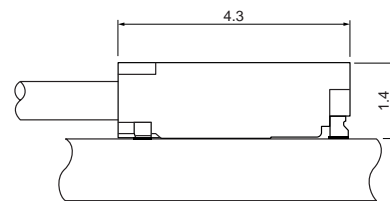
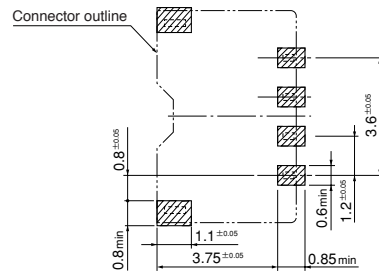
Recognized E60389

## PC board layout (viewed from component side) and Assembly layout

<2, 3 circuits>

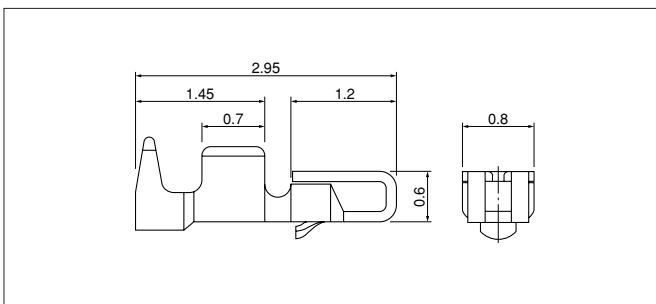


<4 circuits>



Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.  
2. The dimensions above should serve as a guideline. Contact JST for details.

## Contact



Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty / reel
	mm <sup>2</sup>	AWG#		
<b>SACH-003G-P0.2</b>	0.05~0.08	30~28	0.5~0.63	30,000

### Material and Finish

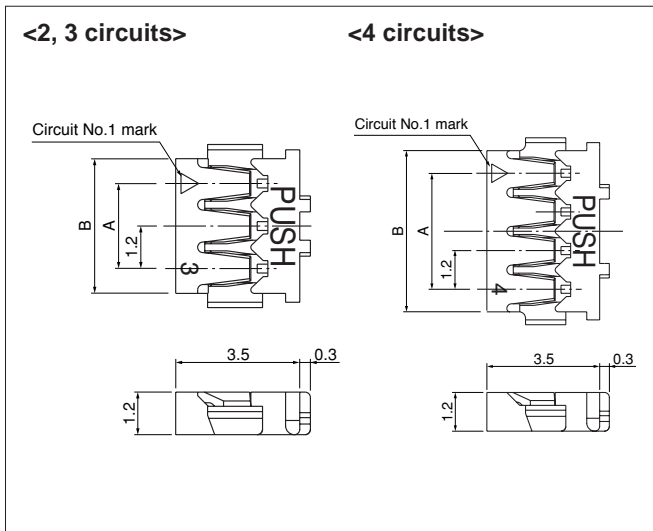
Copper alloy, nickel-undercoated, gold-plated

### RoHS compliance

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SACH-003G-P0.2</b>	AP-K2N	MKS-L-10-3	MK/SACH-003-02	APLMK SACH003-02

# ACH CONNECTOR

## Housing



Circuits	Model No.	Dimensions (mm)		Q'ty / bag
		A	B	
2	<b>ACHR-02V-S</b>	1.2	2.6	1,000
3	<b>ACHR-03V-S</b>	2.4	3.8	1,000
4	<b>ACHR-04V-A-S</b>	3.6	5.0	1,000

### Material

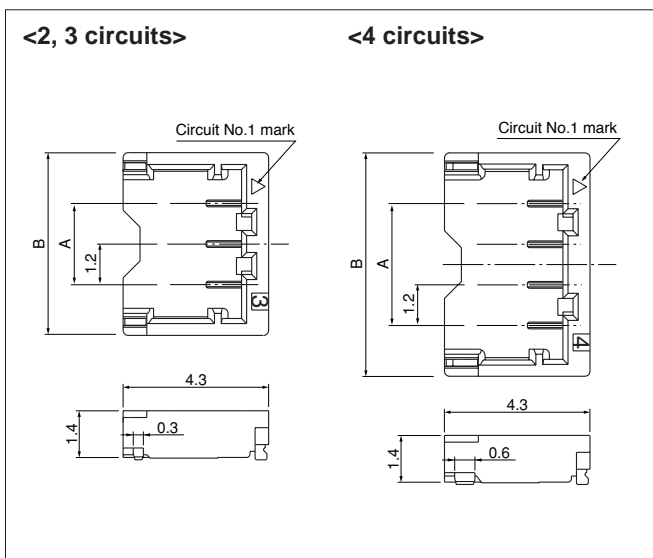
PBT, UL94V-0, natural (white)

### RoHS compliance

<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. **ACHR-02V-00**  
S...natural (white)  
K...black

## Shrouded header



Circuits	Model No.	Dimensions (mm)		Q'ty / bag
		A	B	
2	<b>BM02B-ACHSS-GAN-TF</b>	1.2	4.2	4,500
3	<b>BM03B-ACHSS-GAN-TF</b>	2.4	5.4	4,500
4	<b>BM04B-ACHSS-A-GAN-TF</b>	3.6	6.6	4,500

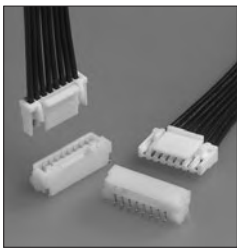
### Material and Finish

Contact: Copper alloy, nickel-undercoated, gold-plated (nickel-stripe)  
Housing: Heat resisting resin, UL94V-0, natural (ivory)  
Solder tab: Copper alloy, copper-undercoated, tin-plated (reflow treatment)

### RoHS compliance

This product displays (LF)(SN) on a label. <For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

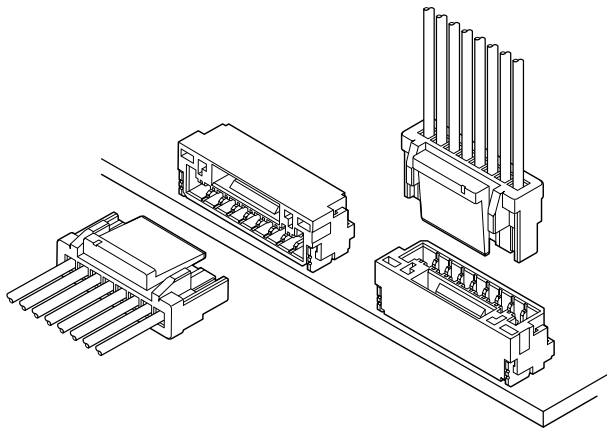
ex. **BM02B-ACHSS-GAN-TF**  
S...natural (ivory)  
K...black



# GH CONNECTOR



1.25mm pitch/Disconnectable Crimp style connectors



Developed for PDP, LCD or small electronics equipment. This low insertion force type connector realizes easier mating operation. The basic concept of the contact part of this connector is equivalent to the performance proven SHL connector.

- Secure locking structure
- Contact lock structure
- Prevent deformation of contacts

## Specifications

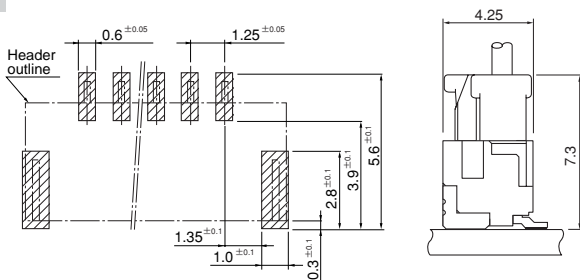
- Current rating: 1.0A AC, DC (AWG #26)
- Voltage rating: 50V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/30m Ω max.  
After environmental testing/50m Ω max.
- Insulation resistance: 100M Ω min.
- Withstanding voltage: 500V AC/minute
- Applicable wire: Conductor size/AWG #30 to #26  
Insulation O.D./0.8 to 1.0mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

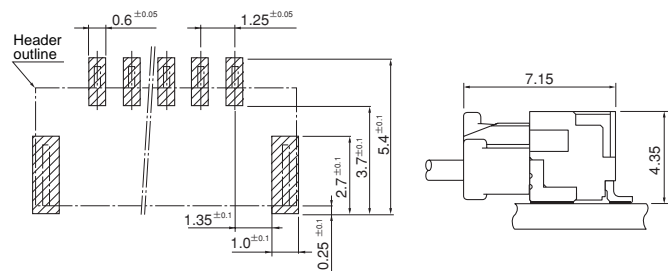
Recognized E60389

## PC board layout (viewed from component side) and Assembly layout

### Top entry type

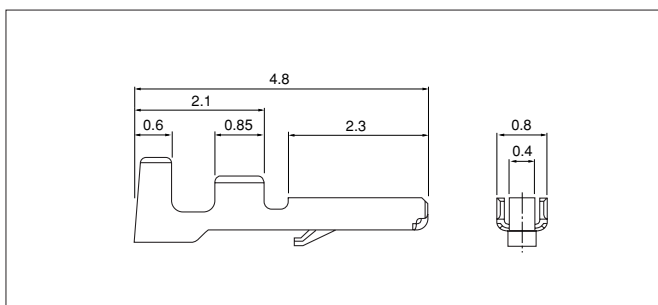


### Side entry type



Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.  
2. The dimensions above should serve as a guideline. Contact JST for details.

## Contact



Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty / reel
	mm <sup>2</sup>	AWG#		
SSHL-002T-P0.2	0.05~0.13	30~26	0.8~1.0	23,000

### Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

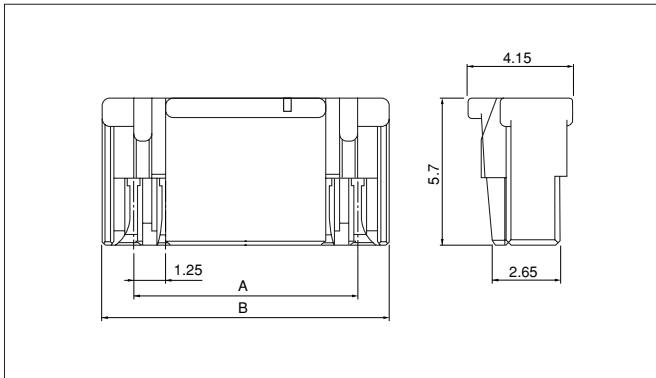
### RoHS compliance

Note: 1. Contact JST for gold-plates products.  
2. This contact can be applied only for GH connector.  
SSHL-003( )-P0.2 cannot be applied for GH connector.

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SSHL-002T-P0.2	AP-K2N	MKS-L-10-3	MK/SSHL-002-02	APLMK SSSL002-02
		-	-	-

# GH CONNECTOR

## Housing



Circuits	Model No	Dimensions (mm)		Q'ty / box
		A	B	
2	<b>GHR-02V-S</b>	1.25	3.75	4,000
3	<b>GHR-03V-S</b>	2.50	5.00	3,000
4	<b>GHR-04V-S</b>	3.75	6.25	2,500
5	<b>GHR-05V-S</b>	5.00	7.50	2,000
6	<b>GHR-06V-S</b>	6.25	8.75	1,500
7	<b>GHR-07V-S</b>	7.50	10.00	1,500
8	<b>GHR-08V-S</b>	8.75	11.25	1,000
9	<b>GHR-09V-S</b>	10.00	12.50	1,000
10	<b>GHR-10V-S</b>	11.25	13.75	1,000
11	<b>GHR-11V-S</b>	12.50	15.00	1,000
12	<b>GHR-12V-S</b>	13.75	16.25	1,000
13	<b>GHR-13V-S</b>	15.00	17.50	1,000
14	<b>GHR-14V-S</b>	16.25	18.75	500
15	<b>GHR-15V-S</b>	17.50	20.00	500

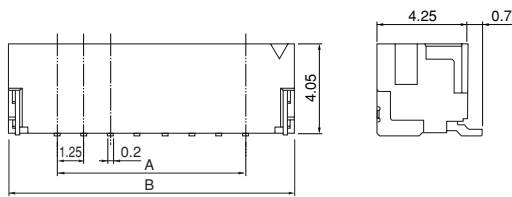
### Material

PBT, UL94V-0, natural (white)

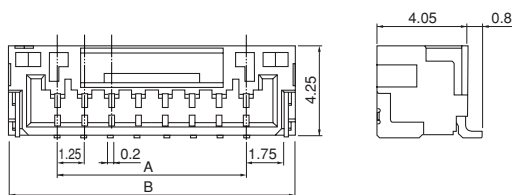
### RoHS compliance

## Shrouded header

### Top entry type



### Side entry type

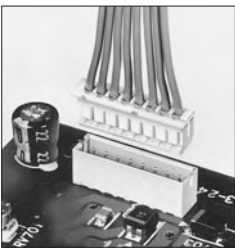


Circuits	Model No.		Dimensions (mm)		Q'ty / reel
	Top entry type	Side entry type	A	B	
2	<b>BM02B-GHS-TBT</b>	<b>SM02B-GHS-TB</b>	1.25	5.75	2,500
3	<b>BM03B-GHS-TBT</b>	<b>SM03B-GHS-TB</b>	2.50	7.00	2,500
4	<b>BM04B-GHS-TBT</b>	<b>SM04B-GHS-TB</b>	3.75	8.25	2,500
5	<b>BM05B-GHS-TBT</b>	<b>SM05B-GHS-TB</b>	5.00	9.50	2,500
6	<b>BM06B-GHS-TBT</b>	<b>SM06B-GHS-TB</b>	6.25	10.75	2,500
7	<b>BM07B-GHS-TBT</b>	<b>SM07B-GHS-TB</b>	7.50	12.00	2,500
8	<b>BM08B-GHS-TBT</b>	<b>SM08B-GHS-TB</b>	8.75	13.25	2,500
9	<b>BM09B-GHS-TBT</b>	<b>SM09B-GHS-TB</b>	10.00	14.50	2,500
10	<b>BM10B-GHS-TBT</b>	<b>SM10B-GHS-TB</b>	11.25	15.75	2,500
11	<b>BM11B-GHS-TBT</b>	<b>SM11B-GHS-TB</b>	12.50	17.00	2,500
12	<b>BM12B-GHS-TBT</b>	<b>SM12B-GHS-TB</b>	13.75	18.25	2,500
13	<b>BM13B-GHS-TBT</b>	<b>SM13B-GHS-TB</b>	15.00	19.50	2,500
14	<b>BM14B-GHS-TBT</b>	<b>SM14B-GHS-TB</b>	16.25	20.75	2,500
15	<b>BM15B-GHS-TBT</b>	<b>SM15B-GHS-TB</b>	17.50	22.00	2,500

### Material and Finish

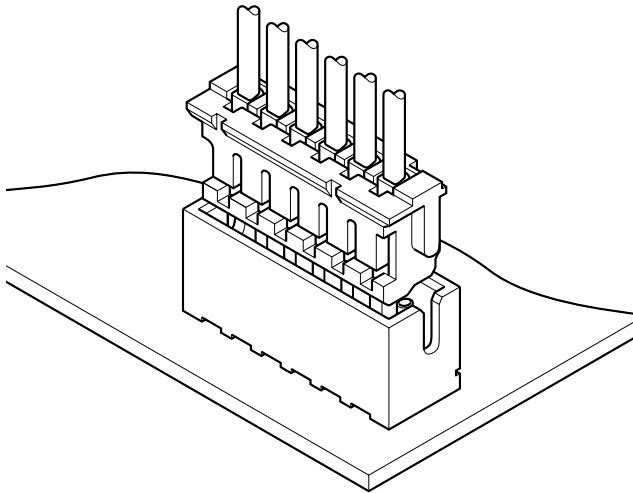
Contact: Phosphor bronze, copper-undercoated, tin-plated (reflow treatment)  
Housing: PA9T, UL94V-0, natural (ivory)  
Solder tab: Brass, copper-undercoated, tin-plated

**RoHS compliance** This product displays (LF)(SN) on a label.  
Note: Contact JST for gold-plated products.



# ZH CONNECTOR

1.5mm pitch/Disconnectable Crimp style connectors



The ZH connector is very small with a mounting height of 5.6mm and a thickness of only 3.5mm. Contact retention lances on the housing make insertion easier, while the dimple at the center of the contact ensures reliable contact with the post.

- Compact, low profile design
- Housing lances
- Reliable contact construction
- Distortion resistant construction
- Compatible with the ZR insulation displacement connectors

## Specifications

- Current rating: 1.0A AC, DC (AWG #26)
- Voltage rating: 50V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/20m Ω max.  
After environmental testing/30m Ω max.
- Insulation resistance: 500M Ω min.
- Withstanding voltage: 500V AC/minute
- Applicable wire: AWG #32 to #26
- Applicable PC board thickness: 0.6 to 1.2mm, 1.6mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

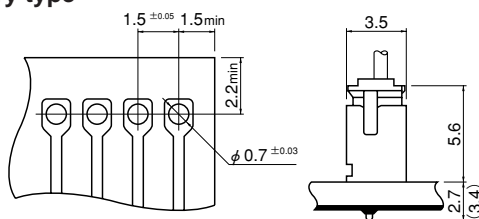
## Standards

- Ⓜ Recognized E60389
- Ⓢ Certified LR20812
- ⚠ R9351092

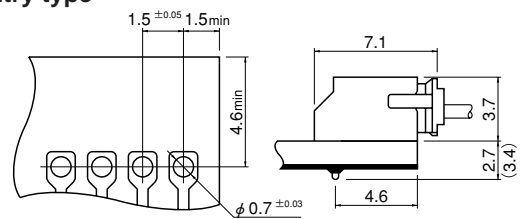
## PC board layout and Assembly layout

<Through-hole type (viewed from soldering side) >

### Top entry type



### Side entry type



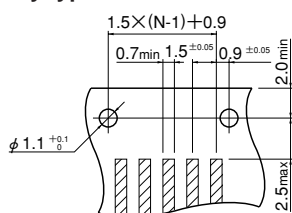
Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.

2. Hole dimension differ according to the kind of PC board and piercing method. If PC boards made of hard material are used, the hole dimensions should be larger. The dimensions above should serve as a guideline. Contact JST for details.

<SMT type (viewed from component side) >

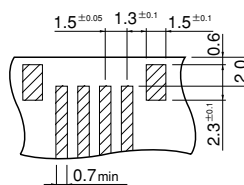
### SM2 type

#### Side entry type

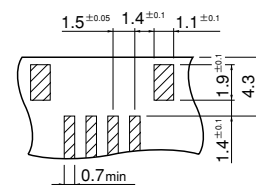


### SM4 type

#### Top entry type



#### Side entry type



Note: 1. N...Number of circuits

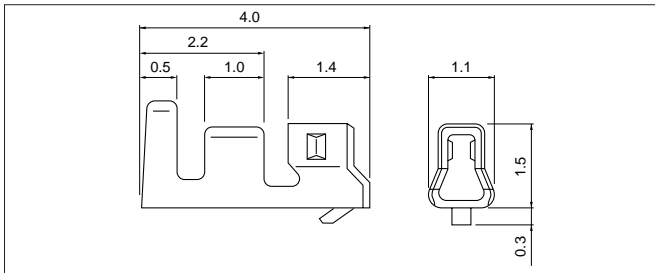
2. Tolerances are non-cumulative: ±0.05mm for all centers.

3. The dimensions above should serve as a guideline. Contact JST for details.



# ZH CONNECTOR

## Contact



Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SZH-002T-P0.5	AP-K2N	MKS-L	MK/SZH-002-05	APLMK SZH002-05

Note: \*Strip-crimp applicator.

Model No.	Applicable wire			Qty / reel
	mm <sup>2</sup>	AWG#	Insulation O.D. (mm)	
SZH-002T-P0.5	0.08 ~0.13	28~26	0.8~1.1	13,000
SZH-003T-P0.5	0.032~0.08	32~28	0.5~0.9	16,000

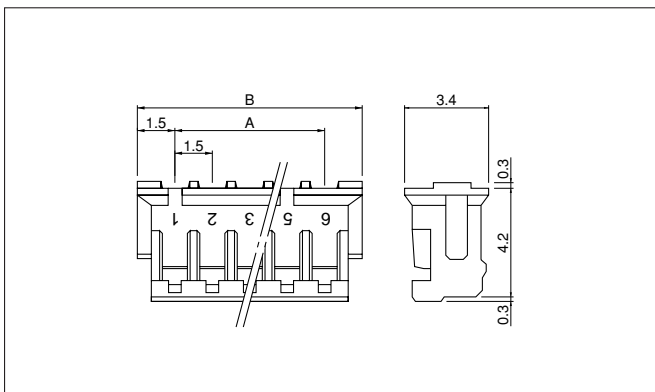
### Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

### RoHS compliance

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SZH-003T-P0.5	AP-K2N	MKS-L	MK/SZH-003-05	APLMK SZH003-05
		*MKS-SC	SC/SZH-003-05	APLSC SZH003-05

## Housing



<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. **ZHR-2-oo**

(blank)...natural (white)

K...black R...red E...blue M...green

Circuits	Model No.	Dimensions (mm)		Qty / bag
		A	B	
2	ZHR-2	1.5	4.5	1,000
3	ZHR-3	3.0	6.0	1,000
4	ZHR-4	4.5	7.5	1,000
5	ZHR-5	6.0	9.0	1,000
6	ZHR-6	7.5	10.5	1,000
6	ZHR-6(3.0)	15.0	18.0	1,000
7	ZHR-7	9.0	12.0	1,000
8	ZHR-8	10.5	13.5	1,000
9	ZHR-9	12.0	15.0	1,000
10	ZHR-10	13.5	16.5	1,000
11	ZHR-11	15.0	18.0	1,000
12	ZHR-12	16.5	19.5	1,000
13	ZHR-13	18.0	21.0	1,000

### Material

PA 66, UL94V-0, natural (white)

### RoHS compliance

Note: 1. ZHR-6(3.0) is 6 circuits 3.0mm pitch plugged up.

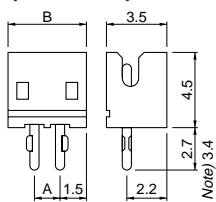
As for this housing, only circuit No.1 is marked.

2. ZHR-6(3.0) is not UL/CSA/TÜV approved.

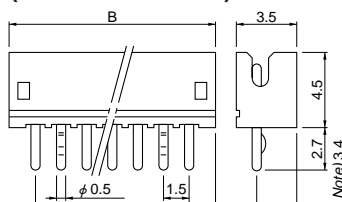
## Through-hole type shrouded header

### Top entry type

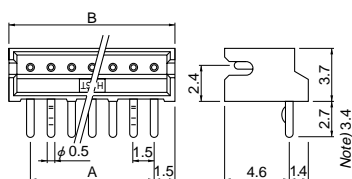
#### (2 circuits)



#### (3 circuits or more)



### Side entry type



Circuits	Model No.				Dimensions (mm)		Qty / box		
	Top entry type	Side entry type	Note) Top entry type	Note) Side entry type	A	B	Top entry type	Side entry type	Side entry type-3.4
2	B2B-ZR	S2B-ZR	B2B-ZR-3.4	S2B-ZR-3.4	1.5	4.5	2,000	2,000	2,000
3	B3B-ZR	S3B-ZR	B3B-ZR-3.4	S3B-ZR-3.4	3.0	6.0	2,000	2,000	1,000
4	B4B-ZR	S4B-ZR	B4B-ZR-3.4	S4B-ZR-3.4	4.5	7.5	2,000	2,000	2,000
5	B5B-ZR	S5B-ZR	B5B-ZR-3.4	S5B-ZR-3.4	6.0	9.0	2,000	1,000	1,000
6	B6B-ZR	S6B-ZR	B6B-ZR-3.4	S6B-ZR-3.4	7.5	10.5	2,000	1,000	1,000
7	B7B-ZR	S7B-ZR	B7B-ZR-3.4	S7B-ZR-3.4	9.0	12.0	1,000	1,000	1,000
8	B8B-ZR	S8B-ZR	B8B-ZR-3.4	S8B-ZR-3.4	10.5	13.5	1,000	1,000	1,000
9	B9B-ZR	S9B-ZR	B9B-ZR-3.4	S9B-ZR-3.4	12.0	15.0	1,000	1,000	1,000
10	B10B-ZR	S10B-ZR	B10B-ZR-3.4	S10B-ZR-3.4	13.5	16.5	1,000	1,000	1,000
11	B11B-ZR	S11B-ZR	B11B-ZR-3.4	S11B-ZR-3.4	15.0	18.0	1,000	500	500
12	B12B-ZR	S12B-ZR	B12B-ZR-3.4	S12B-ZR-3.4	16.5	19.5	1,000	500	500
13	B13B-ZR	S13B-ZR	B13B-ZR-3.4	S13B-ZR-3.4	18.0	21.0	500	500	500

### Material and Finish

Pin: Brass, copper-undercoated, tin-plated (reflow treatment)

Wafer: Glass-filled PA 66, UL94V-0, natural (ivory)

### RoHS compliance

This product displays (LF)(SN) on a label.

Note: Headers with 3.4mm long solder tails, suited for the 1.6mm thick PC board.

<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. **B2B-ZR-3.4-oo**

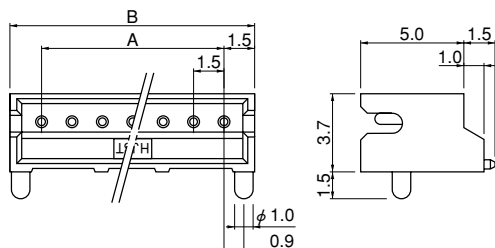
(blank)...natural (ivory)

K...black R...red E...blue M...green

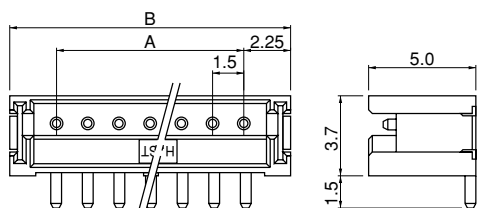
# ZH CONNECTOR

## SMT type shrouded header

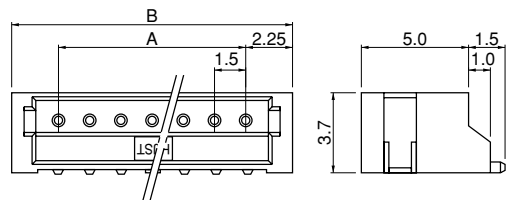
### SM2 type Side entry type



### SM4 type (with solder tabs) Top entry type



### Side entry type



### SM2 type

Circuits	Model No. Side entry type	Dimensions (mm)		Q'ty / reel
		A	B	
2	<b>S2B-ZR-SM2-TF</b>	1.5	4.5	1,000
3	<b>S3B-ZR-SM2-TF</b>	3.0	6.0	1,000
4	<b>S4B-ZR-SM2-TF</b>	4.5	7.5	1,000
5	<b>S5B-ZR-SM2-TF</b>	6.0	9.0	1,000
6	<b>S6B-ZR-SM2-TF</b>	7.5	10.5	1,000
7	<b>S7B-ZR-SM2-TF</b>	9.0	12.0	1,000
8	<b>S8B-ZR-SM2-TF</b>	10.5	13.5	1,000
9	<b>S9B-ZR-SM2-TF</b>	12.0	15.0	1,000
10	<b>S10B-ZR-SM2-TF</b>	13.5	16.5	1,000
11	<b>S11B-ZR-SM2-TF</b>	15.0	18.0	1,000
12	<b>S12B-ZR-SM2-TF</b>	16.5	19.5	1,000
13	<b>S13B-ZR-SM2-TF</b>	18.0	21.0	1,000

#### Material and Finish

Pin: Brass, copper-undercoated, tin-plated (reflow treatment)  
Wafer: Glass-filled PA 46, UL94V-0, natural (ivory)

**RoHS compliance** This product displays (LF)(SN) on a label.

### SM4 type

Circuits	Model No.		Dimensions (mm)		Q'ty / reel	
	Top entry type	Side entry type	A	B	Top entry type	Side entry type
2	<b>B2B-ZR-SM4-TF</b>	<b>S2B-ZR-SM4A-TF</b>	1.5	6.0	1,000	1,000
3	<b>B3B-ZR-SM4-TF</b>	<b>S3B-ZR-SM4A-TF</b>	3.0	7.5	1,000	1,000
4	<b>B4B-ZR-SM4-TF</b>	<b>S4B-ZR-SM4A-TF</b>	4.5	9.0	1,000	1,000
5	<b>B5B-ZR-SM4-TF</b>	<b>S5B-ZR-SM4A-TF</b>	6.0	10.5	1,000	1,000
6	<b>B6B-ZR-SM4-TF</b>	<b>S6B-ZR-SM4A-TF</b>	7.5	12.0	1,000	1,000
7	<b>B7B-ZR-SM4-TF</b>	<b>S7B-ZR-SM4A-TF</b>	9.0	13.5	1,000	1,000
8	<b>B8B-ZR-SM4-TF</b>	<b>S8B-ZR-SM4A-TF</b>	10.5	15.0	1,000	1,000
9	<b>B9B-ZR-SM4-TF</b>	<b>S9B-ZR-SM4A-TF</b>	12.0	16.5	1,000	1,000
10	<b>B10B-ZR-SM4-TF</b>	<b>S10B-ZR-SM4A-TF</b>	13.5	18.0	1,000	1,000
11	<b>B11B-ZR-SM4-TF</b>	<b>S11B-ZR-SM4A-TF</b>	15.0	19.5	1,000	1,000
12	<b>B12B-ZR-SM4-TF</b>	<b>S12B-ZR-SM4A-TF</b>	16.5	21.0	1,000	1,000
13	<b>B13B-ZR-SM4-TF</b>	<b>S13B-ZR-SM4A-TF</b>	18.0	22.5	1,000	1,000

#### Material and Finish

Pin: Brass, copper-undercoated, tin-plated (reflow treatment)□  
Wafer: PA 6T, UL94V-0, natural (ivory)□  
Solder tab: Brass, copper-undercoated, tin-plated (reflow treatment)

**RoHS compliance** This product displays (LF)(SN) on a label.

Note: 1. The products listed above are supplied on embossed-tape.

2. Contact JST for the top entry type headers with suction cap.

<For reference> As the color identification, the following alphabet shall be put in the underlined part.

For availability, delivery and minimum order quantity, contact JST.

ex. **S2B-ZR-SM4A-oo-TF**

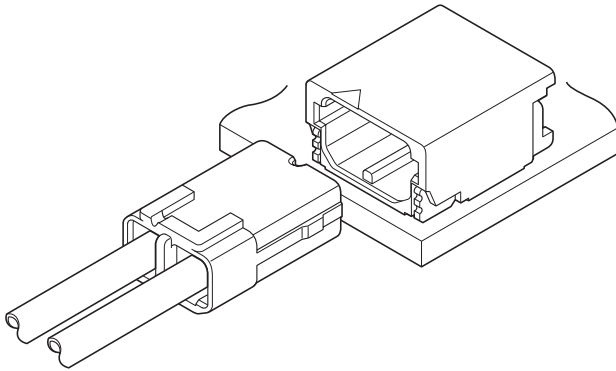
(blank)...natural (ivory)

K...black R...red E...blue M...green



# SFH CONNECTOR

1.8mm pitch/Disconnectable Crimp style connectors



**This low profile type connector with height of 3.0mm is designed for connection to stroboscope flash and realized space saving.**

- Contact lance
- Countermeasure for inverse insertion and locking feature

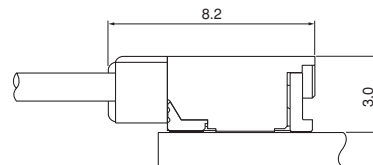
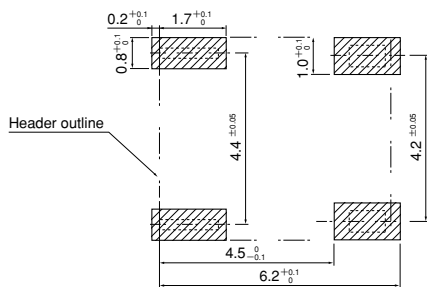
## Specifications

- Current rating: 4A AC, DC (AWG #22, #24)
- Voltage rating: 350V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/10m Ω max.  
After environmental testing/20m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 1,700V AC/minute
- Applicable wire: Conductor size/AWG #30 to #22  
Insulation O.D./0.7 to 1.3mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

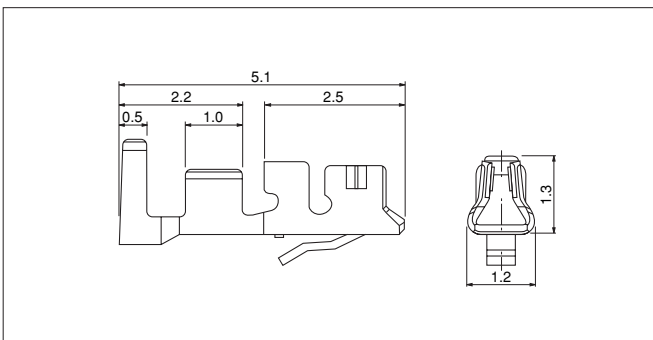
- Ⓜ Recognized E60389
- Ⓢ Certified LR20812

## PC board layout (viewed from component side) and Assembly layout



Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.  
2. The dimensions above should serve as a guideline. Contact JST for details.

## Contact



Model No.	Applicable wire			Q'ty / reel
	mm <sup>2</sup>	AWG#	Insulation O.D. (mm)	
<b>SSFH-001T-P0.5</b>	0.13~0.33	26~22	0.95~1.3	15,000
<b>SSFH-002T-P0.5</b>	0.05~0.13	30~26	0.7 ~1.25	15,000

### Material and Finish

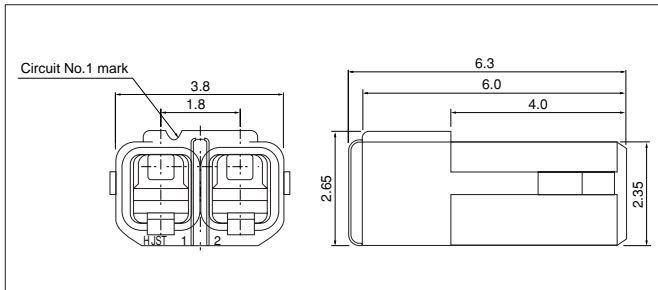
Copper alloy, tin-plated (reflow treatment)

### RoHS compliance

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SSFH-001T-P0.5</b>	AP-K2N	MKS-L	MK/SSFH-001-05	APLMK SSFH001-05
		—	—	—
<b>SSFH-002T-P0.5</b>	AP-K2N	MKS-L	MK/SSFH-002-05	APLMK SSFH002-05
		—	—	—

# SFH CONNECTOR

## Housing



Circuits	Model No.	Q'ty / bag
2	<b>SFHR-02V-R</b>	1,000

### Material

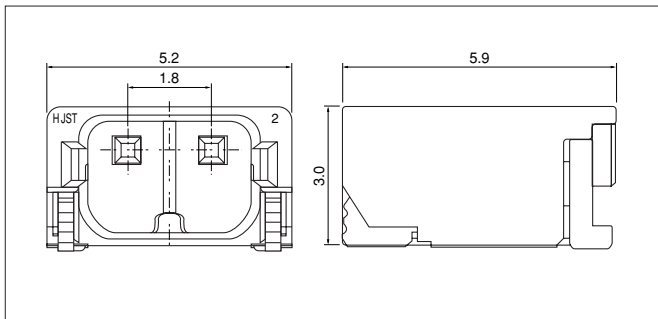
Thermoplastic resin, UL94V-0

### RoHS compliance

<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. **SFHR-02V-R**  
R...red  
L...lemon yellow

## Shrouded header



Circuits	Model No.	Q'ty / reel
2	<b>SM02B-SFHRS-TF</b>	2,000

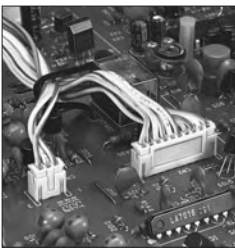
### Material and Finish

Press pin: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
 Wafer: Heat resisting resin, UL94V-0  
 Solder tab: Copper alloy, copper-undercoated, tin-plated (reflow treatment)

**RoHS compliance** This product displays (LF)(SN) on a label.

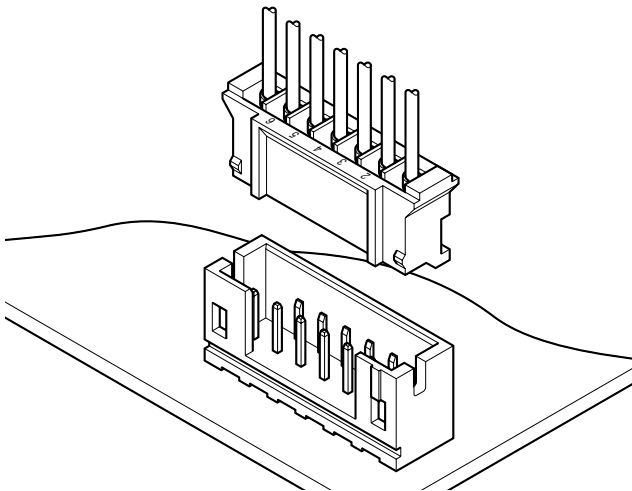
<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. **SM02B-SFHRS-TF**  
R...red  
L...lemon yellow



# PH CONNECTOR

2.0mm pitch/Disconnectable Crimp style connectors



**This is a thin, low-profile 2.0mm pitch connector 8.0mm in height after mounting and 4.5mm in width. It is designed to meet the demand for high-density connection of internal wires to printed circuit boards. It is compact, highly reliable and low in cost.**

- **Reliable contact**
- **Fully shrouded header**
- **Printed circuit board retention mechanism**
- **Surface mount model (SMT)**

## Specifications

- Current rating: 2A AC, DC (AWG #24)
- Voltage rating: 100V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/10m Ω max.  
After environmental testing/20m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 800V AC/minute
- Applicable wire: AWG #32 to #24
- Applicable PC board thickness: 0.8 to 1.6mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

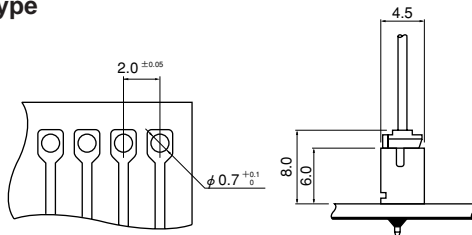
## Standards

- Ⓜ Recognized E60389
- Ⓢ Certified LR20812
- Ⓡ R75087

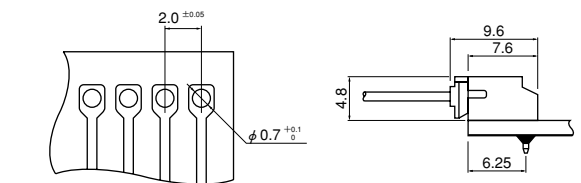
## PC board layout and Assembly layout

〈Through-hole type (viewed from soldering side)〉

Top entry type



Side entry type



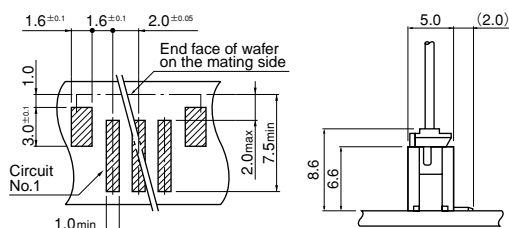
Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.

2. Hole dimensions differ according to the kind of PC board and piercing method. If PC boards made of hard material are used, the hole dimensions should be larger. The dimensions above should serve as a guideline. Contact JST for details.

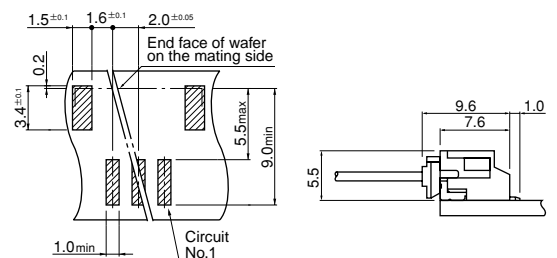
〈SMT type (viewed from component side)〉

SM4 type

Top entry type



Side entry type

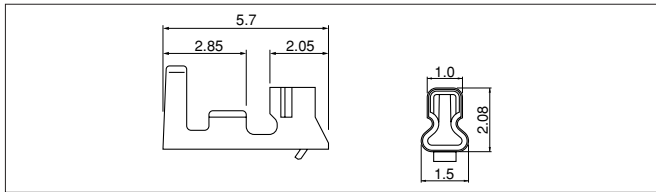


Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.

2. The dimensions above should serve as a guideline. Contact JST for details.

# PH CONNECTOR

## Contact



Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SPH-002T-P0.5S	AP-K2N	MKS-LS • MKS-L	MK/SPH-002-05S	APLMK SPH002-05S
		*MKS-SC	SC/SPH-002-05S	APLSC SPH002-05S
SPH-002T-P0.5L		MKS-LS • MKS-L	MK/SPH-002-05L	APLMK SPH002-05L
		*MKS-SC	SC/SPH-002-05L	APLSC SPH002-05L
SPH-004T-P0.5S		MKS-L-10	MK/SPH-004-05S	APLMK SPH004-05S
		*MKS-SC-10	SC/SPH-004-05S	APLSC SPH004-05S

Note: \*Strip-crimp applicator

Model No.	Applicable wire			Q'ty / reel
	mm <sup>2</sup>	AWG #	Insulation O.D. (mm)	
SPH-002T-P0.5S	0.05 ~ 0.22	30~24	0.9~1.5	8,000
SPH-002T-P0.5L	0.08 ~ 0.22	28~24	0.8~1.5	
SPH-004T-P0.5S	0.032~0.08	32~28	0.5~0.9	10,000

### Material and Finish

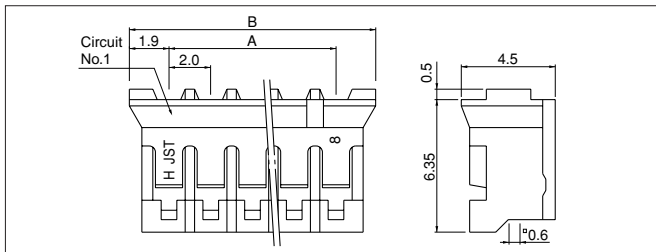
Phosphor bronze, tin-plated (reflow treatment)

### RoHS compliance

Note:

- Contact JST for gold-plated products.
- SPH-002T-P0.5L is low-insertion force type contact, for easier insertion/ withdrawal, which would be less resistant to the vibration. The crimp height is different from the standard.
- Contact JST for details.

## Housing



<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. **PHR-2-oo**

(blank)...natural (white)

BK...black R...red TR...tomato red BL...blue Y...yellow

L...lemon yellow M...green D...orange N...brown

P...purple PK...pink H...gray LE...light blue

FY...vivid yellow DPK...dark pink

Circuits	Model No.	Dimensions (mm)		Q'ty / box
		A	B	
2	PHR-2	2.0	5.8	1,000
3	PHR-3	4.0	7.8	1,000
4	PHR-4	6.0	9.8	1,000
5	PHR-5	8.0	11.8	1,000
6	PHR-6	10.0	13.8	1,000
7	PHR-7	12.0	15.8	1,000
8	PHR-8	14.0	17.8	1,000
9	PHR-9	16.0	19.8	1,000
10	PHR-10	18.0	21.8	1,000
11	PHR-11	20.0	23.8	1,000
12	PHR-12	22.0	25.8	1,000
13	PHR-13	24.0	27.8	1,000
14	PHR-14	26.0	29.8	1,000
15	PHR-15	28.0	31.8	1,000
16	PHR-16	30.0	33.8	1,000

### Material

PA 66, UL94V-0, natural (white)

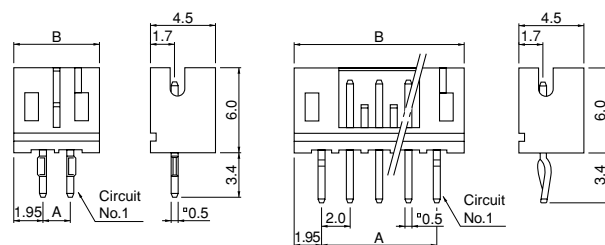
### RoHS compliance

## Through-hole type shrouded header

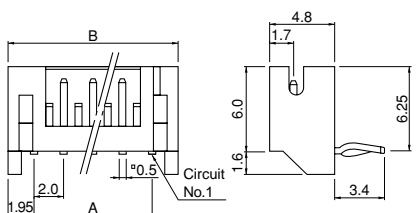
### Top entry type

(2 circuits)

(3 circuits or more)



### Side entry type



Circuits	Model No.		Dimensions (mm)		Q'ty / box	
	Top entry type	Side entry type	A	B	Top entry type	Side entry type
2	B2B-PH-K-S	S2B-PH-K-S	2.0	5.9	1,000	1,000
3	B3B-PH-K-S	S3B-PH-K-S	4.0	7.9	1,000	1,000
4	B4B-PH-K-S	S4B-PH-K-S	6.0	9.9	1,000	500
5	B5B-PH-K-S	S5B-PH-K-S	8.0	11.9	1,000	500
6	B6B-PH-K-S	S6B-PH-K-S	10.0	13.9	1,000	500
7	B7B-PH-K-S	S7B-PH-K-S	12.0	15.9	500	500
8	B8B-PH-K-S	S8B-PH-K-S	14.0	17.9	500	250
9	B9B-PH-K-S	S9B-PH-K-S	16.0	19.9	500	250
10	B10B-PH-K-S	S10B-PH-K-S	18.0	21.9	500	250
11	B11B-PH-K-S	S11B-PH-K-S	20.0	23.9	500	250
12	B12B-PH-K-S	S12B-PH-K-S	22.0	25.9	400	250
13	B13B-PH-K-S	S13B-PH-K-S	24.0	27.9	250	250
14	B14B-PH-K-S	S14B-PH-K-S	26.0	29.9	250	250
15	B15B-PH-K-S	S15B-PH-K-S	28.0	31.9	250	200
16	B16B-PH-K-S	S16B-PH-K-S	30.0	33.9	250	200

### Material and Finish

Post: Brass, copper-undercoated, tin-plated (reflow treatment)  
Wafer: PA 66, UL94V-0, natural (white)

### RoHS compliance

This product displays (LF)(SN) on a label.  
<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. **B2B-PH-K-oo**

S...natural (white)

K...black R...red TR...tomato red

E...blue Y...yellow L...lemon yellow M...green

O...orange N...brown P...purple PK...pink H...gray

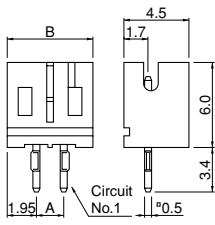
LE...light blue FY...vivid yellow (blank)...ivory

# PH CONNECTOR

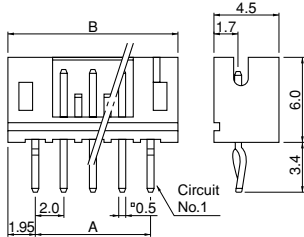
## Through-hole type shrouded header <Low insertion force type>

### Top entry type

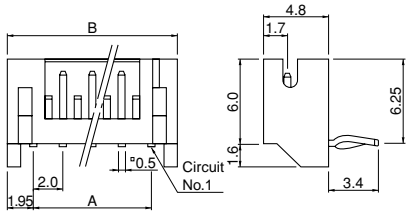
(2 circuits)



(3 circuits or more)



### Side entry type



Circuits	Model No.		Dimensions (mm)		Q'ty / box	
	Top entry type	Side entry type	A	B	Top entry type	Side entry type
2	<b>B2B-PH-KL</b>	<b>S2B-PH-KL</b>	2.0	5.9	1,000	1,000
3	<b>B3B-PH-KL</b>	<b>S3B-PH-KL</b>	4.0	7.9	1,000	1,000
4	<b>B4B-PH-KL</b>	<b>S4B-PH-KL</b>	6.0	9.9	1,000	500
5	<b>B5B-PH-KL</b>	<b>S5B-PH-KL</b>	8.0	11.9	1,000	500
6	<b>B6B-PH-KL</b>	<b>S6B-PH-KL</b>	10.0	13.9	1,000	500
7	<b>B7B-PH-KL</b>	<b>S7B-PH-KL</b>	12.0	15.9	500	500
8	<b>B8B-PH-KL</b>	<b>S8B-PH-KL</b>	14.0	17.9	500	250
9	<b>B9B-PH-KL</b>	<b>S9B-PH-KL</b>	16.0	19.9	500	250
10	<b>B10B-PH-KL</b>	<b>S10B-PH-KL</b>	18.0	21.9	500	250
11	<b>B11B-PH-KL</b>	<b>S11B-PH-KL</b>	20.0	23.9	500	250
12	<b>B12B-PH-KL</b>	<b>S12B-PH-KL</b>	22.0	25.9	400	250
13	<b>B13B-PH-KL</b>	<b>S13B-PH-KL</b>	24.0	27.9	250	250
14	<b>B14B-PH-KL</b>	<b>S14B-PH-KL</b>	26.0	29.9	250	200
15	<b>B15B-PH-KL</b>	<b>S15B-PH-KL</b>	28.0	31.9	250	200
16	<b>B16B-PH-KL</b>	<b>S16B-PH-KL</b>	30.0	33.9	250	200

### Material and Finish

Post: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
Wafer: PA 66, UL94V-0, gray

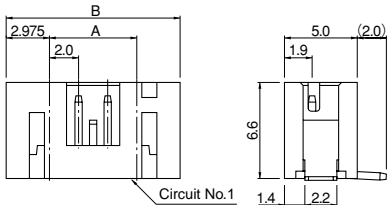
**RoHS compliance** This product displays (LF)(SN) on a label.

<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

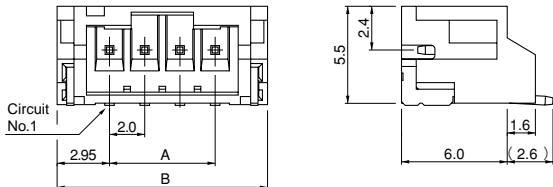
ex. **B2B-PH-KL-oo**  
(blank)...gray  
R...red E...blue S...natural (white)

## SMT type shrouded header

### Top entry type



### Side entry type



Circuits	Model No.		Dimensions (mm)			Q'ty / reel
	Top entry type	Side entry type	A	B		
				Top entry type	Side entry type	
2	<b>B2B-PH-SM4-TB</b>	<b>S2B-PH-SM4-TB</b>	2.0	7.95	7.9	1,000
3	<b>B3B-PH-SM4-TB</b>	<b>S3B-PH-SM4-TB</b>	4.0	9.95	9.9	1,000
4	<b>B4B-PH-SM4-TB</b>	<b>S4B-PH-SM4-TB</b>	6.0	11.95	11.9	1,000
5	<b>B5B-PH-SM4-TB</b>	<b>S5B-PH-SM4-TB</b>	8.0	13.95	13.9	1,000
6	<b>B6B-PH-SM4-TB</b>	<b>S6B-PH-SM4-TB</b>	10.0	15.95	15.9	1,000
7	<b>B7B-PH-SM4-TB</b>	<b>S7B-PH-SM4-TB</b>	12.0	17.95	17.9	1,000
8	<b>B8B-PH-SM4-TB</b>	<b>S8B-PH-SM4-TB</b>	14.0	19.95	19.9	1,000
9	<b>B9B-PH-SM4-TB</b>	<b>S9B-PH-SM4-TB</b>	16.0	21.95	21.9	1,000
10	<b>B10B-PH-SM4-TB</b>	<b>S10B-PH-SM4-TB</b>	18.0	23.95	23.9	1,000
11	<b>B11B-PH-SM4-TB</b>	<b>S11B-PH-SM4-TB</b>	20.0	25.95	25.9	1,000
12	<b>B12B-PH-SM4-TB</b>	<b>S12B-PH-SM4-TB</b>	22.0	27.95	27.9	1,000
13	<b>B13B-PH-SM4-TB</b>	<b>S13B-PH-SM4-TB</b>	24.0	29.95	29.9	1,000
14	<b>B14B-PH-SM4-TB</b>	<b>S14B-PH-SM4-TB</b>	26.0	31.95	31.9	1,000
15	<b>B15B-PH-SM4-TB</b>	<b>S15B-PH-SM4-TB</b>	28.0	33.95	33.9	1,000
16	<b>B16B-PH-SM4-TB</b>	—	30.0	35.95	—	1,000

### Material and Finish

Post: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
Wafer: PA, UL94V-0, natural (ivory)  
Solder tab: Brass, copper-undercoated, tin-plated (reflow treatment)

**RoHS compliance** This product displays (LF)(SN) on a label. Note: Contact JST for the top entry type headers with suction cap.

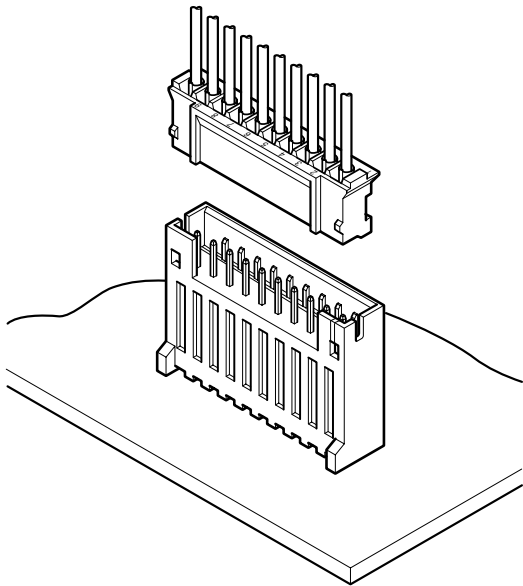
<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. **B2B-PH-SM4-oo-TB**  
(blank)...natural (ivory)  
R...red E...blue M...green L...lemon yellow K...black  
DPK...dark pink



# PH CONNECTOR <High box type>

2.0mm pitch/Disconnectable Crimp style connectors



PH connector high box type, with 17.0mm mounting height and with 4.5mm thickness.

- Interchangeability

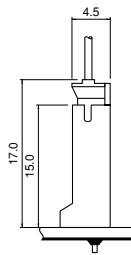
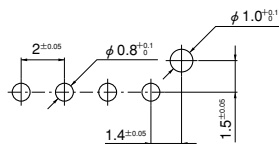
## Specifications

- Current rating: 2A AC, DC (AWG #24)
- Voltage rating: 100V AC, DC
- Temperature range: -25°C to +85°C (including temperature rise in applying electrical current)
- Contact resistance: Initial value/10m Ω max. After environmental testing/20m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 800V AC/minute
- Applicable wire: AWG #30 to #24
- Applicable PC board thickness: 0.8 to 1.6mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

- Ⓜ Recognized E60389
- Ⓢ Certified LR20812
- Ⓡ R75087

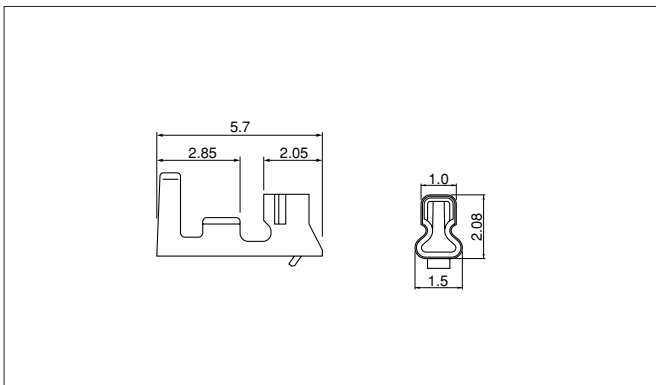
## PC board layout (viewed from component side) and Assembly layout



Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.

2. Hole dimensions differ according to the kind of PC board and piercing method. If PC boards made of hard material are used, the hole dimensions should be larger. The hole dimensions shown above are reference values. Contact JST for details.

## Contact



Model No.	Applicable wire		Insulation O.D. (mm)	Qty / reel
	mm <sup>2</sup>	AWG #		
SPH-002T-P0.5S	0.05 ~ 0.22	30~24	0.9~1.5	8,000

### Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

### RoHS compliance

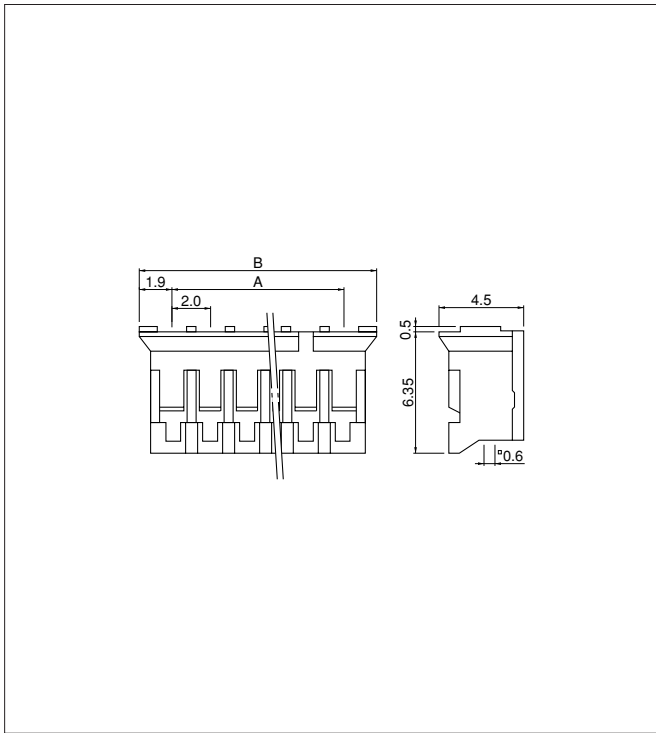
Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SPH-002T-P0.5S	AP-K2N	MKS-LS · MKS-L	MK/SPH-002-05S	APLMK SPH002-05S
		*MKS-SC	SC/SPH-002-05S	APLSC SPH002-05S

Note: \*Strip-crimp applicator



# PH CONNECTOR (High box type)

## Housing



Cir- cuits	Model No.	Dimensions (mm)		Q'ty / box
		A	B	
2	<b>PHR-2</b>	2.0	5.8	1,000
3	<b>PHR-3</b>	4.0	7.8	1,000
4	<b>PHR-4</b>	6.0	9.8	1,000
5	<b>PHR-5</b>	8.0	11.8	1,000
6	<b>PHR-6</b>	10.0	13.8	1,000
7	<b>PHR-7</b>	12.0	15.8	1,000
8	<b>PHR-8</b>	14.0	17.8	1,000
9	<b>PHR-9</b>	16.0	19.8	1,000
10	<b>PHR-10</b>	18.0	21.8	1,000
11	<b>PHR-11</b>	20.0	23.8	1,000
12	<b>PHR-12</b>	22.0	25.8	1,000
13	<b>PHR-13</b>	24.0	27.8	1,000

### Material

PA 66, UL94V-0, natural (white)

### RoHS compliance

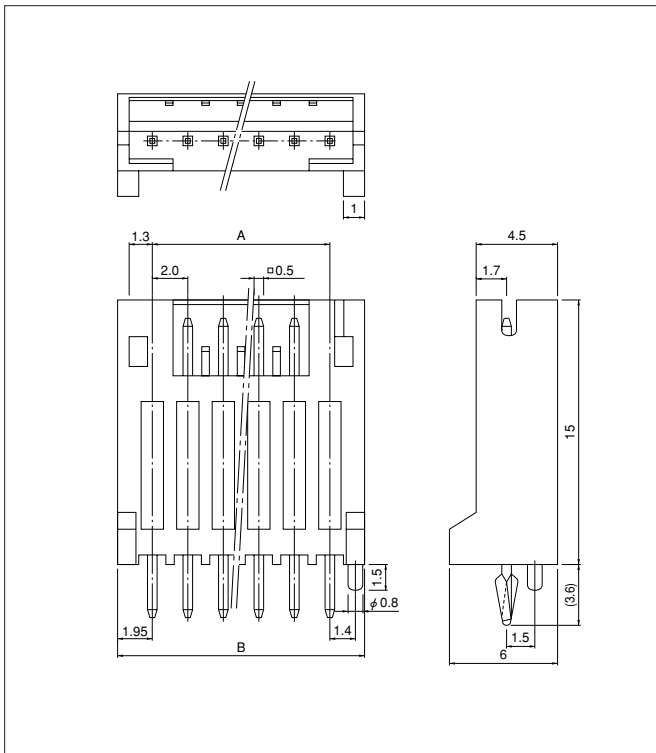
<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. **PHR-2-oo**

(blank)...natural (white)

BK...black R...red TR...tomato red BL...blue Y...yellow  
L...lemon yellow M...green D...orange N...brown P...purple  
PK...pink H...gray LE...light blue FY...vivid yellow

## Shrouded header



Cir- cuits	Model No.	Dimensions (mm)		Q'ty / box
		A	B	
2	<b>BH2B-PH</b>	2.0	5.9	800
3	<b>BH3B-PH</b>	4.0	7.9	480
4	<b>BH4B-PH</b>	6.0	9.9	400
5	<b>BH5B-PH</b>	8.0	11.9	390
6	<b>BH6B-PH</b>	10.0	13.9	300
7	<b>BH7B-PH</b>	12.0	15.9	240
8	<b>BH8B-PH</b>	14.0	17.9	240
9	<b>BH9B-PH</b>	16.0	19.9	200
10	<b>BH10B-PH</b>	18.0	21.9	200
11	<b>BH11B-PH</b>	20.0	23.9	150
12	<b>BH12B-PH</b>	22.0	25.9	150
13	<b>BH13B-PH</b>	24.0	27.9	100

### Material and Finish

Post: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
Wafer: PA 66, UL94V-0, natural (white)

### RoHS compliance

This product displays (LF)(SN) on a label. <For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. **BH2B-PH-oo**

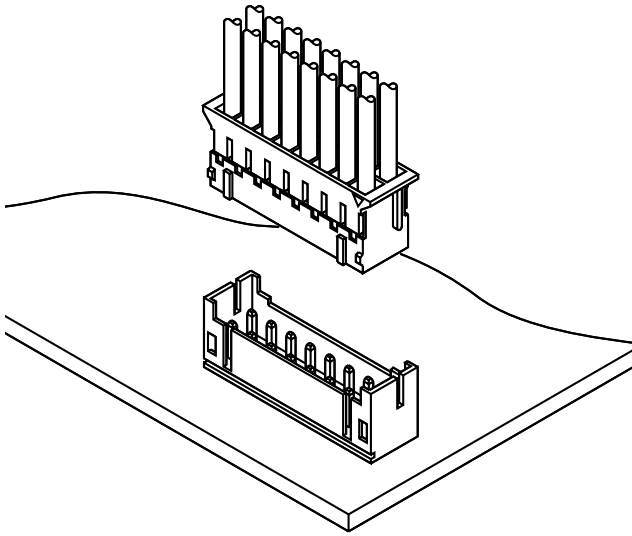
(blank)...natural (white)

K...black R...red E...blue Y...yellow M...green N...brown



# PHD CONNECTOR

2.0mm pitch/Disconnectable Crimp style connectors



**This is a 2.0mm pitch, crimp style, double-row, wire-to-board connector. It is designed to meet the demand for high-density and low-profile connection.**

- Compact
- Reliable contacts
- Fully shrouded header

## Specifications

- Current rating: 3A AC, DC (AWG #22)
- Voltage rating: 250V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/10m Ω max.  
After environmental testing/20m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 800V AC/minute
- Applicable wire: AWG #28 to #22
- Applicable PC board thickness: 1.6mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

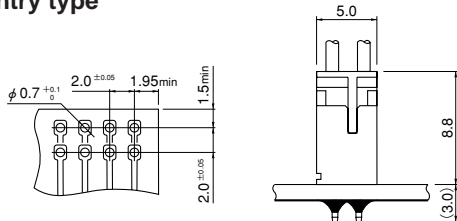
## Standards

⚡ Recognized E60389

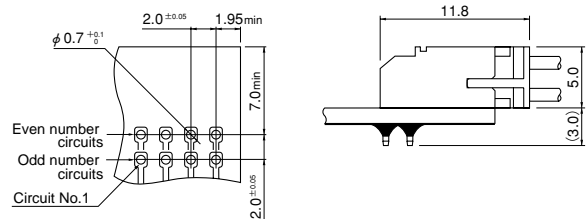
Ⓢ Certified LR20812

## PC board layout (viewed from soldering side) and Assembly layout

### Top entry type



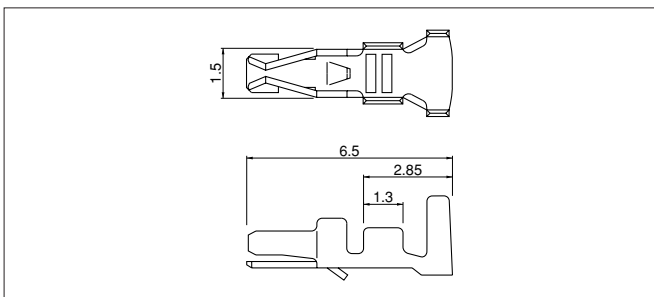
### Side entry type



Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.

2. Hole dimensions differ according to the kind of PC board and piercing method. If PC boards made of hard material are used, the hole dimensions should be larger. The dimensions above should serve as a guideline. Contact JST for details.

## Contact



Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty / reel
	mm <sup>2</sup>	AWG #		
SPHD-002T-P0.5	0.08~0.21	28~24	0.9~1.5	8,000
SPHD-001T-P0.5	0.13~0.33	26~22	1.0~1.5	

### Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

### RoHS compliance

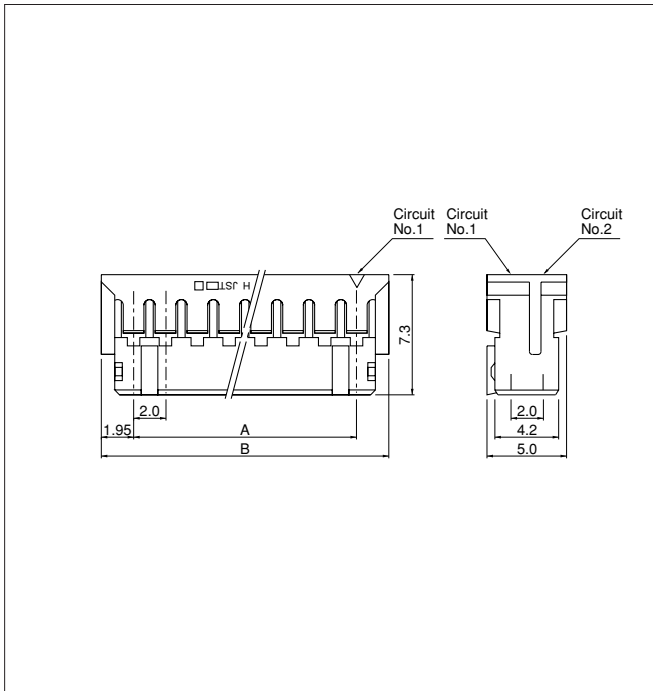
Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SPHD-002T-P0.5	AP-K2N	MKS-LS-10·MKS-L-10	MK/SPHD-002-05	APLMK SPHD002-05
		*MKS-SC-10	SC/SPHD-002-05	APLSC SPHD002-05

Note: \*Strip-crimp applicator

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SPHD-001T-P0.5	AP-K2N	MKS-L-10·MKS-LS-10	MK/SPHD-001-05	APLMK SPHD001-05
		*MKS-SC-10	SC/SPHD-001-05	APLSC SPHD001-05

# PHD CONNECTOR

## Housing



Cir- cuits	Model No.	Dimensions (mm)		Q'ty / bag
		A	B	
8	<b>PHDR-08VS</b>	6.0	9.9	1,000
10	<b>PHDR-10VS</b>	8.0	11.9	1,000
12	<b>PHDR-12VS</b>	10.0	13.9	1,000
14	<b>PHDR-14VS</b>	12.0	15.9	1,000
16	<b>PHDR-16VS</b>	14.0	17.9	1,000
18	<b>PHDR-18VS</b>	16.0	19.9	1,000
20	<b>PHDR-20VS</b>	18.0	21.9	1,000
22	<b>PHDR-22VS</b>	20.0	23.9	1,000
24	<b>PHDR-24VS</b>	22.0	25.9	1,000
26	<b>PHDR-26VS</b>	24.0	27.9	1,000
28	<b>PHDR-28VS</b>	26.0	29.9	1,000
30	<b>PHDR-30VS</b>	28.0	31.9	1,000
32	<b>PHDR-32VS</b>	30.0	33.9	1,000
34	<b>PHDR-34VS</b>	32.0	35.9	1,000

### Material

PA 66, UL94V-0, natural (white)

### RoHS compliance

<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

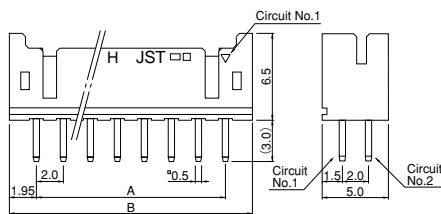
ex. **PHDR-10VS**

S...natural (white)

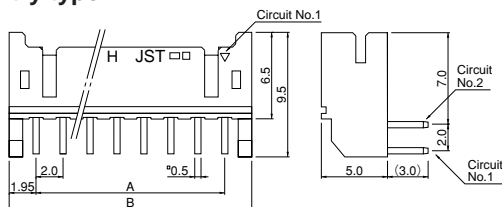
K...black Y...yellow E...blue R...red

## Shrouded header

### Top entry type



### Side entry type



Cir- cuits	Model No.				Dimensions (mm)		Q'ty / box	
	Glass-filled nylon		Nylon		A	B	Top entry type	Side entry type
	Top entry type	Side entry type	Top entry type	Side entry type				
8	<b>B8B-PHDSS</b>	<b>S8B-PHDSS</b>	—	—	6.0	9.9	500	500
10	<b>B10B-PHDSS</b>	<b>S10B-PHDSS</b>	<b>B10B-PHDSS-B</b>	<b>S10B-PHDSS-B</b>	8.0	11.9	500	500
12	<b>B12B-PHDSS</b>	<b>S12B-PHDSS</b>	<b>B12B-PHDSS-B</b>	<b>S12B-PHDSS-B</b>	10.0	13.9	500	500
14	<b>B14B-PHDSS</b>	<b>S14B-PHDSS</b>	<b>B14B-PHDSS-B</b>	<b>S14B-PHDSS-B</b>	12.0	15.9	500	250
16	<b>B16B-PHDSS</b>	<b>S16B-PHDSS</b>	<b>B16B-PHDSS-B</b>	<b>S16B-PHDSS-B</b>	14.0	17.9	500	250
18	<b>B18B-PHDSS</b>	<b>S18B-PHDSS</b>	<b>B18B-PHDSS-B</b>	<b>S18B-PHDSS-B</b>	16.0	19.9	500	250
20	<b>B20B-PHDSS</b>	<b>S20B-PHDSS</b>	<b>B20B-PHDSS-B</b>	<b>S20B-PHDSS-B</b>	18.0	21.9	250	250
22	<b>B22B-PHDSS</b>	<b>S22B-PHDSS</b>	<b>B22B-PHDSS-B</b>	<b>S22B-PHDSS-B</b>	20.0	23.9	250	250
24	<b>B24B-PHDSS</b>	<b>S24B-PHDSS</b>	<b>B24B-PHDSS-B</b>	<b>S24B-PHDSS-B</b>	22.0	25.9	250	200
26	<b>B26B-PHDSS</b>	<b>S26B-PHDSS</b>	<b>B26B-PHDSS-B</b>	<b>S26B-PHDSS-B</b>	24.0	27.9	250	200
28	<b>B28B-PHDSS</b>	<b>S28B-PHDSS</b>	<b>B28B-PHDSS-B</b>	<b>S28B-PHDSS-B</b>	26.0	29.9	250	200
30	<b>B30B-PHDSS</b>	<b>S30B-PHDSS</b>	<b>B30B-PHDSS-B</b>	<b>S30B-PHDSS-B</b>	28.0	31.9	250	200
32	<b>B32B-PHDSS</b>	<b>S32B-PHDSS</b>	<b>B32B-PHDSS-B</b>	<b>S32B-PHDSS-B</b>	30.0	33.9	250	200
34	<b>B34B-PHDSS</b>	<b>S34B-PHDSS</b>	<b>B34B-PHDSS-B</b>	<b>S34B-PHDSS-B</b>	32.0	35.9	250	200

### Material and Finish

Post: Copper alloy, copper-undercoated, tin-plated (reflow treatment)

Wafer: Glass-filled PA 66, UL94V-0, natural (ivory)

PA 66, UL94V-0, natural (white)

**RoHS compliance** This product displays (LF)(SN) on a label.

<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

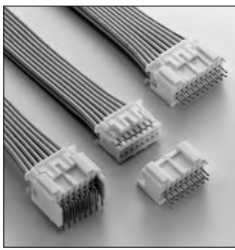
ex. **B10B-PHDSS**

S...natural (ivory)

ex. **B10B-PHDSS-B**

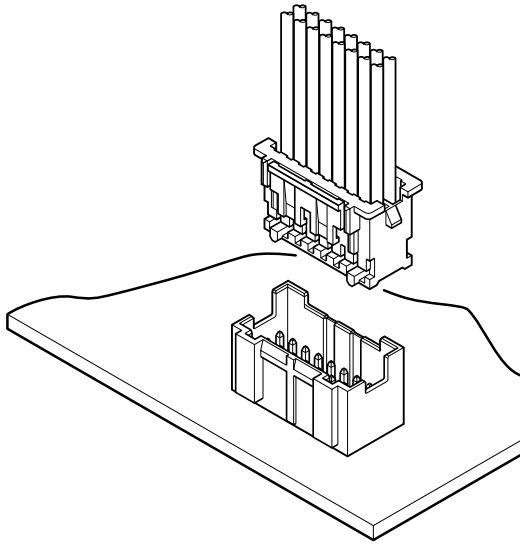
S...natural (white)

K...black Y...yellow E...blue R...red



# PAD CONNECTOR

2.0mm pitch/Disconnectable Crimp style connectors



**Dual-row construction allows high density mounting.**

- Secure locking device
- Reliable contacts
- Insertion guide mechanism
- Polarizing boss

## Specifications

- Current rating: 3A AC, DC (AWG #22)
- Voltage rating: 250V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/10m Ω max.  
After environmental testing/20m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 800V AC/minute
- Applicable wire: AWG #28 to #22
- Applicable PC board thickness: 1.6mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

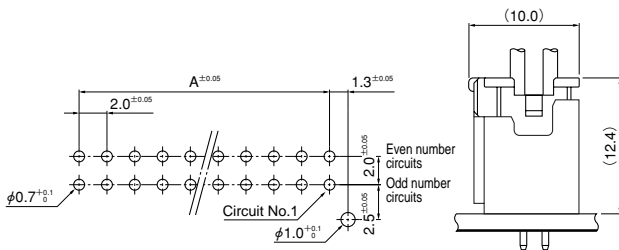
## Standards

Recognized E60389

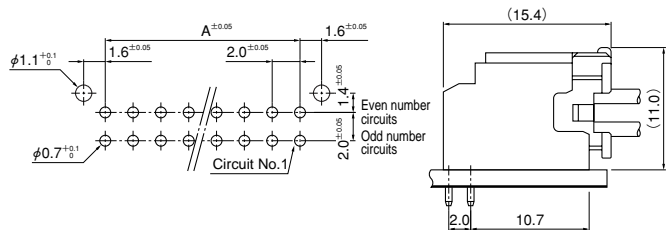
Certified LR20812

## PC board layout (viewed from component side) and Assembly layout

### Top entry type



### Side entry type

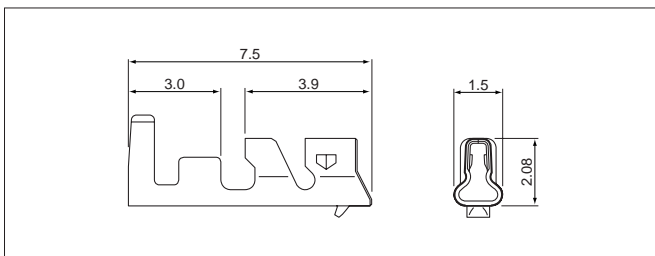
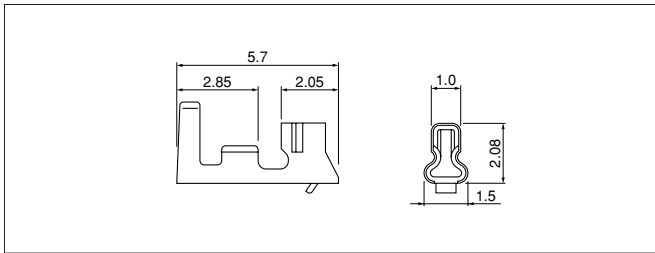


Note: 1. Tolerances are non-cumulative:  $\pm 0.05\text{mm}$  for all centers.

2. Hole dimensions differ according to the kind of PC board and piercing method. If PC boards made of hard material are used, the hole dimensions should be larger. The dimensions above should serve as a guideline. Contact JST for details.

# PAD CONNECTOR

## Contact



Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SPH-001T-P0.5L	AP-K2N	MKS-LS · MKS-L	MK/SPH-001-05L	APLMK SPH001-05L
		—	—	—
SPH-002T-P0.5L	AP-K2N	MKS-LS · MKS-L	MK/SPH-002-05L	APLMK SPH002-05L
		*MKS-SC	SC/SPH-002-05L	APLSC SPH002-05L

Note: \*Strip-crimp applicator

Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty / reel
	mm <sup>2</sup>	AWG #		
SPH-001T-P0.5L	0.13~0.33	26~22	1.0~1.5	8,000
SPH-002T-P0.5L	0.08~0.22	28~24	0.8~1.5	

### Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

### RoHS compliance

Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty / reel
	mm <sup>2</sup>	AWG #		
SPND-001T-C0.5	0.13~0.33	26~22	1.0~1.5	8,000
SPND-002T-C0.5	0.08~0.22	28~24	0.8~1.5	

### Material and Finish

Copper alloy, tin-plated (reflow treatment)

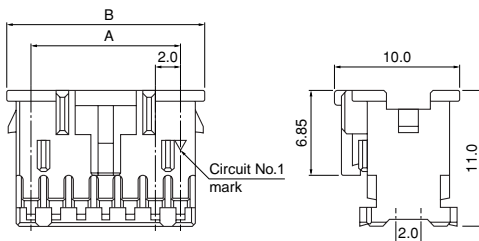
### RoHS compliance

Note: SPND-( )T-C0.5 is low insertion/withdrawal force type contact, in order to improve the work of insertion/withdrawal.

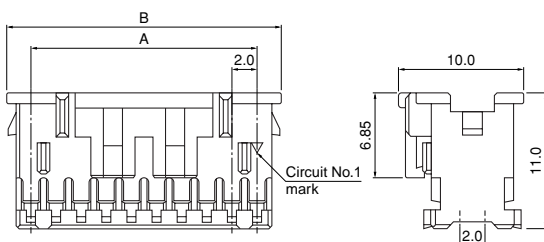
Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SPND-001T-C0.5	AP-K2N	MKS-LS · MKS-L	MK/SPND-001-05	APLMK SPND001-05
		—	—	—
SPND-002T-C0.5	AP-K2N	MKS-LS · MKS-L	MK/SPAD/ND-002-05	APLMK SPAD/ND002-05
		—	—	—

## Housing

(14 circuits or less)



(16 circuits or more)



Circuit	Model No.	Dimensions (mm)		Q'ty / bag
		A	B	
10	PADP-10V-1-S	8.0	12.0	1,000
12	PADP-12V-1-S	10.0	14.0	1,000
14	PADP-14V-1-S	12.0	16.0	1,000
16	PADP-16V-1-S	14.0	18.0	250
20	PADP-20V-1-S	18.0	22.0	200
22	PADP-22V-1-S	20.0	24.0	1,000
24	PADP-24V-1-S	22.0	26.0	1,000
40	PADP-40V-1-S	38.0	42.0	500

### Material

PA 66, UL94V-0, natural (white)

### RoHS compliance

<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. **PADP-16V-1-S**

S...natural (white)

K...black R...red Y...yellow E...blue M...green P...purple

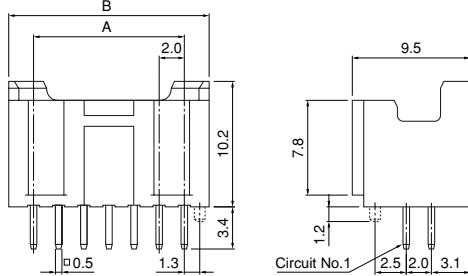
L...lemon yellow

# PAD CONNECTOR

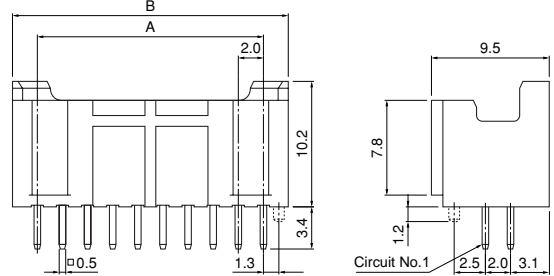
## Shrouded header

### Top entry type

(14 circuits or less)

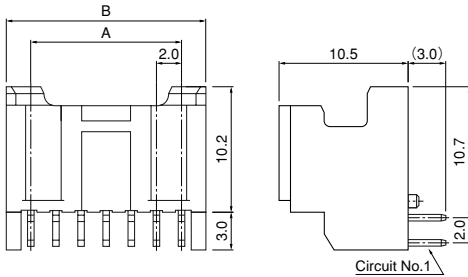


(16 circuits or more)

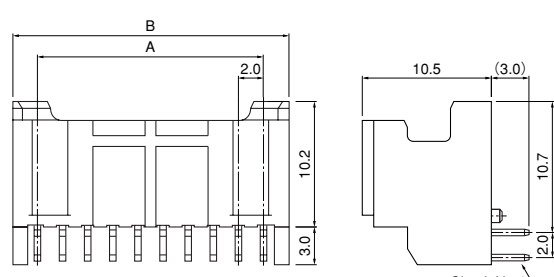


### Side entry type

(14 circuits or less)



(16 circuits or more)



Circuit	Model No.			Dimensions (mm)		Q'ty / box	
	Top entry type		Side entry type	A	B	Top entry type	Side entry type
	With a boss	Without a boss					
10	B10B-PADSS-1F	B10B-PADSS-F	S10B-PADSS-1	8.0	12.0	400	504
12	B12B-PADSS-1F	B12B-PADSS-F	S12B-PADSS-1	10.0	14.0	300	420
14	B14B-PADSS-1F	B14B-PADSS-F	S14B-PADSS-1	12.0	16.0	300	364
16	B16B-PADSS-1F	B16B-PADSS-F	S16B-PADSS-1	14.0	18.0	200	336
20	B20B-PADSS-1F	B20B-PADSS-F	S20B-PADSS-1	18.0	22.0	150	280
22	B22B-PADSS-1F	B22B-PADSS-F	-	20.0	24.0	150	-
24	B24B-PADSS-1F	B24B-PADSS-F	S24B-PADSS-1	22.0	26.0	150	224
40	B40B-PADSS-1F	-	-	38.0	42.0	100	-

### Material and Finish

Post: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
 Wafer: Glass-filled PBT, UL94V-0, (natural) [side entry type]  
 Glass-filled PA 66, UL94V-0, (natural) [top entry type]

**RoHS compliance** This product displays (LF)(SN) on a label.

<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. **B16B-PADSS(-1F)**

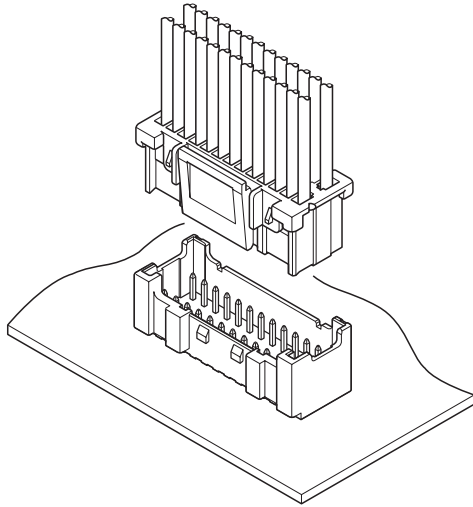
S...natural (white)

K...black R...red Y...yellow E...blue M...green P...purple  
 L...lemon yellow



# PND CONNECTOR

2.0mm pitch/Disconnectable Crimp style connectors



**The PND connector is the high-density dipping type connector with secure lock for wire to board connection and enabled to achieve excellent workability and withstand the unexpected external force.**

- Superior operability (Low insertion force)
- Withstanding external force and secure locking device
- Countermeasure for inverse insertion and mismatching insertion
- High density
- Polarizing boss

## Specifications

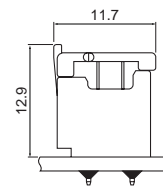
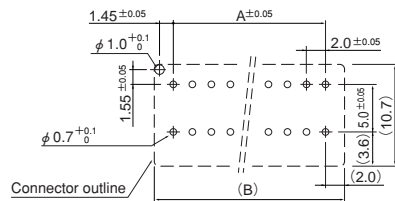
- Current rating: 3A AC, DC (AWG #22)
- Voltage rating: 250V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/10m Ω max.  
After environmental testing/20m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 800V AC/minute
- Applicable wire: AWG #28 to #22
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

Recognized E60389

Certified LR20812

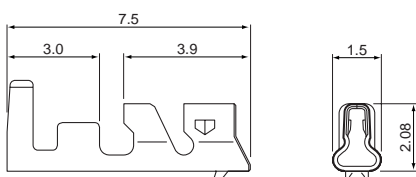
## PC board layout (viewed from component side) and Assembly layout



Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.

2. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.

## Contact



Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty / reel
	mm <sup>2</sup>	AWG #		
SPND-001T-C0.5	0.13~0.33	26~22	1.0~1.5	8,000
SPND-002T-C0.5	0.08~0.22	28~24	0.8~1.5	

### Material and Finish

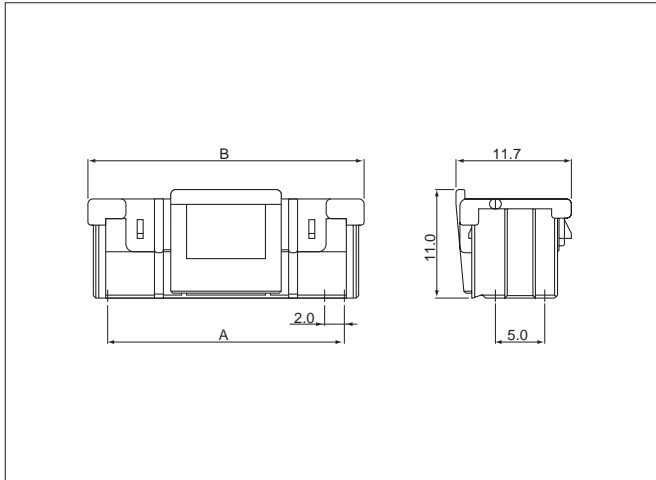
Copper alloy, tin-plated (reflow treatment)

### RoHS compliance

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SPND-001T-C0.5	AP-K2N	MKS-LS · MKS-L	MK/SPND-001-05	APLMK SPND001-05
		—	—	—
SPND-002T-C0.5	—	MKS-LS · MKS-L	MK/SPAD/ND-002-05	APLMK SPAD/ND002-05
		—	—	—

# PND CONNECTOR

## Housing



Circuits	Model No.	Dimensions (mm)		Qty / bag
		A	B	
8	<b>PNDP-08V-Z</b>	6.0	10.0	500
10	<b>PNDP-10V-Z</b>	8.0	12.0	500
12	<b>PNDP-12V-Z</b>	10.0	14.0	500
14	<b>PNDP-14V-Z</b>	12.0	16.0	500
16	<b>PNDP-16V-Z</b>	14.0	18.0	300
18	<b>PNDP-18V-Z</b>	16.0	20.0	300
20	<b>PNDP-20V-Z</b>	18.0	22.0	300
22	<b>PNDP-22V-Z</b>	20.0	24.0	300
24	<b>PNDP-24V-Z</b>	22.0	26.0	250
26	<b>PNDP-26V-Z</b>	24.0	28.0	250
28	<b>PNDP-28V-Z</b>	26.0	30.0	250
30	<b>PNDP-30V-Z</b>	28.0	32.0	150
32	<b>PNDP-32V-Z</b>	30.0	34.0	150
34	<b>PNDP-34V-Z</b>	32.0	36.0	150
36	<b>PNDP-36V-Z</b>	34.0	38.0	100
38	<b>PNDP-38V-Z</b>	36.0	40.0	100
40	<b>PNDP-40V-Z</b>	38.0	42.0	100

### Material

PA 66, UL94V-0, ivory

### RoHS compliance

<For reference> As the color identification, the following alphabet shall be put in the underlined part.  
For availability, delivery and minimum order quantity, contact JST.

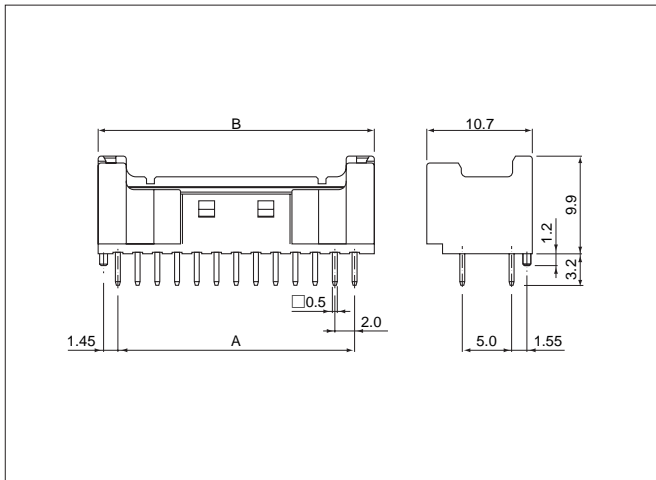
ex. **PNDP-28V-Z**

Z...ivory

K...black R...red E...blue M...green N...brown PK...pink

D...orange

## Shrouded header



Circuits	Model No.		Dimensions (mm)		Qty / box
	With boss	Without boss	A	B	
8	<b>B08B-PNDZS-1</b>	<b>B08B-PNDZS</b>	6.0	10.0	736
10	<b>B10B-PNDZS-1</b>	<b>B10B-PNDZS</b>	8.0	12.0	608
12	<b>B12B-PNDZS-1</b>	<b>B12B-PNDZS</b>	10.0	14.0	512
14	<b>B14B-PNDZS-1</b>	<b>B14B-PNDZS</b>	12.0	16.0	448
16	<b>B16B-PNDZS-1</b>	<b>B16B-PNDZS</b>	14.0	18.0	416
18	<b>B18B-PNDZS-1</b>	<b>B18B-PNDZS</b>	16.0	20.0	352
20	<b>B20B-PNDZS-1</b>	<b>B20B-PNDZS</b>	18.0	22.0	320
22	<b>B22B-PNDZS-1</b>	<b>B22B-PNDZS</b>	20.0	24.0	288
24	<b>B24B-PNDZS-1</b>	<b>B24B-PNDZS</b>	22.0	26.0	288
26	<b>B26B-PNDZS-1</b>	<b>B26B-PNDZS</b>	24.0	28.0	256
28	<b>B28B-PNDZS-1</b>	<b>B28B-PNDZS</b>	26.0	30.0	224
30	<b>B30B-PNDZS-1</b>	<b>B30B-PNDZS</b>	28.0	32.0	224
32	<b>B32B-PNDZS-1</b>	<b>B32B-PNDZS</b>	30.0	34.0	192
34	<b>B34B-PNDZS-1</b>	<b>B34B-PNDZS</b>	32.0	36.0	192
36	<b>B36B-PNDZS-1</b>	<b>B36B-PNDZS</b>	34.0	38.0	192
38	<b>B38B-PNDZS-1</b>	<b>B38B-PNDZS</b>	36.0	40.0	160
40	<b>B40B-PNDZS-1</b>	<b>B40B-PNDZS</b>	38.0	42.0	160

### Material and Finish

Post: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
Wafer: Glass-filled PA 66, UL94V-0, ivory

**RoHS compliance** This product displays (LF)(SN) on a label.

<For reference> As the color identification, the following alphabet shall be put in the underlined part.  
For availability, delivery and minimum order quantity, contact JST.

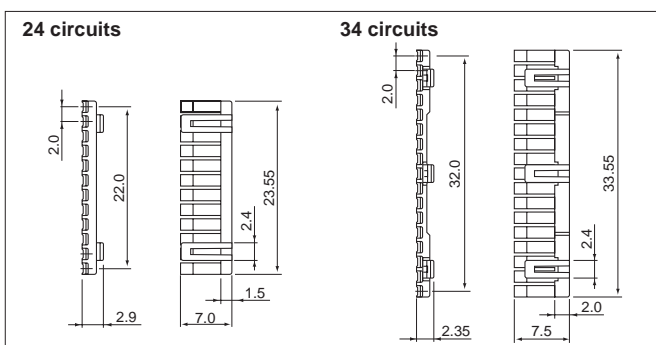
ex. **B28B-PNDZS-1**

Z...ivory

K...black R...red E...blue M...green

N...brown PK...pink D...orange

## Retainer



Circuits	Model No.	Qty / bag
24	<b>PNDP-24V-Z</b>	1,000
34	<b>PNDP-34V-Z</b>	1,000

### Material

Glass-filled PA 66, UL94V-0, ivory

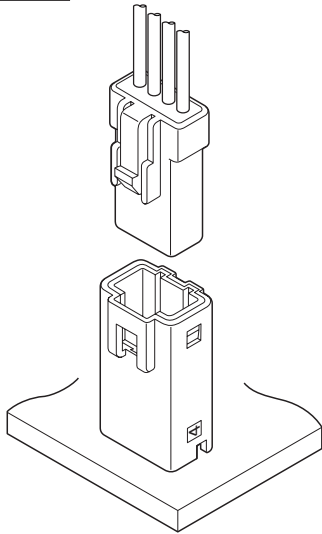
### RoHS compliance





# JWPF CONNECTOR

2.0mm pitch/Disconnectable Crimp style connectors



**Applicable for waterproof usage. Its waterproof grade is more than 7 ingress protection of JIC C 0920 (IEC 60529 IPX7).**

- **Waterproof performance**
- **Contained seal ring**
- **Solid rubber seal**
- **Double-spring construction**
- **Housing-to-terminal locks**
- **Inner housing lock**
- **Interchangeability**
- **Header for use specifically with resin coated ("potted") PC board**

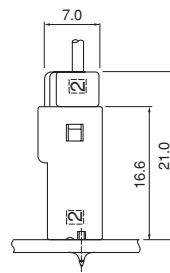
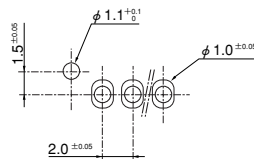
## Specifications

- Current rating: 3A AC, DC (AWG #22)
- Voltage rating: 100V AC, DC
- Temperature range: -40°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/5m Ω max.  
After environmental testing/10m Ω max.
- Insulation resistance: 800M Ω min.
- Withstanding voltage: 1,000V AC/minute
- Applicable wire: AWG #26 to #22  
0.13 to 0.33mm<sup>2</sup>  
Insulation O.D./1.4 to 1.6mm
- Waterproof grade: More than grade 7 ingress protection of JIS C 0920 (IEC 60529 IPX7).

## Standards

Recognized E60389

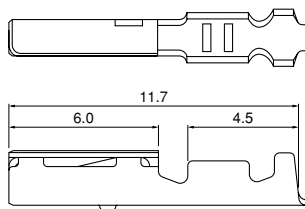
## PC board layout (viewed from component side) and Assembly layout



Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.

2. Hole dimension differ according to the kind of PC board and piercing method. If PC boards made of hard material are used, the hole dimensions should be larger. The dimensions above should serve as a guideline. Contact JST for details.

## Contact



Model No.	Applicable wire		Insulation O.D (mm)	Qty / reel
	mm <sup>2</sup>	AWG#		
SWPR-001T-P025	0.13~0.33	26~22	1.4~1.6	8,200

### Material and Finish

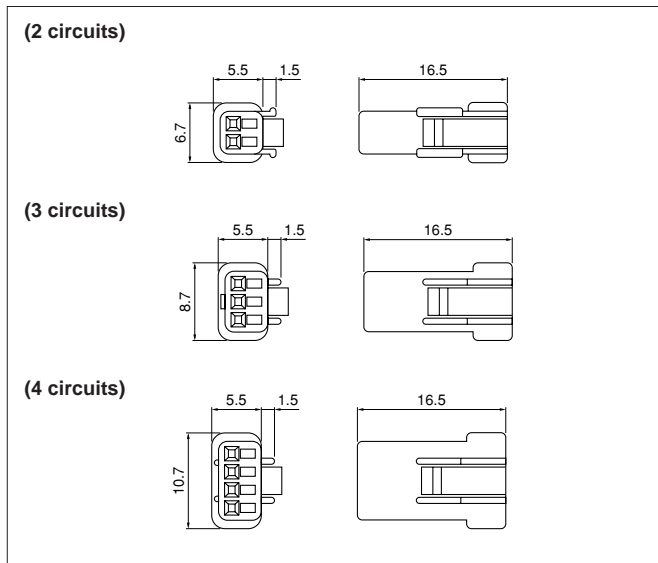
Copper alloy, tin-plated (reflow treatment)

### RoHS compliance

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SWPR-001T-P025	AP-K2N	MKS-L	MK/SWPR/T-001-025	APLMK SWPR/T001-025
		—	—	—

# JWPF CONNECTOR

## Housing



Note: Housing comes with seal rubber plate.

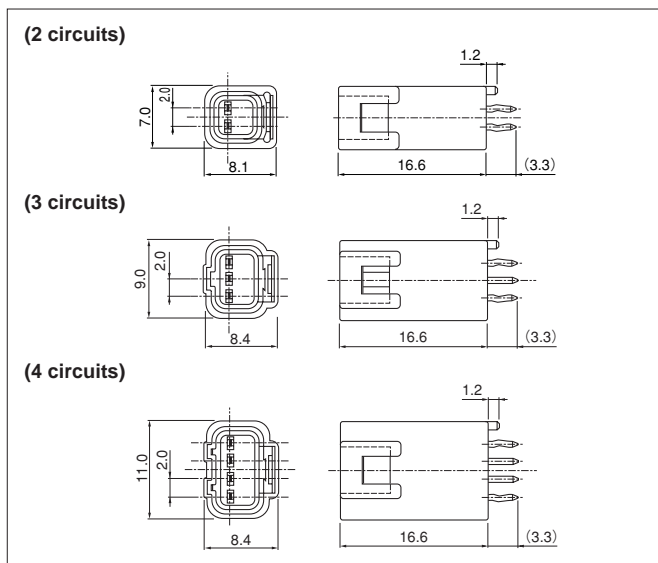
Circuits	Model No.	Q'ty / bag
2	<b>02R-JWPF-VSLE-S</b>	1,000
3	<b>03R-JWPF-VSLE-S</b>	1,000
4	<b>04R-JWPF-VSLE-S</b>	1,000

### Material

PBT, UL94V-0, natural (white)

### RoHS compliance

## Shrouded header



Circuits	Model No.	Q'ty / box
2	<b>B02B-JWPF-SK-R</b>	825
3	<b>B03B-JWPF-SK-R</b>	650
4	<b>B04B-JWPF-SK-R</b>	525

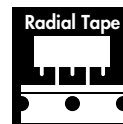
### Material and Finish

Press pin: Copper alloy, tin-plated (reflow treatment)  
 Seal ring: Silicon rubber  
 Seal ring holder: PBT, UL94V-0, yellow  
 Wafer: Glass-filled PBT, UL94V-0, natural (white)

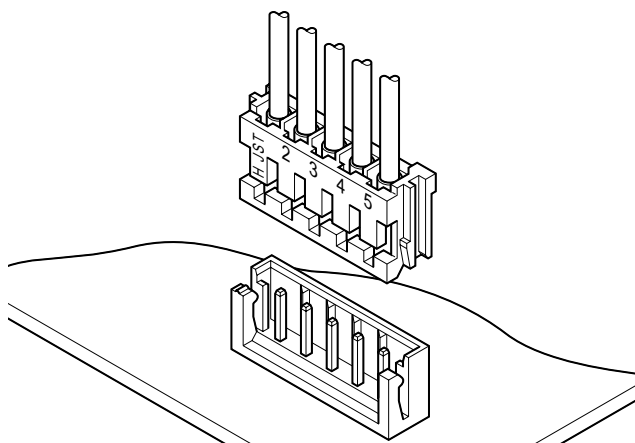
**RoHS compliance** This product displays (LF)(SN) on a label.



# EH CONNECTOR



## 2.5mm pitch/Disconnectable Crimp style connectors



**This, the thinnest, 2.5mm pitch connector, is 8.1mm in height after mounting and 3.8mm in width. It is designed to meet the demand for the high-density connection of internal wires to printed circuit boards. It is compact, highly reliable and low in cost.**

- Compact and slim
- Highly reliable contact
- Polarizing guides
- Easy and effective crimping

### Specifications

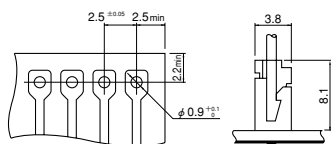
- Current rating: 3A AC, DC (AWG #22)
- Voltage rating: 250V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/10m Ω max.  
After environmental testing/20m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 800V AC/minute
- Applicable wire: AWG #32 to #22
- Applicable PC board thickness: 0.8 to 1.6mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

### Standards

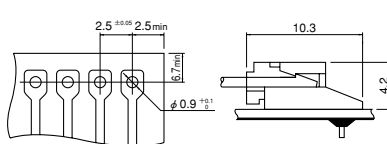
- Ⓜ Recognized E60389
- Ⓢ Certified LR20812
- Ⓡ R50082349

### PC board layout (viewed from soldering side) and Assembly layout

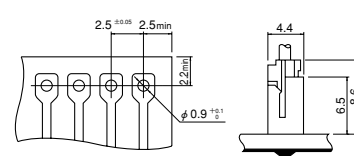
#### Top entry type



#### Side entry type



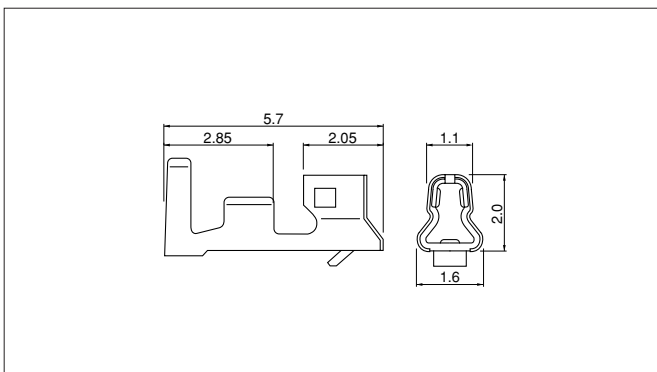
#### Radial-tape



Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.

2. Hole dimension differ according to the kind of PC board and piercing method. If PC boards made of hard material are used, the hole dimensions should be larger. The dimensions above should serve as a guideline. Contact JST for details.

### Contact



Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty / reel
	mm <sup>2</sup>	AWG#		
SEH-001T-P0.6	0.05 ~ 0.33	30~22	1.0~1.9	9,000
*SEH-001T-P0.6L	0.13 ~ 0.33	26~22	0.9~1.9	
*SEH-002T-P0.6L	0.05 ~ 0.13	30~26	0.9~1.3	
*SEH-003T-P0.6L	0.032~0.08	32~28	0.5~1.1	10,000

#### Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

#### RoHS compliance

1. Contact JST for gold-plated products.
2. SEH-00( )T-P0.6L is low-insertion force type contact, for easier insertion/withdrawal, which would be less resistant to the vibration. The crimp height is different from the standard contact.
3. \*Marked products are not TÜV approved.
4. Contact JST for details.

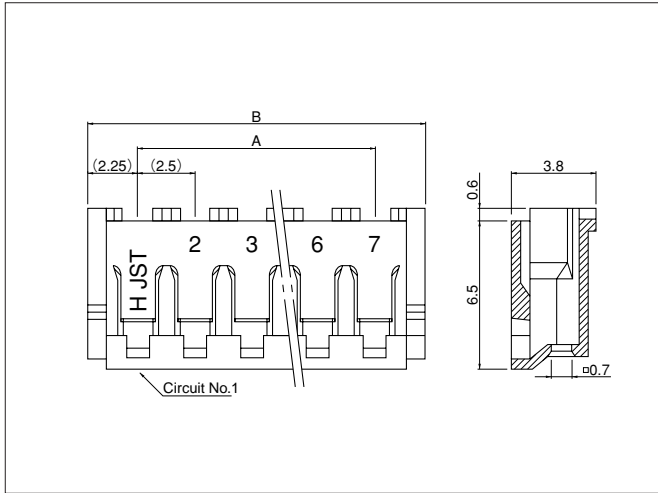
Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SEH-001T-P0.6	AP-K2N	MKS-LS · MKS-L	MK/SEH-001-06	APLMK SEH001-06
		*MKS-SC	SC/SEH-001-06	APLSC SEH001-06
SEH-001T-P0.6L		MKS-LS · MKS-L	MK/SEH-001-06L	APLMK SEH001-06L
		*MKS-SC	SC/SEH-001-06L	APLSC SEH001-06L

Note: \*Strip-crimp applicator

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SEH-002T-P0.6L	AP-K2N	MKS-LS · MKS-L	MK/SEH-002-06L	APLMK SEH002-06L
		—	—	—
SEH-003T-P0.6L		MKS-L-10	MK/SEH-003-06L	APLMK SEH003-06L
		*MKS-SC-10	SC/SEH-003-06L	APLSC SEH003-06L

# EH CONNECTOR

## Housing



Circuits	Model No.	Dimensions (mm)		Q'ty / bag
		A	B	
2	<b>EHR-2</b>	2.5	7.0	1,000
3	<b>EHR-3</b>	5.0	9.5	1,000
4	<b>EHR-4</b>	7.5	12.0	1,000
5	<b>EHR-5</b>	10.0	14.5	1,000
6	<b>EHR-6</b>	12.5	17.0	1,000
7	<b>EHR-7</b>	15.0	19.5	1,000
8	<b>EHR-8</b>	17.5	22.0	1,000
9	<b>EHR-9</b>	20.0	24.5	1,000
10	<b>EHR-10</b>	22.5	27.0	1,000
11	<b>EHR-11</b>	25.0	29.5	1,000
12	<b>EHR-12</b>	27.5	32.0	1,000
13	<b>EHR-13</b>	30.0	34.5	1,000
14	<b>EHR-14</b>	32.5	37.0	1,000
15	<b>EHR-15</b>	35.0	39.5	1,000

### Material

PA 66, UL94V-0, natural (white)

### RoHS compliance

<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. **EHR-2-oo**

(blank)...natural (white)

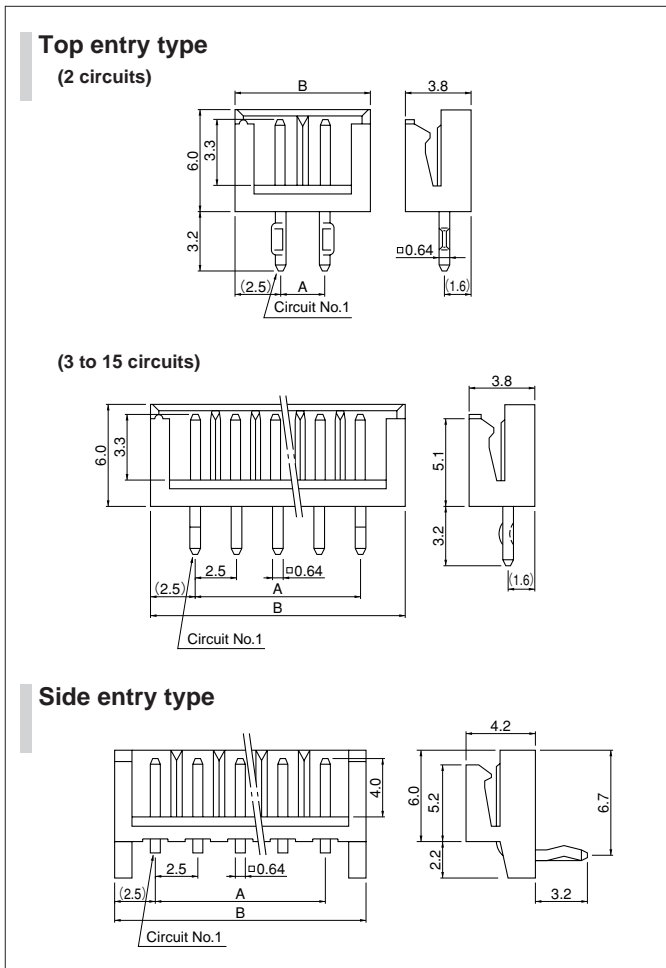
K...black R...red TR...tomato red E...blue Y...yellow

L...lemon yellow M...green O...orange N...brown PL...purple

PK...pink H...gray LE...light blue FY...vivid yellow

## Shrouded header

The shrouded headers are interchangeable with those of the HR crimp style and insulation displacement connectors.



Circuits	Model No.		Dimensions (mm)		Q'ty / box	
	Top entry type	Side entry type	A	B	Top entry type	Side entry type
2	<b>B2B-EH-A</b>	<b>S2B-EH</b>	2.5	7.5	1,000	1,000
3	<b>B3B-EH-A</b>	<b>S3B-EH</b>	5.0	10.0	1,000	1,000
4	<b>B4B-EH-A</b>	<b>S4B-EH</b>	7.5	12.5	1,000	1,000
5	<b>B5B-EH-A</b>	<b>S5B-EH</b>	10.0	15.0	1,000	1,000
6	<b>B6B-EH-A</b>	<b>S6B-EH</b>	12.5	17.5	1,000	500
7	<b>B7B-EH-A</b>	<b>S7B-EH</b>	15.0	20.0	1,000	500
8	<b>B8B-EH-A</b>	<b>S8B-EH</b>	17.5	22.5	500	500
9	<b>B9B-EH-A</b>	<b>S9B-EH</b>	20.0	25.0	500	500
10	<b>B10B-EH-A</b>	<b>S10B-EH</b>	22.5	27.5	500	500
11	<b>B11B-EH-A</b>	<b>S11B-EH</b>	25.0	30.0	500	250
12	<b>B12B-EH-A</b>	<b>S12B-EH</b>	27.5	32.5	500	250
13	<b>B13B-EH-A</b>	<b>S13B-EH</b>	30.0	35.0	250	250
14	<b>B14B-EH-A</b>	<b>S14B-EH</b>	32.5	37.5	250	250
15	<b>B15B-EH-A</b>	<b>S15B-EH</b>	35.0	40.0	250	250

### Material and Finish

Post: Brass, copper-undercoated, tin-plated (reflow treatment)

Wafer: PA 66, UL94V-0, natural (white)

**RoHS compliance** This product displays (LF)(SN) on a label.

Note: Also available and identified as model BxxB-EH is a top entry type having a post extension length of 4.0mm

<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

<Top entry type>

ex. **B2B-EH-A-oo**

(blank)...natural (white)

K...black R...red E...blue Y...yellow M...green

<Side entry type>

ex. **S2B-EH-oo**

(blank)...natural (white)

K...black R...red TR...tomato red E...blue Y...yellow

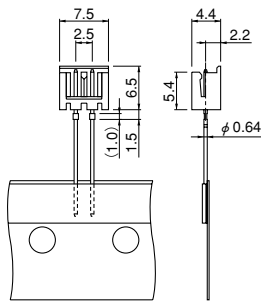
L...lemon yellow M...green O...orange N...brown P...purple

PK...pink H...gray LE...light blue FY...vivid yellow

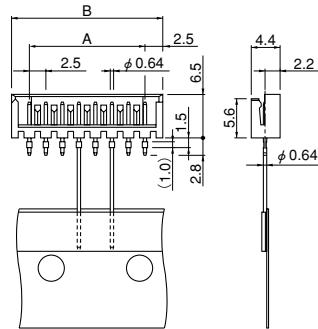
## Shrouded header on radial-tape

### ● TS type

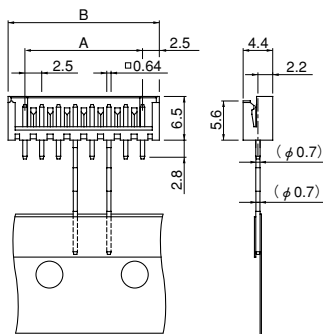
(2 circuits)



(3 to 8 circuits)



### ● TV4 type



Circuits	Model No.		Dimensions (mm)		Q'ty / box
	TS type	TV4 type	A	B	
2	<b>B2B-EH-TS</b>	—	—	—	1,400
3	<b>B3B-EH-TS</b>	<b>B3B-EH-TV4</b>	5.0	10.0	1,400
4	<b>B4B-EH-TS</b>	<b>B4B-EH-TV4</b>	7.5	12.5	700
5	<b>B5B-EH-TS</b>	<b>B5B-EH-TV4</b>	10.0	15.0	700
6	<b>B6B-EH-TS</b>	<b>B6B-EH-TV4</b>	12.5	17.5	700
7	<b>B7B-EH-TS</b>	<b>B7B-EH-TV4</b>	15.0	20.0	700
8	<b>B8B-EH-TS</b>	<b>B8B-EH-TV4</b>	17.5	22.5	700

#### Material and Finish

Pin/Post: Brass, copper-undercoated, tin-plated (reflow treatment)  
Wafer: PA 66, UL94V-0, natural (white)

**RoHS compliance** This product displays (LF)(SN) on a label.

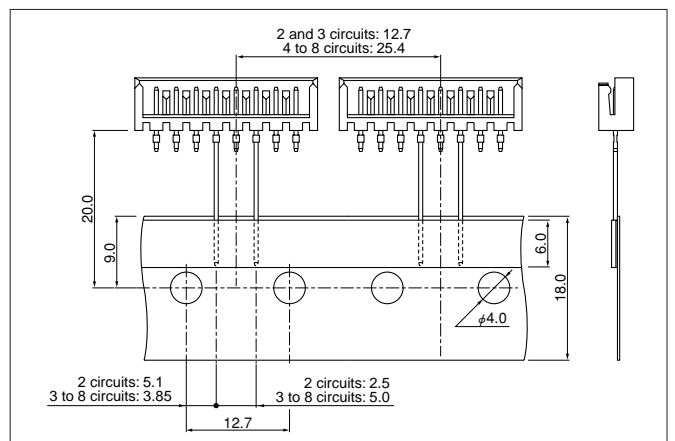
<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. **B2B-EH-TS-oo**

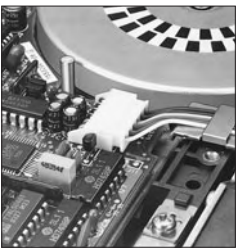
(blank)...natural (white)

K...black R...red E...blue Y...yellow M...green N...brown

### Taping specifications

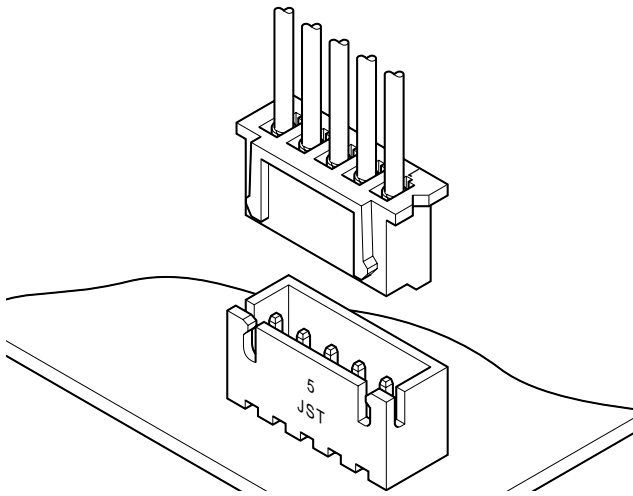


Note: Conforms to JIS C 0806.



# XH CONNECTOR

2.5mm pitch/Disconnectable Crimp style connectors



The XH connector was developed based on the high reliability and versatility of our NH series connectors. The connector is very small with a mounting height of 9.8mm.

- Original folded beam contact
- Box-shaped shrouded header
- Header with a boss
- Interchangeability
- Conforming to the HA terminal

## Specifications

- Current rating: 3A AC, DC (AWG #22)
- Voltage rating: 250V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/10m Ω max.  
After environmental testing/20m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 1,000V AC/minute
- Applicable wire: AWG #30 to #22
- Applicable PC board thickness: 1.6mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

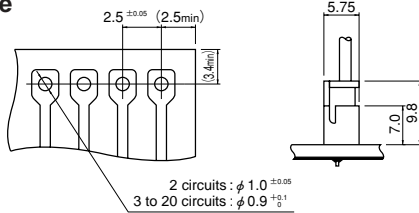
## Standards

- Ⓜ Recognized E60389
- Ⓢ Certified LR20812
- ⚠ J50014297

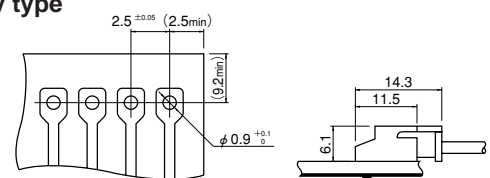
## PC board layout and Assembly layout

### <Through-hole type (viewed from soldering side)>

#### Top entry type

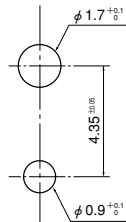


#### Side entry type

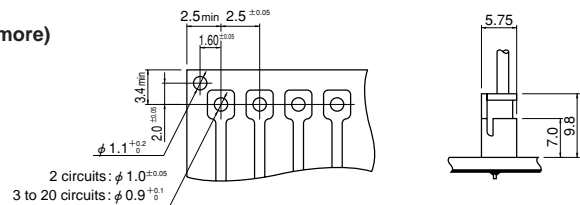


#### Top entry type with a boss

(1 circuit)



(2 circuits or more)

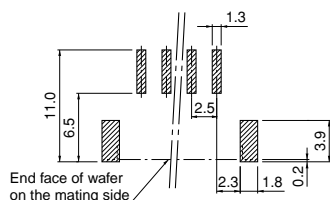


Note: 1. Tolerances are non-cumulative:  $\pm 0.05\text{mm}$  for all centers.

2. Hole dimensions differ according to the kind of PC board and piercing method. If PC boards made of hard material are used, the hole dimensions should be larger. The dimensions above should serve as a guideline. Contact JST for details.

### <SMT type (viewed from component side)>

#### Side entry type

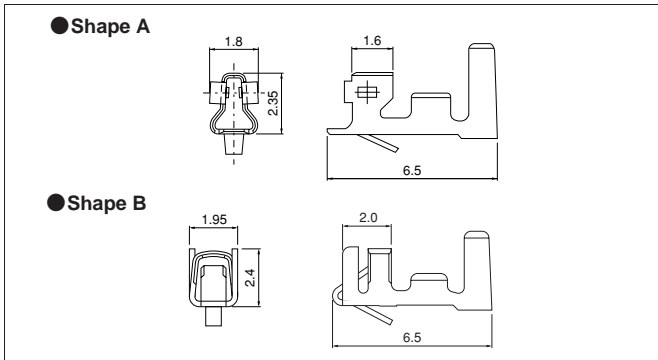


Note: 1. Tolerances are non-cumulative:  $\pm 0.05\text{mm}$  for all centers.

2. The dimensions above should serve as a guideline. Contact JST for details.

# XH CONNECTOR

## Contact



Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SXH-001T-P0.6N	AP-K2N	MKS-LS · MKS-L	MK/SXH-001-06N	APLMK SXH001-06N
		*MKS-SC	SC/SXH-001-06N	APLSC SXH001-06N
SXH-001T-P0.6		MKS-LS · MKS-L	MK/SXH-001-06	APLMK SXH001-06
		*MKS-SC	SC/SXH-001-06	APLSC SXH001-06

Note: \*Strip-crimp applicator

Model No.	Shape	Applicable Wire		Insulation O.D (mm)	Q'ty / reel
		mm <sup>2</sup>	AWG#		
SXH-001T-P0.6N	A	0.13~0.33	26~22	1.3~1.9	5,000
SXH-001T-P0.6	B	0.08~0.33	28~22	0.9~1.9	8,000
SXH-002T-P0.6		0.05~0.13	30~26	0.9~1.3	

### Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

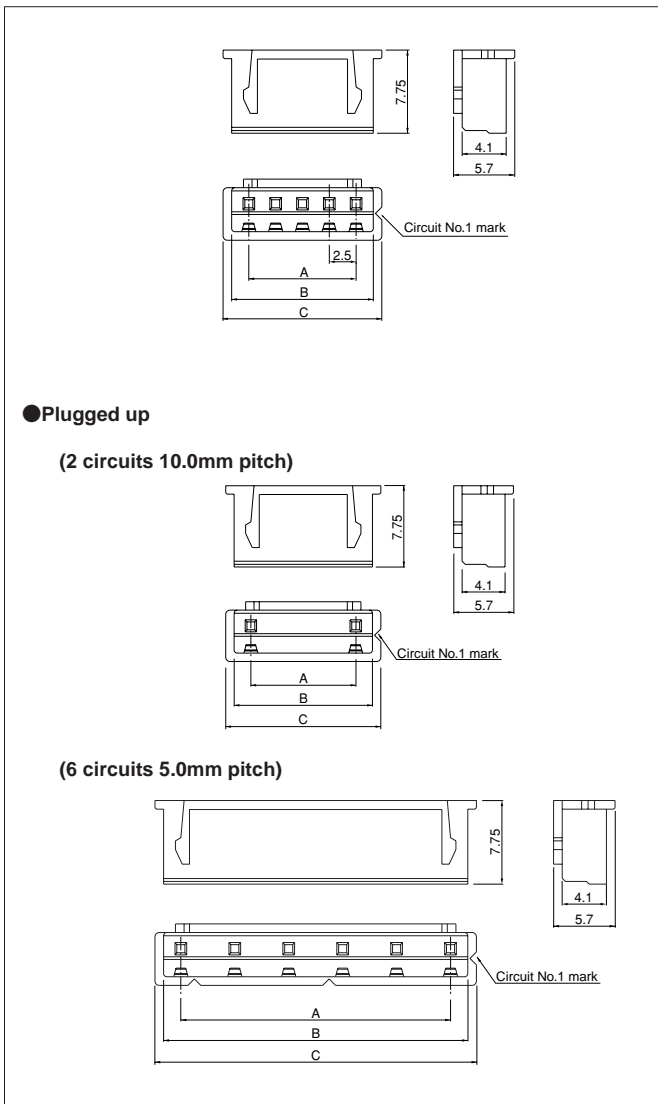
### RoHS compliance

Note:

- Contact JST if you require gold-plated contacts or contacts made of brass.
- Contact JST also if you require shielded wires, thin wires or other special wires.
- SXH-001T-P0.6N is low-insertion force type contact, for easier insertion/withdrawal, which would be less resistant to the vibration.

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SXH-002T-P0.6	AP-K2N	MKS-LS · MKS-L	MK/SXH-002-06	APLMK SXH002-06
		*MKS-SC	SC/SXH-002-06	APLSC SXH002-06

## Housing



Circuits	Model No.	Dimensions (mm)			Q'ty / bag
		A	B	C	
1	XHP-1	—	3.2	4.8	1,000
2	XHP-2	2.5	5.7	7.3	1,000
2	XHP-2(10.0)-U	10.0	13.2	14.8	1,000
3	XHP-3	5.0	8.2	9.8	1,000
4	XHP-4	7.5	10.7	12.3	1,000
5	XHP-5	10.0	13.2	14.8	1,000
6	XHP-6	12.5	15.7	17.3	1,000
6	XHP-6(5.0)-U	25.0	28.2	29.8	1,000
7	XHP-7	15.0	18.2	19.8	1,000
8	XHP-8	17.5	20.7	22.3	1,000
9	XHP-9	20.0	23.2	24.8	1,000
10	XHP-10	22.5	25.7	27.3	1,000
11	XHP-11	25.0	28.2	29.8	1,000
12	XHP-12	27.5	30.7	32.3	1,000
13	XHP-13	30.0	33.2	34.8	1,000
14	XHP-14	32.5	35.7	37.3	1,000
15	XHP-15	35.0	38.2	39.8	1,000
16	XHP-16	37.5	40.7	42.3	1,000
20	XHP-20	47.5	50.7	52.3	500

### Material

PA 6, UL94V-0, natural (white)

### RoHS compliance

Note:

- XHP-2(10.0)-U is 2 circuits 10.0mm pitch plugged up. Not UL/CSA/TÜV approved.
- XHP-6(5.0)-U is 6 circuits 5.0mm pitch plugged up. Not UL/CSA/TÜV approved.

<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. XHP-1-oo  
(blank)...natural (white)  
BK...black R...red E...blue Y...yellow L...lemon yellow  
M...green D...orange N...brown FY...vivid yellow

<Plugged up type>

ex. XHP-2(10.0)-U-oo  
(blank)...natural (white)  
R...red E...blue

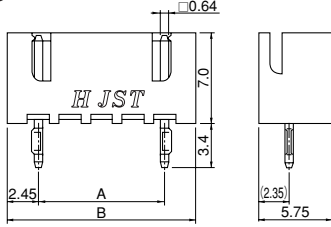
# XH CONNECTOR

## Through-hole type shrouded header

The shrouded headers are interchangeable with those of the NR and NRD insulation displacement connectors, and JQ board-to-board connectors.

### Top entry type

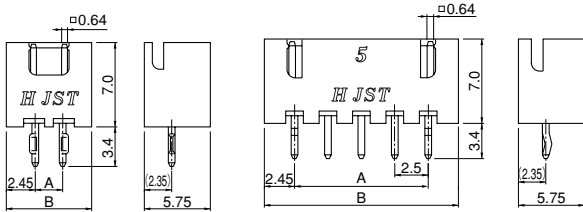
● plugged up



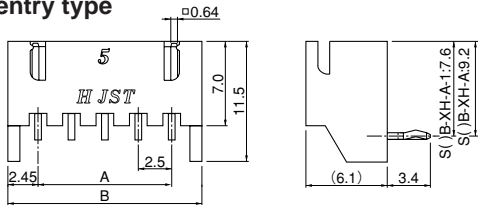
### Top entry type

(2 circuits)

(3 to 20 circuits)



### Side entry type



Circuits	Model No.			Dimensions (mm)		Q'ty / box	
	Top entry type	Side entry type		A	B	Top entry type	Side entry type
2	B2B-XH-A	S2B-XH-A-1	S2B-XH-A	2.5	7.4	1,000	1,000
2	B2(10.0)B-XH-A-U	-	-	10.0	14.9	1,000	-
3	B3B-XH-A	S3B-XH-A-1	S3B-XH-A	5.0	9.9	1,000	1,000
4	B4B-XH-A	S4B-XH-A-1	S4B-XH-A	7.5	12.4	500	500
5	B5B-XH-A	S5B-XH-A-1	S5B-XH-A	10.0	14.9	500	500
6	B6B-XH-A	S6B-XH-A-1	S6B-XH-A	12.5	17.4	500	500
7	B7B-XH-A	S7B-XH-A-1	S7B-XH-A	15.0	19.9	500	250
8	B8B-XH-A	S8B-XH-A-1	S8B-XH-A	17.5	22.4	250	250
9	B9B-XH-A	S9B-XH-A-1	S9B-XH-A	20.0	24.9	250	250
10	B10B-XH-A	S10B-XH-A-1	S10B-XH-A	22.5	27.4	250	250
11	B11B-XH-A	S11B-XH-A-1	S11B-XH-A	25.0	29.9	250	250
12	B12B-XH-A	S12B-XH-A-1	S12B-XH-A	27.5	32.4	250	200
13	B13B-XH-A	S13B-XH-A-1	S13B-XH-A	30.0	34.9	250	200
14	B14B-XH-A	S14B-XH-A-1	S14B-XH-A	32.5	37.4	250	200
15	B15B-XH-A	S15B-XH-A-1	S15B-XH-A	35.0	39.9	250	100
16	B16B-XH-A	-	S16B-XH-A	37.5	42.4	200	100
20	B20B-XH-A	-	-	47.5	52.4	100	-

### Material and Finish

Post: Brass, copper-undercoated, tin-plated (reflow treatment)  
Wafer: PA 66, UL94V-0, natural (white)

**RoHS compliance** This product displays (LF)(SN) on a label.

Note: B2(10.0)B-XH-A-U is 2 circuits 10.0mm pitch plugged up.

Not UL/CSA/TÜV approved.

<For reference> As the color identification, the following alphabet shall be put in the underlined part.  
For availability, delivery and minimum order quantity, contact JST.

ex. **S3B-XH-A(-1)-oo**

(blank)...natural (white)

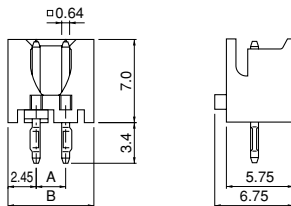
BK...black R...red E...blue Y...yellow L...lemon yellow

M...green D...orange N...brown FY...vivid yellow

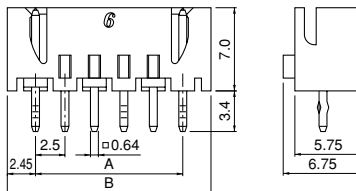
## Through-hole type shrouded header

### Top entry type of glass-filled nylon

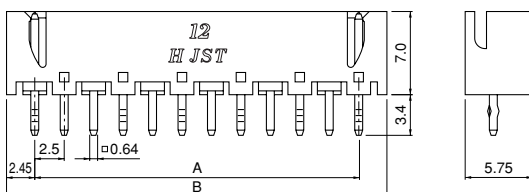
(2 circuits)



(3 to 8 circuits)



(9 to 15 circuits)



Circuits	Model No.	Dimensions (mm)		Q'ty/bag
		A	B	
2	B2B-XH-2	2.5	7.4	1,000
3	B3B-XH-2	5.0	9.9	1,000
4	B4B-XH-2	7.5	12.4	500
5	B5B-XH-2	10.0	14.9	500
6	B6B-XH-2	12.5	17.4	500
7	B7B-XH-2	15.0	19.9	500
8	B8B-XH-2	17.5	22.4	250
9	B9B-XH-2	20.0	24.9	250
10	B10B-XH-2	22.5	27.4	250
11	B11B-XH-2	25.0	29.9	250
12	B12B-XH-2	27.5	32.4	250
13	B13B-XH-2	30.0	34.9	250
14	B14B-XH-2	32.5	37.4	250
15	B15B-XH-2	35.0	39.9	250

### Material and Finish

Post: Brass, copper-undercoated, tin-plated (reflow treatment)  
Wafer: Glass-filled PA 66, UL94V-0, natural (ivory)

**RoHS compliance** This product displays (LF)(SN) on a label.

<For reference> As the color identification, the following alphabet shall be put in the underlined part.  
For availability, delivery and minimum order quantity, contact JST.

ex. **B2B-XH-2-oo**

(blank)...natural (ivory)

C...black R...red E...blue Y...yellow M...green

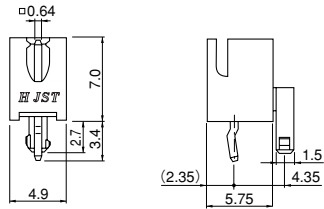


## Through-hole type shrouded header

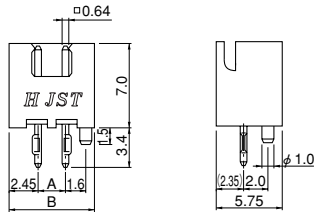
The shrouded headers are interchangeable with those of the NR and NRD insulation displacement connectors, and JQ board-to-board connectors.

### Top entry type with a boss

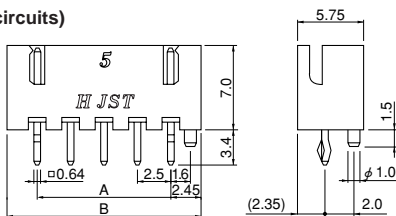
(1 circuit)



(2 circuits)



(3 to 12 circuits)



Circuits	Model No.	Dimensions (mm)		Q'ty / box
		A	B	
1	<b>*B1B-XH-AM</b>	—	—	1,000
2	<b>B2B-XH-AM</b>	2.5	7.4	1,000
3	<b>B3B-XH-AM</b>	5.0	9.9	1,000
4	<b>B4B-XH-AM</b>	7.5	12.4	500
5	<b>B5B-XH-AM</b>	10.0	14.9	500
6	<b>B6B-XH-AM</b>	12.5	17.4	500
7	<b>B7B-XH-AM</b>	15.0	19.9	500
8	<b>B8B-XH-AM</b>	17.5	22.4	250
9	<b>B9B-XH-AM</b>	20.0	24.9	250
10	<b>B10B-XH-AM</b>	22.5	27.4	250
12	<b>B12B-XH-AM</b>	27.5	32.4	250

#### Material and Finish

Post: Brass, copper-undercoated, tin-plated (reflow treatment)  
Wafer: PA 66, UL94V-0, natural (white)

**RoHS compliance** This product displays (LF)(SN) on a label.  
Note: \*Marked product is not UL/CSA/TÜV approved.

<For reference> As the color identification, the following alphabet shall be put in the underlined part.  
For availability, delivery and minimum order quantity, contact JST.

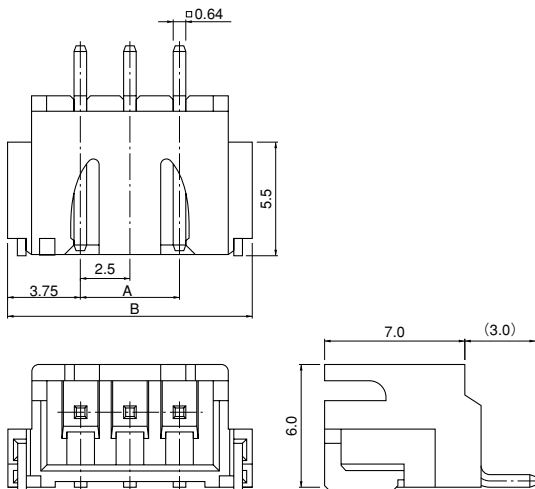
ex. **B1B-XH-AM-oo**

(blank)...natural (white)

BK...black R...red E...blue Y...yellow L...lemon yellow

M...green

## SMT type shrouded header



Circuits	Model No.	Dimensions (mm)		Q'ty / reel
		A	B	
3	<b>S3B-XH-SM4-TB</b>	5.0	12.5	500
4	<b>S4B-XH-SM4-TB</b>	7.5	15.0	500
6	<b>S6B-XH-SM4-TB</b>	12.5	20.0	500

#### Material and Finish

Post: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
Wafer: PA 6T, UL94V-0, natural (ivory)  
Solder tab: Brass, copper-undercoated, tin-plated (reflow treatment)

**RoHS compliance** This product displays (LF)(SN) on a label.  
Note: The products listed above are supplied on embossed-tape.

<For reference> As the color identification, the following alphabet shall be put in the underlined part.  
For availability, delivery and minimum order quantity, contact JST.

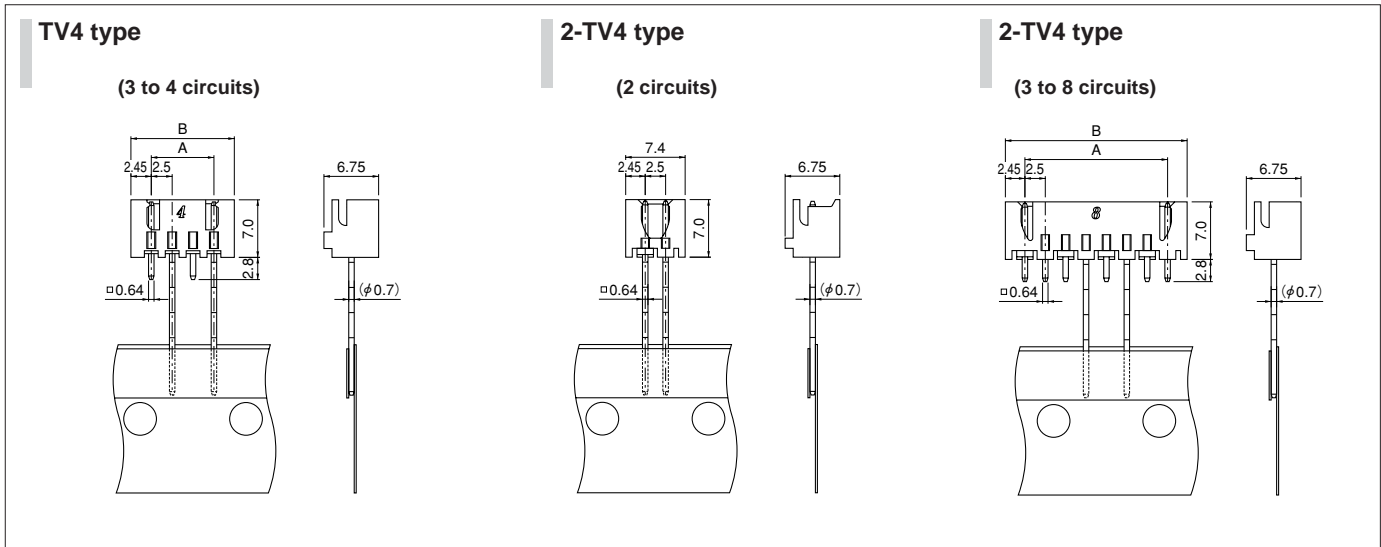
ex. **S3B-XH-SM4-oo-TB**

(blank)...natural (ivory)

M...green R...red E...blue L...lemon yellow

# XH CONNECTOR

## Through-hole type shrouded header on radial-tape



Circuits	Model No.		Dimensions (mm)		Qty/box
	TV4	2-TV4	A	B	
2	—	<b>B2B-XH-2-TV4</b>	—	—	1,000
3	<b>B3B-XH-TV4</b>	<b>B3B-XH-2-TV4</b>	5.0	9.9	1,000
4	<b>B4B-XH-TV4</b>	<b>B4B-XH-2-TV4</b>	7.5	12.4	500
5	—	<b>B5B-XH-2-TV4</b>	10.0	14.9	500
6	—	<b>B6B-XH-2-TV4</b>	12.5	17.4	500
7	—	<b>B7B-XH-2-TV4</b>	15.0	19.9	500
8	—	<b>B8B-XH-2-TV4</b>	17.5	22.4	500

### Material and Finish

Post: Brass, copper-undercoated, tin-plated (reflow treatment)  
 Wafer: TV4 type/ PA 66, UL94V-0, natural (white)  
 2-TV4 type/ Glass-filled PA 66, UL94V-0, natural (ivory)

**RoHS compliance** This product displays (LF)(SN) on a label.

<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

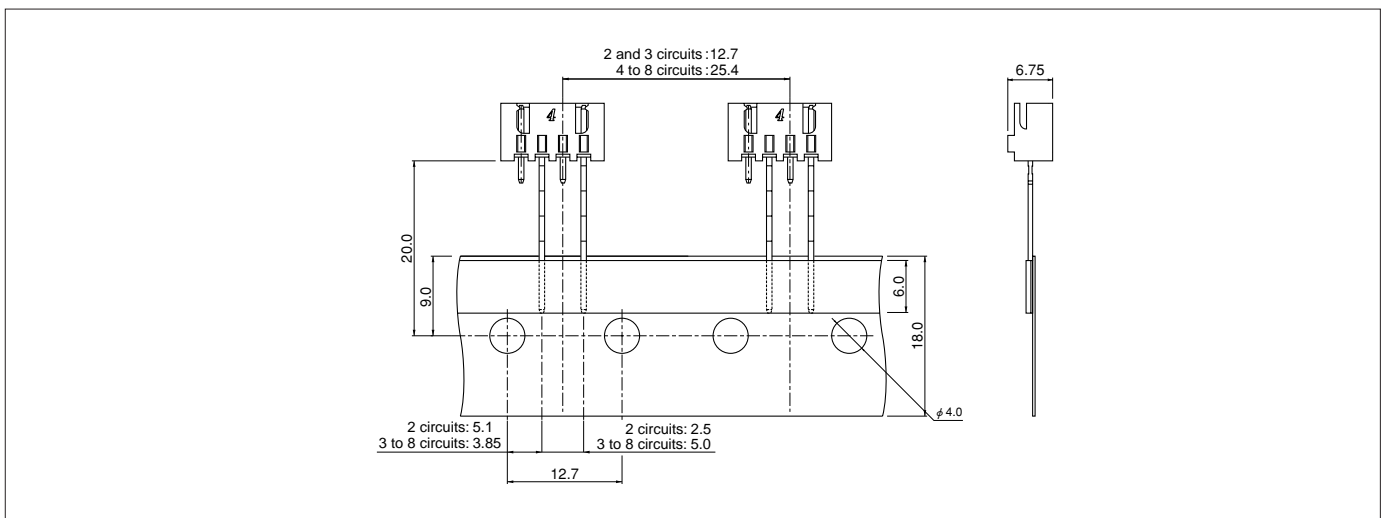
ex. **B2B-XH-2-TV4-oo**

(blank)...natural (TV4 type/white, 2-TV4 type/ivory)

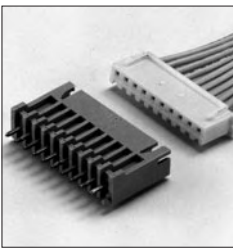
C...black (glass-filled) BK...black R...red E...blue Y...yellow

M...green

## Taping specification

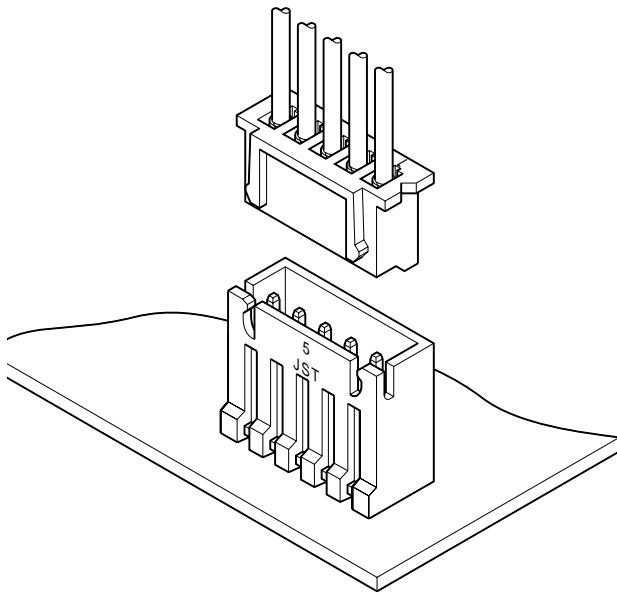


Note: Conforms to JIS C 0806.



# XH CONNECTOR <High box type>

## 2.5mm pitch/Disconnectable Crimp style connectors



**XH connector high box type, with 17.0mm mounting height and with 5.8mm thickness.**

- Header for 2.5mm pitch XH connector for use specifically with resin coated ("potted") PC boards
- Interchangeability

### Specifications

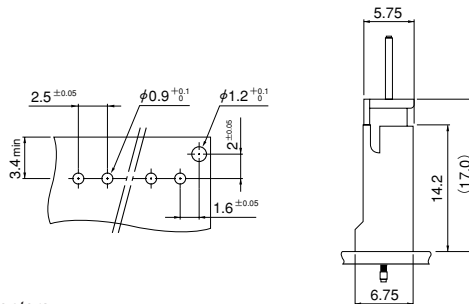
- Current rating: 3A AC, DC (AWG #22)
- Voltage rating: 250V AC, DC
- Temperature range: -25°C to +85°C (including temperature rise in applying electrical current)
- Contact resistance: Initial value/10m Ω max. After environmental testing/20m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 1,000V AC/minute
- Applicable wire: AWG #30 to #22
- Applicable PC board thickness: 1.6mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

### Standards

Recognized E60389

Certified LR20812

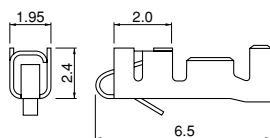
### PC board layout (viewed from component side) and Assembly layout



Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.

2. Hole dimensions differ according to the kind of PC board and piercing method. If PC boards made of hard material are used, the hole dimensions should be larger. The dimensions above should serve as a guideline. Contact JST for details.

### Contact



Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SXH-001T-P0.6	AP-K2N	MKS-LS · MKS-L	MK/SXH-001-06	APLMK SXH001-06
		*MKS-SC	SC/SXH-001-06	APLSC SXH001-06

Note: \*Strip-crimp applicator

Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty / reel
	mm²	AWG#		
SXH-001T-P0.6	0.08~0.33	28~22	1.2~1.9	8,000
SXH-002T-P0.6	0.05~0.13	30~26	0.9~1.3	

#### Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

#### RoHS compliance

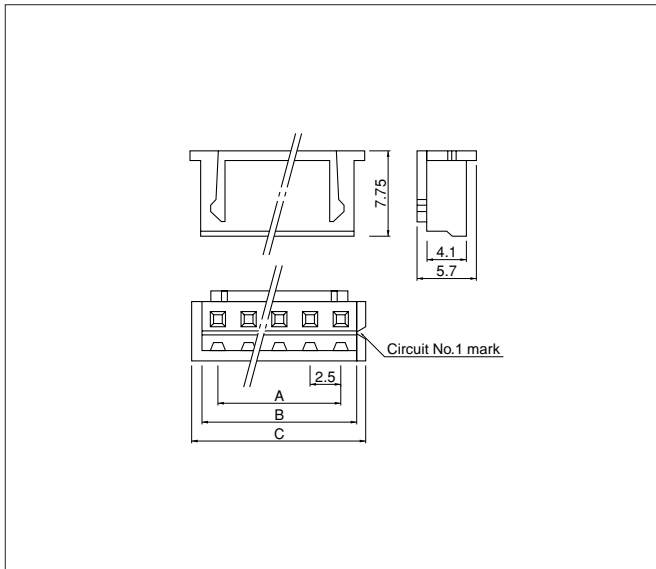
Note: 1. Contact JST if you require gold-plated contacts or contacts made of brass.

2. Contact JST also if you require shielded wires, thin wires or other special wires.

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SXH-002T-P0.6	AP-K2N	MKS-LS · MKS-L	MK/SXH-002-06	APLMK SXH002-06
		*MKS-SC	SC/SXH-002-06	APLSC SXH002-06

# XH CONNECTOR (High box type)

## Housing



Circuits	Model No.	Dimensions (mm)			Qty / bag
		A	B	C	
2	<b>XHP-2</b>	2.5	5.7	7.3	1,000
3	<b>XHP-3</b>	5.0	8.2	9.8	1,000
4	<b>XHP-4</b>	7.5	10.7	12.3	1,000
5	<b>XHP-5</b>	10.0	13.2	14.8	1,000
6	<b>XHP-6</b>	12.5	15.7	17.3	1,000
7	<b>XHP-7</b>	15.0	18.2	19.8	1,000
8	<b>XHP-8</b>	17.5	20.7	22.3	1,000
9	<b>XHP-9</b>	20.0	23.2	24.8	1,000
10	<b>XHP-10</b>	22.5	25.7	27.3	1,000

### Material

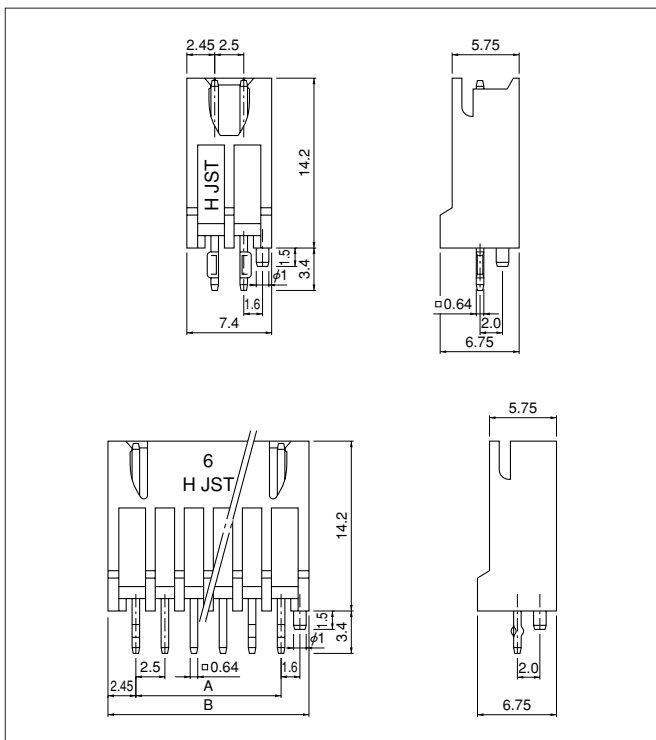
PA 6, UL94V-0, natural (white)

### RoHS compliance

<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. **XHP-2-oo**  
 (blank)...natural (white)  
 BK...black R...red E...blue Y...yellow M...green

## Shrouded header



Circuits	Model No.	Dimensions (mm)		Qty / box
		A	B	
2	<b>BH2B-XH-2</b>	2.5	7.4	700
3	<b>BH3B-XH-2</b>	5.0	9.9	500
4	<b>BH4B-XH-2</b>	7.5	12.4	300
5	<b>BH5B-XH-2</b>	10.0	14.9	300
6	<b>BH6B-XH-2</b>	12.5	17.4	250
7	<b>BH7B-XH-2</b>	15.0	19.9	200
8	<b>BH8B-XH-2</b>	17.5	22.4	150
9	<b>BH9B-XH-2</b>	20.0	24.9	150
10	<b>BH10B-XH-2</b>	22.5	27.4	150

### Material and Finish

Post: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
 Wafer: Glass-filled PA 66, UL94V-0, natural (ivory)

### RoHS compliance

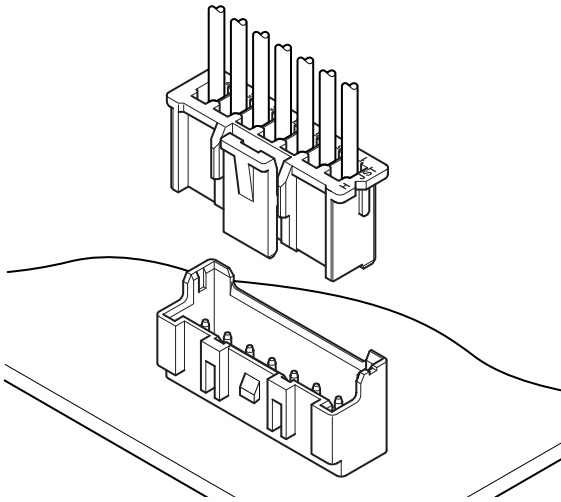
This product displays (LF)(SN) on a label. <For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. **BH2B-XH-2-oo**  
 (blank)...natural (ivory)  
 R...red C...black E...blue Y...yellow M...green



# XA CONNECTOR

2.5mm pitch/Disconnectable Crimp style connectors



- Locking device
- Solder crack preventive material
- Low insertion force
- Insertion guide mechanism
- Applicable to automatic board mounting machine
- Polarizing boss

## Specifications

- Current rating: 3A AC DC (AWG #22, #20)
- Voltage rating: 250V AC DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/10m Ω max.  
After environmental testing/20m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 1,000V AC/minute
- Applicable wire: AWG #28 to #20
- Applicable PC board thickness: 1.6mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

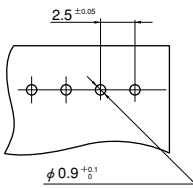
- Ⓜ Recognized E60389
- Ⓢ Certified LR20812
- ⚠ R9851220

## PC board layout (viewed from component side) and Assembly layout

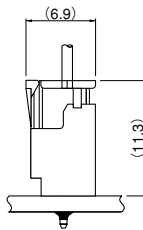
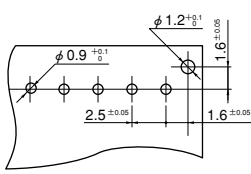
### <Through-hole type>

#### Top entry type

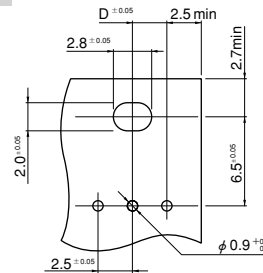
without a boss



with a boss



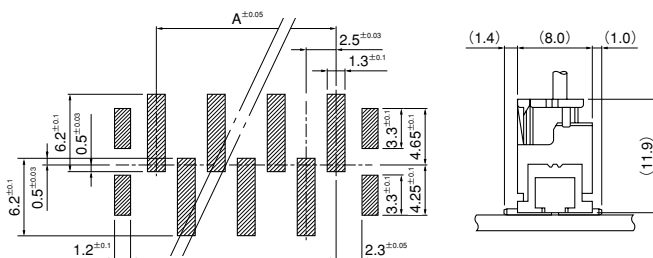
#### Side entry type



Dimension D: Refer to the Model No. chart of header side entry type.

### <SMT type>

#### Top entry type

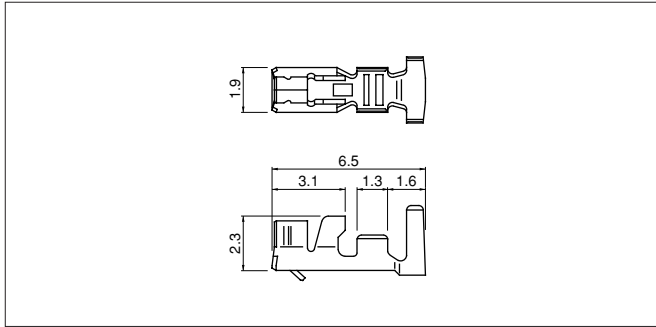


Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.

2. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.

# XA CONNECTOR

## Contact



Model No.	Applicable wire			Q'ty / reel
	mm <sup>2</sup>	AWG#	Insulation O.D. (mm)	
<b>SXA-001T-P0.6</b>	0.08 ~ 0.33	28~22	1.2~1.9	8,000
<b>SXA-01T-P0.6</b>	0.22 ~ 0.5	24~20	1.5~1.9	8,000
<b>SXA-001T-P0.6L</b>	0.13 ~ 0.33	26~22	1.3~1.7	8,000

### Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

### RoHS compliance

Note : 1. SXA-001T-P0.6L is low-insertion force type contact, for easier insertion/withdrawal, which would be less resistant to the vibration. The crimp height is different from the standard contact.  
2. Contact JST for gold-plated products.

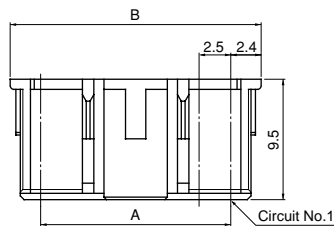
Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SXA-001T-P0.6</b>	AP-K2N	MKS-L	MK/SXA/M-001-06	APLMK SXA/M001-06
		*MKS-SC	SC/SXA/M-001-06	APLSC SXA/M001-06
<b>SXA-001T-P0.6L</b>		MKS-L	MK/SXA-001-06L	APLMK SXA001-06L
		*MKS-SC	SC/SXA-001-06L	APLSC SXA001-06L

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SXA-01T-P0.6</b>	AP-K2N	MKS-L	MK/SXA/M-01-06	APLMK SXA/M01-06
		*MKS-SC	SC/SXA/M-01-06	APLSC SXA/M01-06

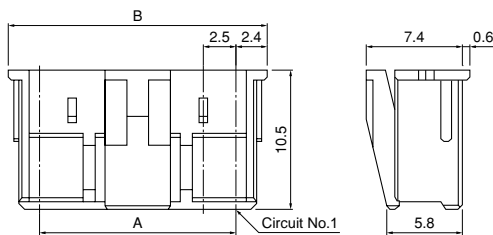
Note: \*Strip-crimp applicator

## Housing

### Standard type



### Retainer mountable type



Circuits	Model No.		Dimensions (mm)		Q'ty / bag	
	Standard type	Retainer mountable type	A	B	Standard type	Retainer mountable type
2	<b>XAP-02V-1</b>	<b>XARP-02V</b>	2.5	7.3	1,000	1,000
3	<b>XAP-03V-1</b>	<b>XARP-03V</b>	5.0	9.8	1,000	1,000
4	<b>XAP-04V-1</b>	<b>XARP-04V</b>	7.5	12.3	1,000	1,000
5	<b>XAP-05V-1</b>	<b>XARP-05V</b>	10.0	14.8	1,000	1,000
6	<b>XAP-06V-1</b>	<b>XARP-06V</b>	12.5	17.3	1,000	1,000
7	<b>XAP-07V-1</b>	<b>XARP-07V</b>	15.0	19.8	1,000	1,000
8	<b>XAP-08V-1</b>	<b>XARP-08V</b>	17.5	22.3	1,000	1,000
9	<b>XAP-09V-1</b>	<b>XARP-09V</b>	20.0	24.8	1,000	1,000
10	<b>XAP-10V-1</b>	<b>XARP-10V</b>	22.5	27.3	1,000	1,000
11	<b>XAP-11V-1</b>	<b>XARP-11V</b>	25.0	29.8	1,000	1,000
12	<b>XAP-12V-1</b>	<b>XARP-12V</b>	27.5	32.3	1,000	1,000
13	<b>XAP-13V-1</b>	<b>XARP-13V</b>	30.0	34.8	1,000	1,000
14	<b>XAP-14V-1</b>	<b>XARP-14V</b>	32.5	37.3	500	1,000
15	<b>XAP-15V-1</b>	<b>XARP-15V</b>	35.0	39.8	500	1,000
18	—	<b>XARP-18V</b>	42.5	47.3	—	500
20	<b>XAP-20V-1</b>	—	47.5	52.3	500	—

### Material

PA 66, UL94V-0, natural (white)

### RoHS compliance

<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

<Standard type>

ex. **XAP-02V-1-oo**

(blank)...natural (white)

K...black R...red E...blue Y...yellow L...lemon yellow

M...green O...orange N...brown H...gray P...purple

LE...light blue PK...pink FY...vivid yellow Z...ivory

<Retainer mountable type>

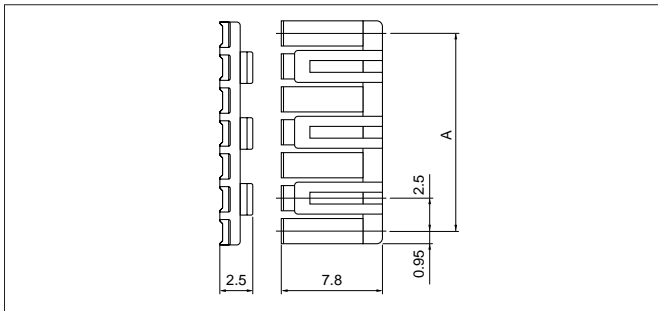
ex. **XARP-02V-oo**

(blank)...natural (white)

K...black R...red E...blue L...lemon yellow

# XA CONNECTOR

## Retainer



### Material

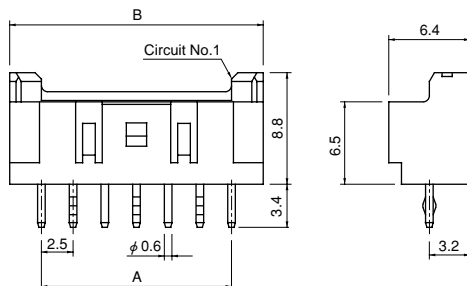
Glass-filled PA 66, UL94V-0, natural (ivory)

RoHS compliance

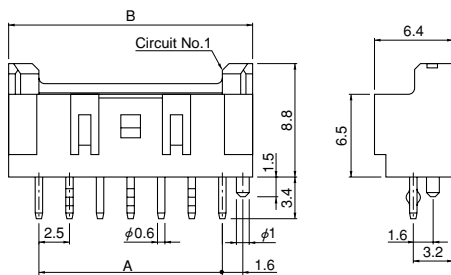
Circuits	Model No.	A	Q'ty / bag
2	XMS-02V	2.5	1,000
3	XMS-03V	5.0	1,000
4	XMS-04V	7.5	1,000
5	XMS-05V	10.0	1,000
6	XMS-06V	12.5	1,000
7	XMS-07V	15.0	1,000
8	XMS-08V	17.5	1,000
9	XMS-09V	20.0	1,000
10	XMS-10V	22.5	1,000
11	XMS-11V	25.0	1,000
12	XMS-12V	27.5	1,000
13	XMS-13V	30.0	1,000
14	XMS-14V	32.5	1,000
15	XMS-15V	35.0	1,000

## Through-hole type shrouded header

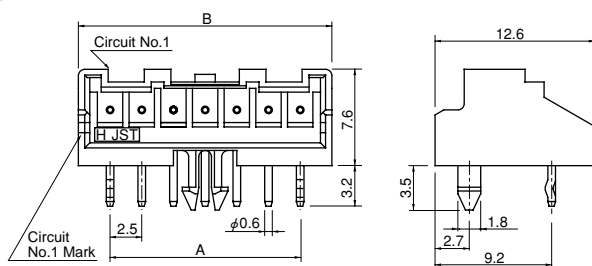
### Top entry type without a boss



### Top entry type with a boss



### Side entry type with a hook



Circuits	Model No.		Dimensions (mm)		Q'ty / box
	Top entry type		A	B	
	Without a boss	With a boss			
2	B02B-XASK-1	B02B-XASK-1-A	2.5	7.5	1,000
3	B03B-XASK-1	B03B-XASK-1-A	5.0	10.0	400
4	B04B-XASK-1	B04B-XASK-1-A	7.5	12.5	400
5	B05B-XASK-1	B05B-XASK-1-A	10.0	15.0	400
6	B06B-XASK-1	B06B-XASK-1-A	12.5	17.5	400
7	B07B-XASK-1	B07B-XASK-1-A	15.0	20.0	250
8	B08B-XASK-1	B08B-XASK-1-A	17.5	22.5	250
9	B09B-XASK-1	B09B-XASK-1-A	20.0	25.0	250
10	B10B-XASK-1	B10B-XASK-1-A	22.5	27.5	250
11	B11B-XASK-1	B11B-XASK-1-A	25.0	30.0	200
12	B12B-XASK-1	B12B-XASK-1-A	27.5	32.5	200
13	B13B-XASK-1	B13B-XASK-1-A	30.0	35.0	100
14	B14B-XASK-1	B14B-XASK-1-A	32.5	37.5	100
15	B15B-XASK-1	B15B-XASK-1-A	35.0	40.0	100
20	B20B-XASK-1	B20B-XASK-1-A	47.5	52.5	100

### Material and Finish

Pin: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
Wafer: Glass-filled PA 66, UL94V-0, natural (ivory)

RoHS compliance This product displays (LF)(SN) on a label.

Note: Contact JST for gold-plated products.

Circuits	Model No.	Dimensions (mm)			Q'ty / box
	Side entry type with a hook	A	B	D	
2	S02B-XASS-1	2.5	7.5	1.25	250
3	S03B-XASK-1	5.0	10.0	2.50	250
4	S04B-XASK-1	7.5	12.5	3.75	200
5	S05B-XASK-1	10.0	15.0	5.00	200
6	S06B-XASK-1	12.5	17.5	6.25	200
7	S07B-XASK-1	15.0	20.0	7.50	200
8	S08B-XASK-1	17.5	22.5	8.75	100
9	S09B-XASK-1	20.0	25.0	10.00	100
10	S10B-XASK-1	22.5	27.5	11.25	100
11	S11B-XASK-1	25.0	30.0	12.50	100
12	S12B-XASK-1	27.5	32.5	13.75	100
13	S13B-XASK-1	30.0	35.0	15.00	100
14	S14B-XASK-1	32.5	37.5	16.25	100

### Material and Finish

Pin: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
Wafer: Glass-filled PA 66, UL94V-0, natural (ivory)

RoHS compliance This product displays (LF)(SN) on a label.

Note: 1. Dimension D... See PC board layout.

2. Contact JST for gold-plated products.

<For reference> As the color identification, the following alphabet shall be put in the underlined part.  
For availability, delivery and minimum order quantity, contact JST.

ex. **S02B-XASK-1**

S...natural (ivory)

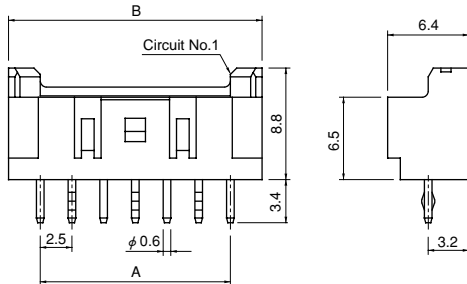
K...black R...red E...blue M...green Y...yellow

# XA CONNECTOR

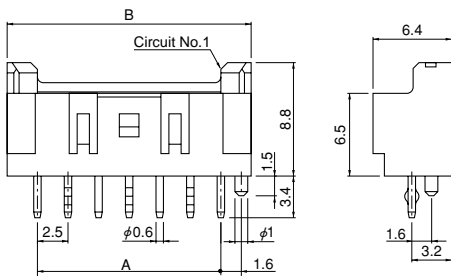
## Through-hole type shrouded header

### N type

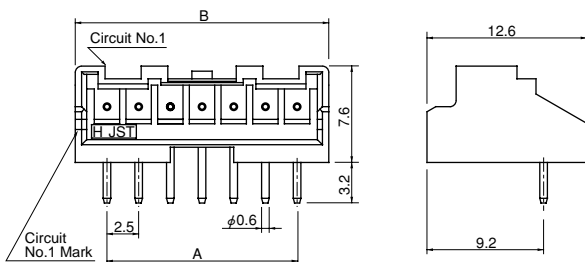
#### Top entry type without a boss



#### Top entry type with a boss



#### Side entry type without a hook



Circuits	Model No.		Dimensions (mm)		Q'ty / box
	Top entry type		A	B	
	Without a boss	With a boss			
2	<b>B02B-XASK-1N</b>	<b>B02B-XASK-1N-A</b>	2.5	7.5	1,000
3	<b>B03B-XASK-1N</b>	<b>B03B-XASK-1N-A</b>	5.0	10.0	400
4	<b>B04B-XASK-1N</b>	<b>B04B-XASK-1N-A</b>	7.5	12.5	400
5	<b>B05B-XASK-1N</b>	<b>B05B-XASK-1N-A</b>	10.0	15.0	400
6	<b>B06B-XASK-1N</b>	<b>B06B-XASK-1N-A</b>	12.5	17.5	400
7	<b>B07B-XASK-1N</b>	<b>B07B-XASK-1N-A</b>	15.0	20.0	250
8	<b>B08B-XASK-1N</b>	<b>B08B-XASK-1N-A</b>	17.5	22.5	250
9	<b>B09B-XASK-1N</b>	<b>B09B-XASK-1N-A</b>	20.0	25.0	250
10	<b>B10B-XASK-1N</b>	<b>B10B-XASK-1N-A</b>	22.5	27.5	250
11	<b>B11B-XASK-1N</b>	<b>B11B-XASK-1N-A</b>	25.0	30.0	200
12	<b>B12B-XASK-1N</b>	<b>B12B-XASK-1N-A</b>	27.5	32.5	200
13	<b>B13B-XASK-1N</b>	<b>B13B-XASK-1N-A</b>	30.0	35.0	100
14	<b>B14B-XASK-1N</b>	<b>B14B-XASK-1N-A</b>	32.5	37.5	100
15	<b>B15B-XASK-1N</b>	<b>B15B-XASK-1N-A</b>	35.0	40.0	100
18	<b>B18B-XASK-1N</b>	—	42.5	47.5	100

#### Material and Finish

Pin: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
Wafer: Glass-filled PA 66, UL94V-0, natural (white)

**RoHS compliance** This product displays (LF)(SN) on a label.  
Note: Not TÜV approved.

<For reference> As the color identification, the following alphabet shall be put in the underlined part.  
For availability, delivery and minimum order quantity, contact JST.

ex. **B02B-XASK-1N-A**

S...natural (white)

K...black R...red E...blue Y...yellow L...lemon yellow

M...green O...orange N...brown H...gray P...purple

LE...light blue PK...pink FY...vivid yellow

Circuits	Model No.		Dimensions (mm)		Q'ty / box
	Side entry type without a hook		A	B	
2	<b>S02B-XASS-1N-BN</b>		2.5	7.5	250
3	<b>S03B-XASS-1N-BN</b>		5.0	10.0	250
4	<b>S04B-XASS-1N-BN</b>		7.5	12.5	200
5	<b>S05B-XASS-1N-BN</b>		10.0	15.0	200
6	<b>S06B-XASS-1N-BN</b>		12.5	17.5	200
7	<b>S07B-XASS-1N-BN</b>		15.0	20.0	200
8	<b>S08B-XASS-1N-BN</b>		17.5	22.5	100
9	<b>S09B-XASS-1N-BN</b>		20.0	25.0	100
10	<b>S10B-XASS-1N-BN</b>		22.5	27.5	100
11	<b>S11B-XASS-1N-BN</b>		25.0	30.0	100
12	<b>S12B-XASS-1N-BN</b>		27.5	32.5	100
13	<b>S13B-XASS-1N-BN</b>		30.0	35.0	100
14	<b>S14B-XASS-1N-BN</b>		32.5	37.5	100

#### Material and Finish

Pin: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
Wafer: Glass-filled PA 66, UL94V-0, natural (white)

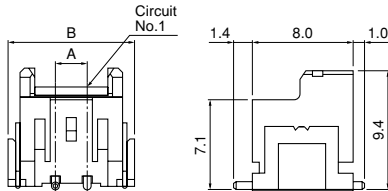
**RoHS compliance** This product displays (LF)(SN) on a label.

Note: 1. As for side entry type, we recommend to use a product with a boss (hook) because stress is applied directly to fillet part when handling the wire. When using the side entry type product without a boss (hook), please handle the wire with care.  
2. Not TÜV approved.

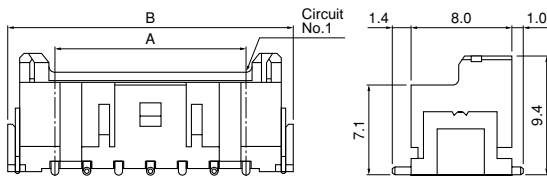


## SMT type shrouded header

(2 circuits)



(3 to 15 circuits)



Circuits	Model No.	Dimensions (mm)		Q'ty / reel
		A	B	
2	<b>BM02B-XASS-TF</b>	2.5	10.0	500
3	<b>BM03B-XASS-TF</b>	5.0	12.5	500
4	<b>BM04B-XASS-TF</b>	7.5	15.0	500
5	<b>BM05B-XASS-TF</b>	10.0	17.5	500
6	<b>BM06B-XASS-TF</b>	12.5	20.0	500
7	<b>BM07B-XASS-TF</b>	15.0	22.5	500
8	<b>BM08B-XASS-TF</b>	17.5	25.0	500
9	<b>BM09B-XASS-TF</b>	20.0	27.5	500
12	<b>BM12B-XASS-TF</b>	27.5	35.0	500
13	<b>BM13B-XASS-TF</b>	30.0	37.5	500
15	<b>BM15B-XASS-TF</b>	35.0	42.5	500

### Material and Finish

Pin: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
 Wafer: PA, UL94V-0, natural  
 Solder tab: Brass, copper-undercoated, tin-plated (reflow treatment)

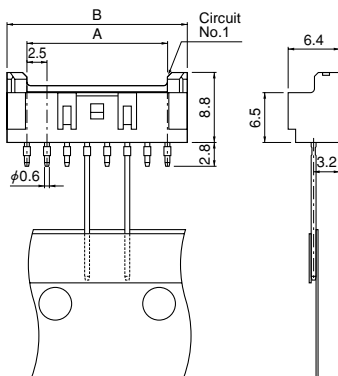
**RoHS compliance** This product displays (LF)(SN) on a label.

<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

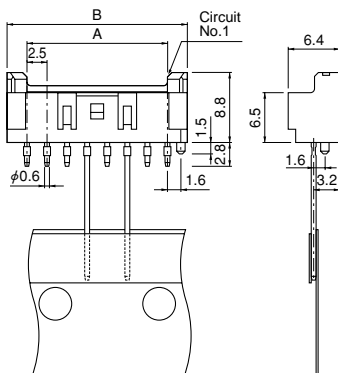
ex. **BM02B-XASS-TF**  
 S...natural  
 K...black R...red E...blue M...green D...orange  
 L...lemon yellow

## Through-hole type shrouded header on radial-tape

Top entry type without a boss



Top entry type with a boss



Circuits	Model No.		Dimensions (mm)		Q'ty / box
	Top entry type without a boss	Top entry type with a boss	A	B	
2	<b>B02B-XASS-1-T</b>	—	2.5	7.5	1,000
3	<b>B03B-XASS-1-T</b>	<b>B03B-XASS-1-A-T</b>	5.0	10.0	1,000
4	<b>B04B-XASS-1-T</b>	<b>B04B-XASS-1-A-T</b>	7.5	12.5	500
5	<b>B05B-XASS-1-T</b>	<b>B05B-XASS-1-A-T</b>	10.0	15.0	500
6	<b>B06B-XASS-1-T</b>	<b>B06B-XASS-1-A-T</b>	12.5	17.5	500
7	<b>B07B-XASS-1-T</b>	<b>B07B-XASS-1-A-T</b>	15.0	20.0	500
8	<b>B08B-XASS-1-T</b>	<b>B08B-XASS-1-A-T</b>	17.5	22.5	500

### Material and Finish

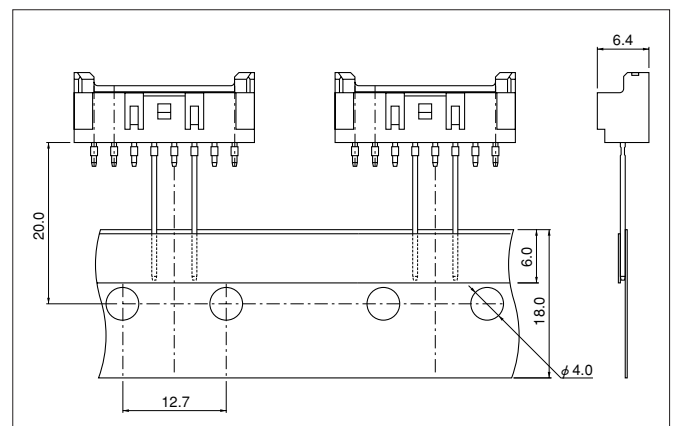
Pin: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
 Wafer: Glass-filled PA 66, UL94V-0, natural (ivory)

**RoHS compliance** This product displays (LF)(SN) on a label.

<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. **B03B-XASS-1-A-T**  
 S...natural (ivory)  
 R...red E...blue M...green

## Taping specifications



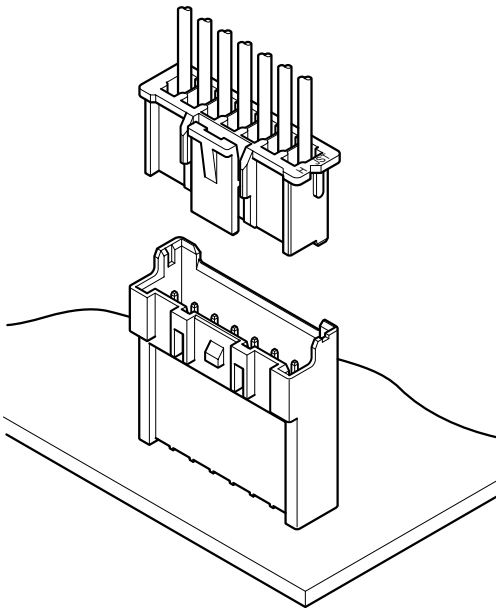
Note: Conforms to JIS C 0806.



# XA CONNECTOR <High box type>



2.5mm pitch/Disconnectable Crimp style connectors



**XA connector high box type, with 19.5mm mounting height and with 6.9mm thickness.**

- Header for 2.5mm pitch XA connector for use specifically with resin coated ("potted") PC boards
- Interchangeability

## Specifications

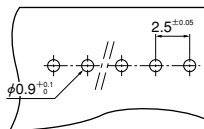
- Current rating: 3A AC, DC (AWG #22)
- Voltage rating: 250V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/10m Ω max.  
After environmental testing/20m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 1,000V AC/minute
- Applicable wire: AWG #28 to #22
- Applicable PC board thickness: 1.6mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

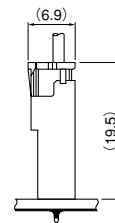
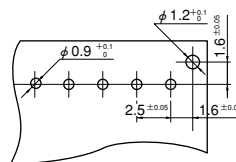
- RA Recognized E60389
- CS Certified LR20812
- △ R9851220

## PC board layout (viewed from component side) and Assembly layout

Without a boss



With a boss

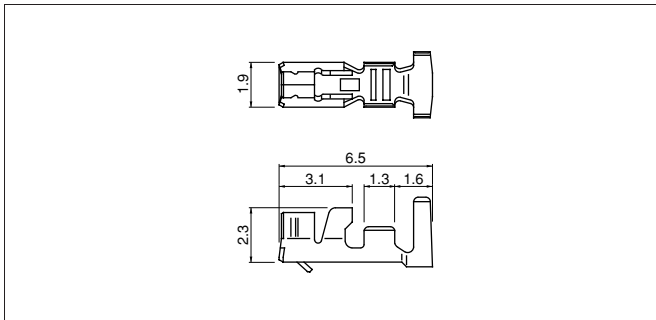


Note:1. Tolerances are non-cumulative: ±0.05mm for all centers.

2. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.

# XA CONNECTOR (High box type)

## Contact



Model No.	Applicable wire			Q'ty / reel
	mm <sup>2</sup>	AWG#	Insulation O.D. (mm)	
<b>SXA-001T-P0.6</b>	0.08 ~ 0.33	28~22	1.2~1.9	8,000

### Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

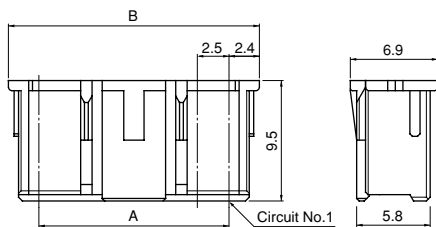
### RoHS compliance

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SXA-001T-P0.6</b>	AP-K2N	MKS-L	MK/SXA/M-001-06	APLMK SXA/M001-06
		*MKS-SC	SC/SXA/M-001-06	APLSC SXA/M001-06

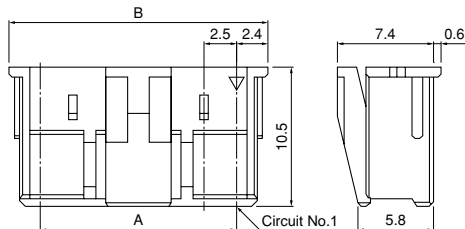
Note: \*Strip-crimp applicator

## Housing

### Standard type



### Retainer mountable type



Circuits	Model No.		Dimensions (mm)		Q'ty / bag	
	Standard type	Retainer mountable type	A	B	Standard type	Retainer mountable type
2	<b>XAP-02V-1</b>	<b>XARP-02V</b>	2.5	7.3	1,000	1,000
3	<b>XAP-03V-1</b>	<b>XARP-03V</b>	5.0	9.8	1,000	1,000
4	<b>XAP-04V-1</b>	<b>XARP-04V</b>	7.5	12.3	1,000	1,000
5	<b>XAP-05V-1</b>	<b>XARP-05V</b>	10.0	14.8	1,000	1,000
6	<b>XAP-06V-1</b>	<b>XARP-06V</b>	12.5	17.3	1,000	1,000
7	<b>XAP-07V-1</b>	<b>XARP-07V</b>	15.0	19.8	1,000	1,000
8	<b>XAP-08V-1</b>	<b>XARP-08V</b>	17.5	22.3	1,000	1,000
9	<b>XAP-09V-1</b>	<b>XARP-09V</b>	20.0	24.8	1,000	1,000
10	<b>XAP-10V-1</b>	<b>XARP-10V</b>	22.5	27.3	1,000	1,000
11	<b>XAP-11V-1</b>	<b>XARP-11V</b>	25.0	29.8	1,000	1,000
12	<b>XAP-12V-1</b>	<b>XARP-12V</b>	27.5	32.3	1,000	1,000
13	<b>XAP-13V-1</b>	<b>XARP-13V</b>	30.0	34.8	1,000	1,000
14	<b>XAP-14V-1</b>	<b>XARP-14V</b>	32.5	37.3	500	1,000
15	<b>XAP-15V-1</b>	<b>XARP-15V</b>	35.0	39.8	500	1,000

### Material

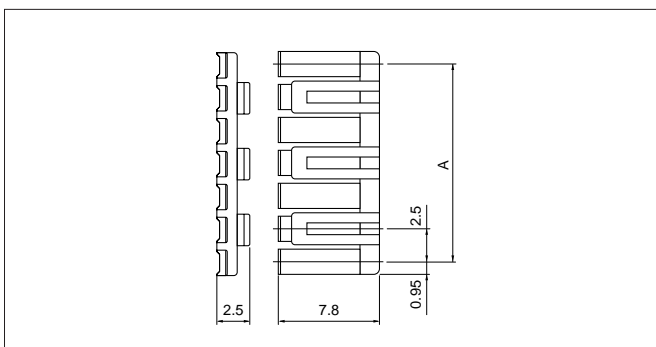
PA 66, UL94V-0, natural (white)

### RoHS compliance

<For reference> As the color identification, the following alphabet shall be put in the underlined part.  
For availability, delivery and minimum order quantity, contact JST.

ex. **XAP-02V-1-oo**  
(blank)...natural (white)  
K...black R...red E...blue M...green Y...yellow

## Retainer



### Material

Glass-filled PA 66, UL94V-0, natural (ivory)

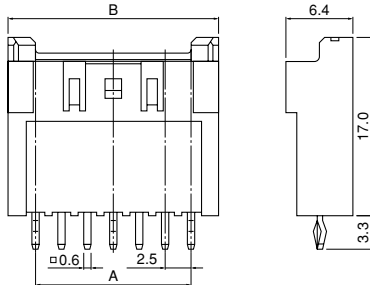
### RoHS compliance

Circuits	Model No.	A	Q'ty / bag
2	<b>XMS-02V</b>	2.5	1,000
3	<b>XMS-03V</b>	5.0	1,000
4	<b>XMS-04V</b>	7.5	1,000
5	<b>XMS-05V</b>	10.0	1,000
6	<b>XMS-06V</b>	12.5	1,000
7	<b>XMS-07V</b>	15.0	1,000
8	<b>XMS-08V</b>	17.5	1,000
9	<b>XMS-09V</b>	20.0	1,000
10	<b>XMS-10V</b>	22.5	1,000
11	<b>XMS-11V</b>	25.0	1,000
12	<b>XMS-12V</b>	27.5	1,000
13	<b>XMS-13V</b>	30.0	1,000
14	<b>XMS-14V</b>	32.5	1,000
15	<b>XMS-15V</b>	35.0	1,000

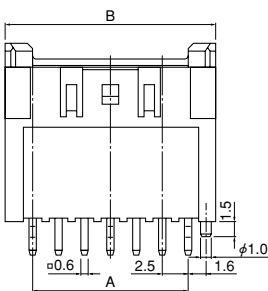
# XA CONNECTOR (High box type)

## Shrouded header

### Without a boss



### With a boss



Circuits	Model No.		Dimensions (mm)		Qty / box
	Without a boss	With a boss	A	B	
2	BH02B-XASK-BN	BH02B-XASK	2.5	7.5	400
3	BH03B-XASK-BN	BH03B-XASK	5.0	10.0	400
4	BH04B-XASK-BN	BH04B-XASK	7.5	12.5	300
5	BH05B-XASK-BN	BH05B-XASK	10.0	15.0	300
6	BH06B-XASK-BN	BH06B-XASK	12.5	17.5	200
7	BH07B-XASK-BN	BH07B-XASK	15.0	20.0	200
8	BH08B-XASK-BN	BH08B-XASK	17.5	22.5	200
9	BH09B-XASK-BN	BH09B-XASK	20.0	25.0	150
10	BH10B-XASK-BN	BH10B-XASK	22.5	27.5	150
11	BH11B-XASK-BN	BH11B-XASK	25.0	30.0	100
12	BH12B-XASK-BN	BH12B-XASK	27.5	32.5	100
13	BH13B-XASK-BN	BH13B-XASK	30.0	35.0	100
14	BH14B-XASK-BN	BH14B-XASK	32.5	37.5	100
15	BH15B-XASK-BN	BH15B-XASK	35.0	40.0	100

### Material and Finish

Post: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
Wafer: Glass-filled PA 66, UL94V-0, natural (ivory)

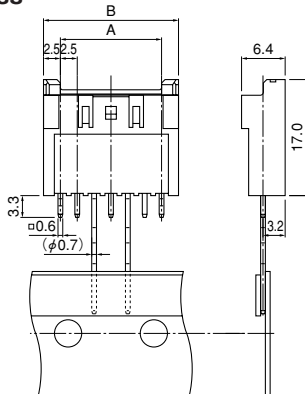
**RoHS compliance** This product displays (LF)(SN) on a label.

<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

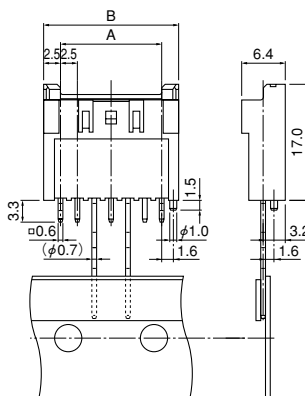
ex. **BH02B-XASK-BN**  
S...natural (ivory)  
K...black R...red M...green Y...yellow

## Shrouded header on radial-tape

### Without a boss



### With a boss



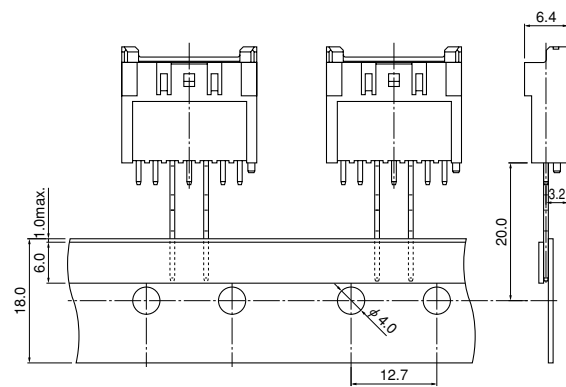
Circuits	Model No.		Dimensions (mm)		Qty / box
	Without a boss	With a boss	A	B	
2	BH02B-XASS-BN-T	BH02B-XASS-T	2.5	7.5	1,000
3	BH03B-XASS-BN-T	BH03B-XASS-T	5.0	10.0	1,000
4	BH04B-XASS-BN-T	BH04B-XASS-T	7.5	12.5	500
5	BH05B-XASS-BN-T	BH05B-XASS-T	10.0	15.0	500
6	BH06B-XASS-BN-T	BH06B-XASS-T	12.5	17.5	500
7	BH07B-XASS-BN-T	BH07B-XASS-T	15.0	20.0	500
8	BH08B-XASS-BN-T	BH08B-XASS-T	17.5	22.5	500

### Material and Finish

Post: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
Wafer: Glass-filled PA 66, UL94V-0, natural (ivory)

**RoHS compliance** This product displays (LF)(SN) on a label.

## Taping specifications

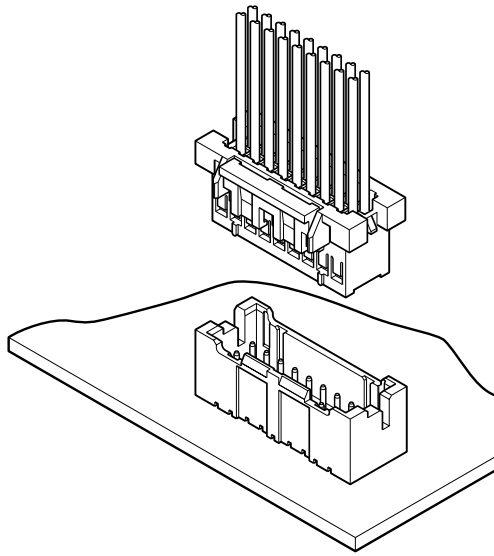


Note: Conforms to JIS C 0806.



# XAD CONNECTOR

2.5mm pitch/Disconnectable Crimp style connectors



**Double-row construction connector with secure locking device.**

- Secure locking device
- Solder crack preventive material
- Polarizing boss
- Mis-insertion preventive design

## Specifications

- Current rating: 3A AC, DC (AWG #20)
- Voltage rating: 250V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/10m Ω max.  
After environmental testing/20m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 1,000V AC/minute
- Applicable wire: AWG #28 to #20
- Applicable PC board thickness: 1.6mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

Recognized E60389

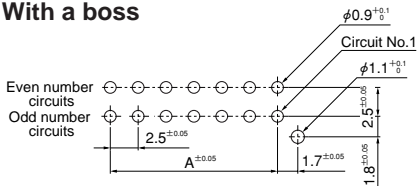
Certified LR20812

R9851219

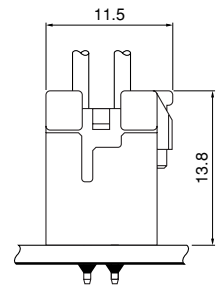
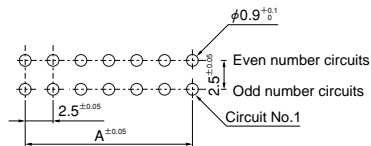
## PC board layout (viewed from component side) and Assembly layout

### Top entry type

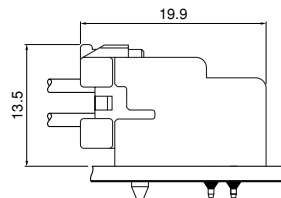
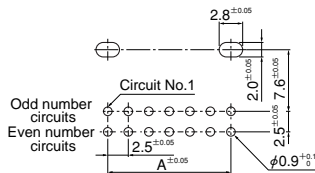
#### With a boss



#### Without a boss



### Side entry type

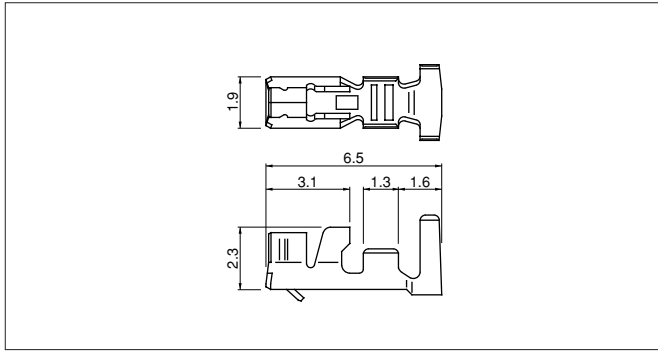


Note: 1. Tolerances are non-cumulative:  $\pm 0.05\text{mm}$  for all centers.

2. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.

# XAD CONNECTOR

## Contact



Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty / reel
	mm <sup>2</sup>	AWG#		
<b>SXA-01T-P0.6</b>	0.22~0.5	24~20	1.5~1.9	8,000
<b>SXA-001T-P0.6</b>	0.08~0.33	28~22	1.2~1.9	8,000
<b>SXA-001T-P0.6L</b>	0.13~0.33	26~22	1.3~1.7	8,000

### Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

### RoHS compliance

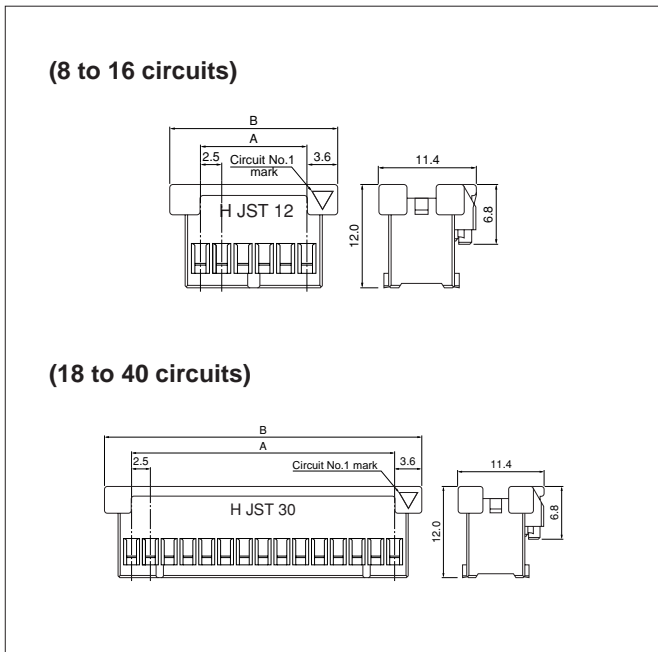
Note: 1. SXA-001T-P0.6L is low-insertion force type contact, for easier insertion/withdrawal, which would be less resistant to the vibration. The crimp height is different from the standard contact.  
2. Contact JST for gold-plated products.

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SXA-001T-P0.6</b>	AP-K2N	MKS-L	MK/SXA/M-001-06	APLMK SXA/M001-06
		*MKS-SC	SC/SXA/M-001-06	APLSC SXA/M001-06
<b>SXA-001T-P0.6L</b>		MKS-L	MK/SXA-001-06L	APLMK SXA001-06L
		*MKS-SC	SC/SXA-001-06L	APLSC SXA001-06L

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SXA-01T-P0.6</b>	AP-K2N	MKS-L	MK/SXA/M-01-06	APLMK SXA/M01-06
		*MKS-SC	SC/SXA/M-01-06	APLMC SXA/M01-06

Note: \*Strip-crimp applicator

## Housing



Circuits	Model No.	Dimensions (mm)		Q'ty / bag
		A	B	
8	<b>XADRP-08V</b>	7.5	14.7	1,000
10	<b>XADRP-10V</b>	10.0	17.2	1,000
12	<b>XADRP-12V</b>	12.5	19.7	1,000
14	<b>XADRP-14V</b>	15.0	22.2	1,000
16	<b>XADRP-16V</b>	17.5	24.7	1,000
18	<b>XADRP-18V</b>	20.0	27.2	1,000
20	<b>XADRP-20V</b>	22.5	29.7	500
22	<b>XADRP-22V</b>	25.0	32.2	500
24	<b>XADRP-24V</b>	27.5	34.7	500
26	<b>XADRP-26V</b>	30.0	37.2	500
28	<b>XADRP-28V</b>	32.5	39.7	500
30	<b>XADRP-30V</b>	35.0	42.2	500
32	<b>XADRP-32V</b>	37.5	44.7	500
34	<b>XADRP-34V</b>	40.0	47.2	500
36	<b>XADRP-36V</b>	42.5	49.7	250
40	<b>XADRP-40V</b>	47.5	54.7	250

### Material

PA 66, UL94V-0, natural (white)

### RoHS compliance

Note: Contact JST if retainers are required.

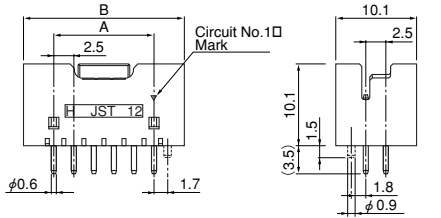
<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. **XADRP-08V-oo**  
(blank)...natural (white)  
K...black R...red E...blue O...orange M...green  
L...lemon yellow PK...pink

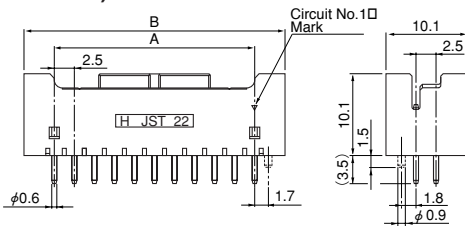
# XAD CONNECTOR

## Shrouded header

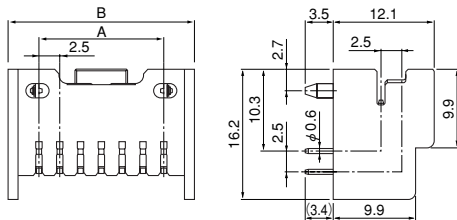
### Top entry type (8 to 16 circuits)



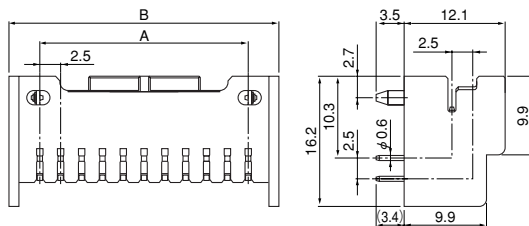
### (18 to 40 circuits)



### Side entry type (8 to 16 circuits)



### (18 to 26 circuits)



Circuits	Model No.			Dimensions (mm)		Qty / box	
	Top entry type		Side entry type	A	B	Top entry type	Side entry type
	Without a boss	With a boss					
8	B08B-XADSS-N	B08B-XADSS-N-A	S08B-XADSS-N	7.5	15.0	200	270
10	B10B-XADSS-N	B10B-XADSS-N-A	S10B-XADSS-N	10.0	17.5	200	234
12	B12B-XADSS-N	B12B-XADSS-N-A	S12B-XADSS-N	12.5	20.0	200	198
14	B14B-XADSS-N	B14B-XADSS-N-A	S14B-XADSS-N	15.0	22.5	150	180
16	B16B-XADSS-N	B16B-XADSS-N-A	S16B-XADSS-N	17.5	25.0	150	162
18	B18B-XADSS-N	B18B-XADSS-N-A	S18B-XADSS-N	20.0	27.5	150	144
20	B20B-XADSS-N	B20B-XADSS-N-A	S20B-XADSS-N	22.5	30.0	100	126
22	B22B-XADSS-N	B22B-XADSS-N-A	—	25.0	32.5	100	—
24	B24B-XADSS-N	B24B-XADSS-N-A	—	27.5	35.0	100	—
26	B26B-XADSS-N	B26B-XADSS-N-A	S26B-XADSS-N	30.0	37.5	100	108
28	B28B-XADSS-N	B28B-XADSS-N-A	—	32.5	40.0	100	—
30	B30B-XADSS-N	B30B-XADSS-N-A	—	35.0	42.5	50	—
32	B32B-XADSS-N	B32B-XADSS-N-A	—	37.5	45.0	50	—
34	B34B-XADSS-N	B34B-XADSS-N-A	—	40.0	47.5	50	—
36	B36B-XADSS-N	B36B-XADSS-N-A	—	42.5	50.0	50	—
40	B40B-XADSS-N	B40B-XADSS-N-A	—	47.5	55.0	50	—

### Material and Finish

Pin: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
Wafer: Glass-filled PA 66, UL94V-0, natural (white)

**RoHS compliance** This product displays (LF)(SN) on a label.  
Note: Contact JST for the headers with gold-plated pins.

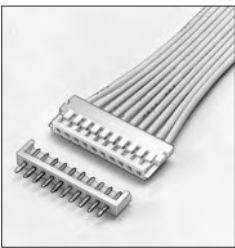
<For reference> As the color identification, the following alphabet shall be put in the underlined part.  
For availability, delivery and minimum order quantity, contact JST.

ex. **B08B-XADSS-N**

S...natural (white)

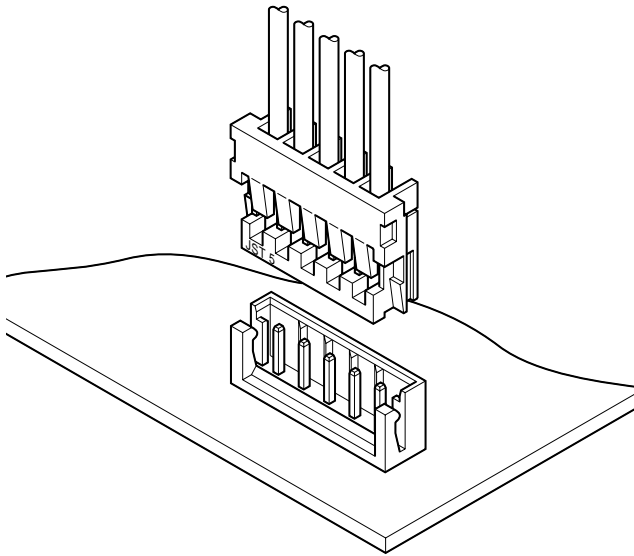
K...black R...red E...blue O...orange M...green

L...lemon yellow PK...pink



# HR CONNECTOR

2.5mm pitch/Disconnectable Crimp style connectors



- **Thin design**
- **High reliability**
- **Interchangeability**

## Specifications

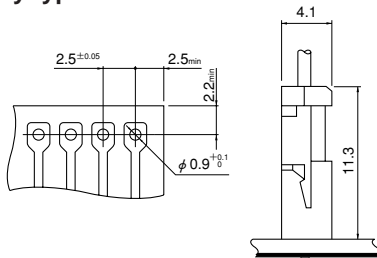
- Current rating: 3A AC, DC (AWG #22)
- Voltage rating: 250V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/10m Ω max.  
After environmental testing/20m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 1,000V AC/minute
- Applicable wire: AWG #26 to #22
- Applicable PC board thickness: 0.8 to 1.6mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

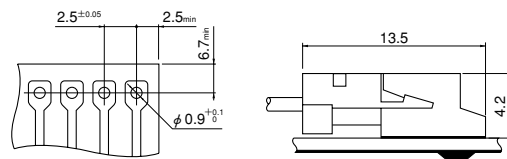
- Ⓜ Recognized E60389
- Ⓢ Certified LR20812

## PC board layout (viewed from soldering side) and Assembly layout

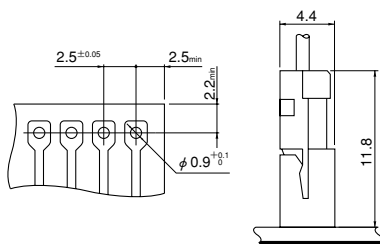
### Top entry type



### Side entry type



### Top entry type on radial-tape



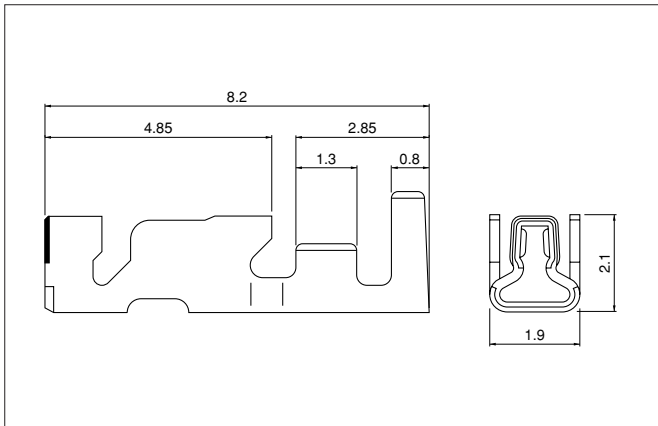
Note: 1. Tolerances are non-cumulative:  $\pm 0.05\text{mm}$  for all centers.

2. Hole dimension differ according to the kind of PC board and piercing method. If PC boards made of hard material are used, the hole dimensions should be larger. The dimensions above should serve as a guideline. Contact JST for details.



# HR CONNECTOR

## Contact



Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty / reel
	mm <sup>2</sup>	AWG #		
<b>SHR-001T-P0.6</b>	0.13~0.33	26~22	1.3~1.7	9,000

### Material and Finish

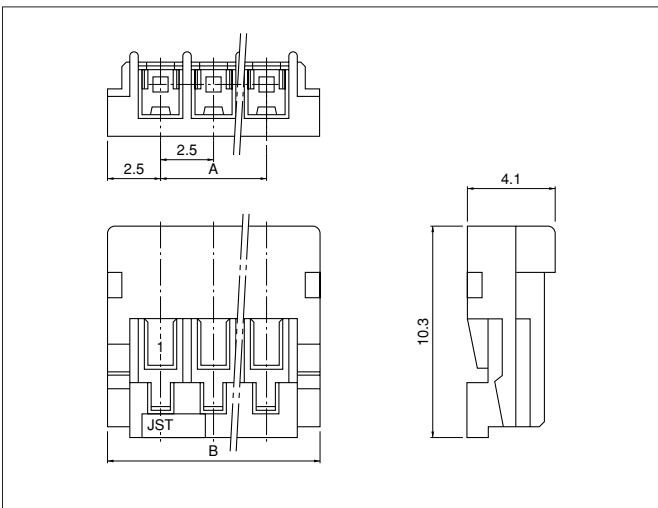
Phosphor bronze, tin-plated (reflow treatment)

### RoHS compliance

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SHR-001T-P0.6</b>	AP-K2N	MKS-L	MK/SHR/MR-001-06	APLMK SHR/MR001-06
		*MKS-SC	SC/SHR/MR-001-06	APLSC SHR/MR001-06

Note:\*Strip-crimp applicator

## Housing



Circuits	Model No.	Dimensions (mm)		Q'ty / bag
		A	B	
2	<b>HRP-02-S</b>	2.5	7.5	2,000
3	<b>HRP-03-S</b>	5.0	10.0	2,000
4	<b>HRP-04-S</b>	7.5	12.5	1,000
5	<b>HRP-05-S</b>	10.0	15.0	1,000
6	<b>HRP-06-S</b>	12.5	17.5	1,000
7	<b>HRP-07-S</b>	15.0	20.0	500
8	<b>HRP-08-S</b>	17.5	22.5	500
9	<b>HRP-09-S</b>	20.0	25.0	500
10	<b>HRP-10-S</b>	22.5	27.5	500
11	<b>HRP-11-S</b>	25.0	30.0	500
12	<b>HRP-12-S</b>	27.5	32.5	500
13	<b>HRP-13-S</b>	30.0	35.0	250

### Material

PA 66, UL94V-0, natural (white)

### RoHS compliance

<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. **HRP-02-S**

S...natural (white)

K...black R...red TR...tomato red E...blue

L...lemon yellow M...green N...brown O...orange P...purple

PK...pink LE...light blue Y...yellow FY...vivid yellow H...gray

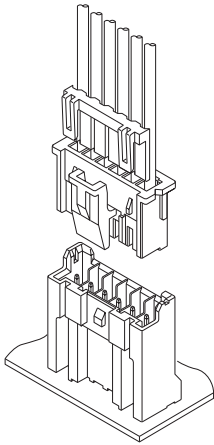
## Shrouded header

The shrouded headers are interchangeable with those of the EH crimp style and HR insulation displacement connectors.



# PXA CONNECTOR

2.5mm pitch/Disconnectable Crimp style connectors



**Secondary retainer mountable 2.5mm pitch high-box type, with 20.5mm mounting height.**

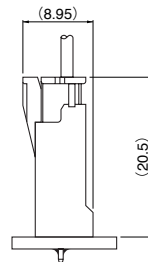
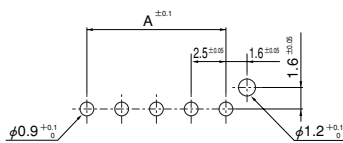
**Fully shrouded header has the walls between every circuit to consider as the structure against vibration or prying.**

- Secure locking device
- Fully shrouded header
- Header for use specifically with resin coated ("potted") PC boards
- PC board layout is exactly same as XA connector
- Secondary retainer

## Specifications

- Current rating: 3A AC, DC (AWG #22)
- Voltage rating: 250V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/10m Ω max.  
After environmental testing/20m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 1,000V AC/minute
- Applicable wire: AWG #26 to #22
- Applicable PC board thickness: 1.6mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

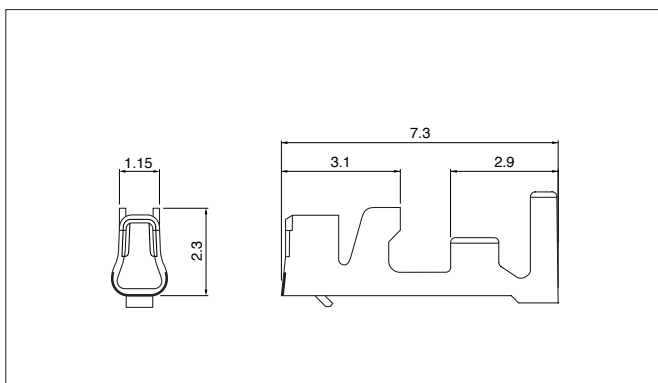
## PC board layout (viewed from component side) and Assembly layout



Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.

2. Hole dimension differ according to the kind of PC board and piercing method. If PC boards made of hard material are used, the hole dimensions should be larger. The dimensions above should serve as a guideline. Contact JST for details.

## Contact



Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty / reel
	mm <sup>2</sup>	AWG#		
SPXA-001T-P0.6	0.13~0.33	26~22	1.2~1.9	7,000

### Material and Finish

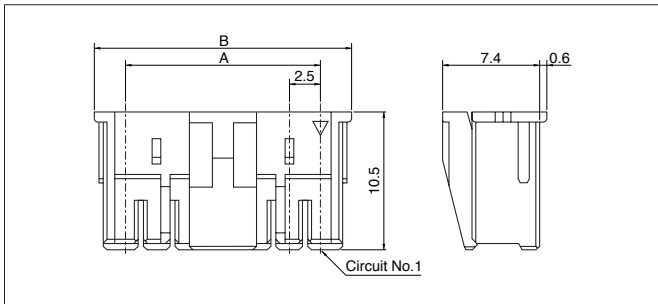
Phosphor bronze, tin-plated (reflow treatment)

### RoHS compliance

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SPXA-001T-P0.6	AP-K2N	MKS-L	MK/SPXA-001-06	APLMK SPXA001-06
		-	-	-

# PXA CONNECTOR

## Housing



Circuits	Model No.	Dimensions (mm)		Q'ty /bag
		A	B	
2	<b>PXARP-02V</b>	2.5	7.3	1,000
3	<b>PXARP-03V</b>	5.0	9.8	1,000
6	<b>PXARP-06V</b>	12.5	17.3	1,000

### Material

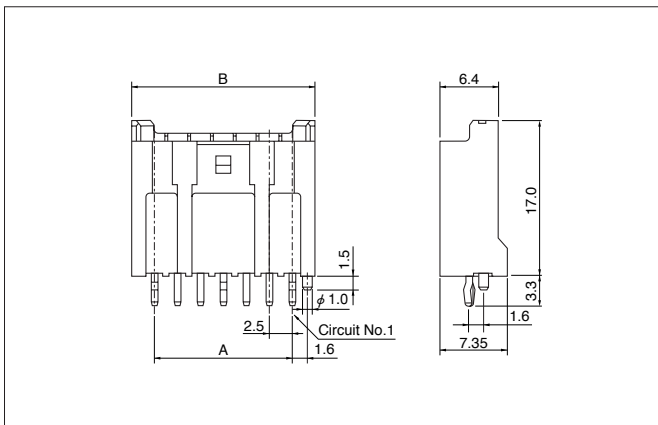
PA 66, UL94V-0, natural (white)

### RoHS compliance

<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. **PXARP-02V-00**  
 (blank)...natural (white)  
 K...black R...red E...blue

## Shrouded header



Circuits	Model No.	Dimensions (mm)		Q'ty /box
		A	B	
2	<b>BH02B-PXASK</b>	2.5	7.5	400
3	<b>BH03B-PXASK</b>	5.0	10.0	400
6	<b>BH06B-PXASK</b>	12.5	17.5	200

### Material and Finish

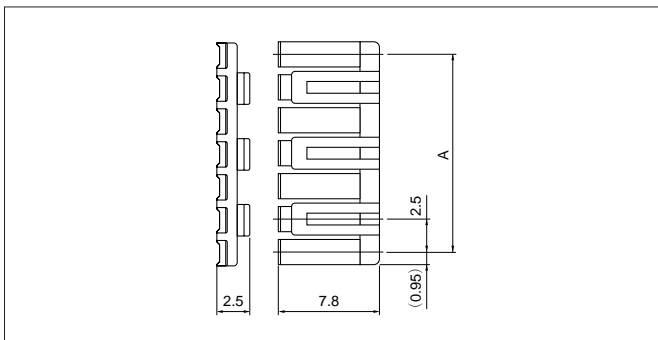
Post: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
 Wafer: Glass-filled PA 66, UL94V-0, natural (ivory)

### RoHS compliance

This product displays (LF)(SN) on a label. <For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. **BH02B-PXASK**  
 S...natural (ivory)  
 K...black R...red E...blue

## Retainer



Circuits	Model No.	A	Q'ty / bag
2	<b>XMS-02V</b>	2.5	1,000
3	<b>XMS-03V</b>	5.0	1,000
6	<b>XMS-06V</b>	12.5	1,000

### Material

Glass-filled PA 66, UL94V-0, natural (ivory)

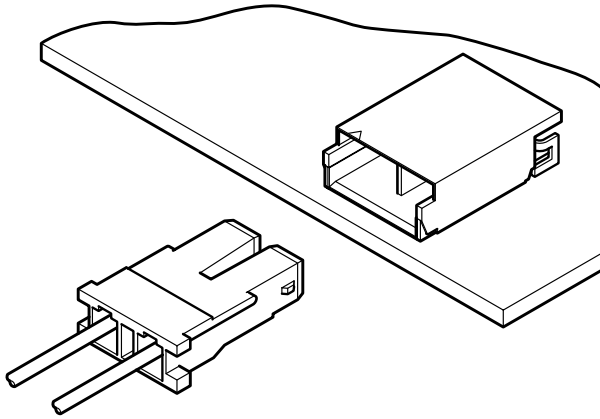
### RoHS compliance



# BHS CONNECTOR



3.5mm pitch/Disconnectable Crimp style connectors



- Low profile
- SMT configuration
- Applicable to special wires
- Housing lock also serves as polarizing device
- Adopt wide large for socket contact

## Specifications

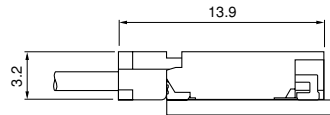
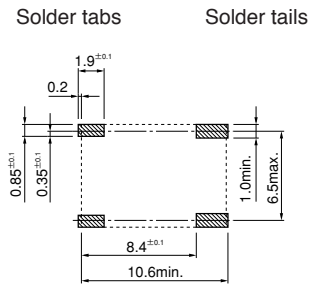
- Current rating: 1.0A AC, DC (AWG #24)
- Voltage rating: 1,400V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/10m Ω max.  
After environmental testing/20m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 3,800V AC/minute
- Applicable wire: AWG #28 to #24  
Insulation O.D./0.9 to 1.7mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

Ⓜ Recognized E60389

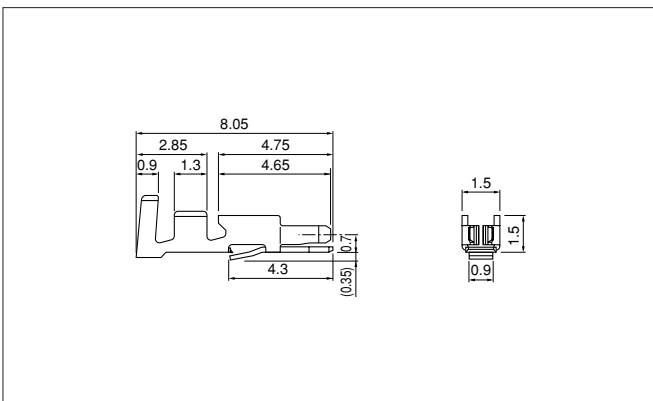
Ⓢ Certified LR20812

## PC board layout (viewed from component side) and Assembly layout



Note: 1. Tolerances are non-cumulative: ±0.1mm for all centers.  
2. The dimensions above should serve as a guideline. Contact JST for details.

## Contact



Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty / reel
	mm <sup>2</sup>	AWG#		
SBHS-002T-P0.5A	0.08~0.22	28~24	0.9~1.7	10,000

### Material and Finish

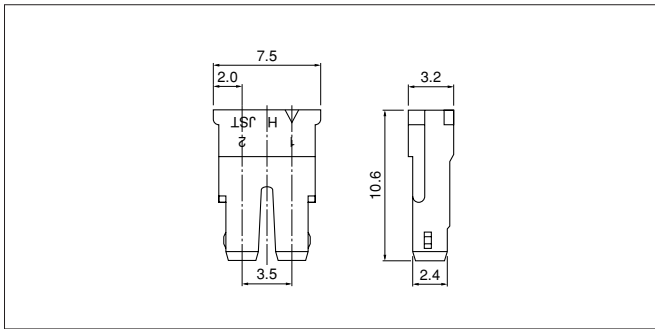
Phosphor bronze, tin-plated (reflow treatment)

### RoHS compliance

Note: Contact JST for SBHS-002T-P0.5.

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SBHS-002T-P0.5A	AP-K2N	MKS-L	MK/SBHS-002-05	APLMK SBHS002-05
		—	—	—

## Housing



Circuits	Model No.	Q'ty / bag
2	<b>BHSR-02VS-1 (N)</b>	1,000

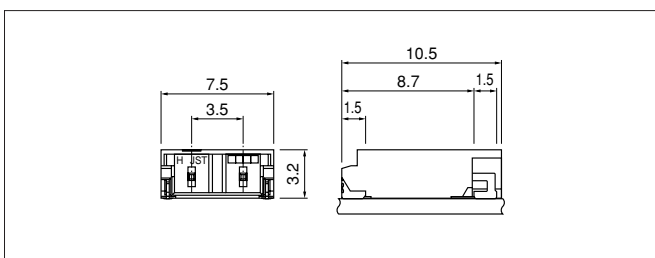
### Material

PA 66, UL94V-0, natural (white)

### RoHS compliance

Note: Contact JST for BHSR-02VS-1.

## Shrouded header



Circuits	Model No.	Q'ty / reel
2	<b>SM02B-BHSS-1-TB</b>	1,000

### Material and Finish

Post: Brass, copper-undercoated, tin-plated (reflow treatment)

Wafer: PPA, UL94V-0, natural (ivory)

Solder tab: Brass, copper-undercoated, tin-plated (reflow treatment)

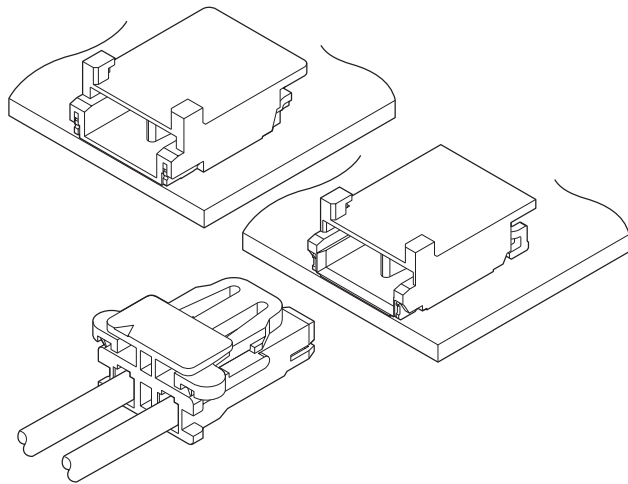
### RoHS compliance

This product displays (LF)(SN) on a label.  
Note: The products listed above are supplied on embossed tape.



# BD CONNECTOR (3.5mm)

3.5mm pitch/Disconnectable Crimp style connectors



**Board-to-wire connector with high withstanding voltage, used for power supply of LCD (Liquid Crystal Display) back light.**

- Secure locking mechanism
- High withstand voltage design
- Low profile
- Compatibility

## Specifications

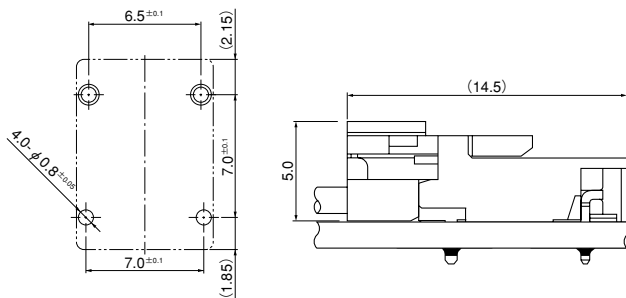
- Current rating: 1.0A AC, DC (AWG #24)
- Voltage rating: 1,400V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/10m Ω max.  
After environmental testing/20m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 3,800V AC/minute
- Applicable wire: AWG #28 to #24
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

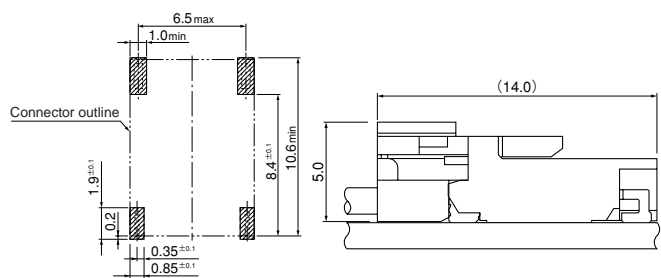
Recognized E60389

## PC board layout (viewed from component side) and Assembly layout

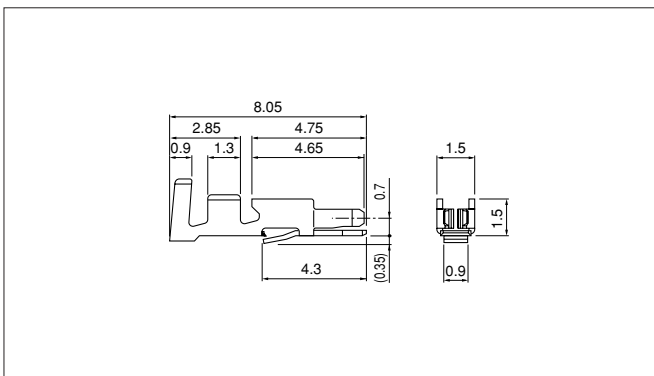
### Through-hole type



### SMT type



## Contact



Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty / reel
	mm <sup>2</sup>	AWG#		
SBHS-002T-P0.5A	0.08~0.22	28~24	0.9~1.7	10,000

### Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

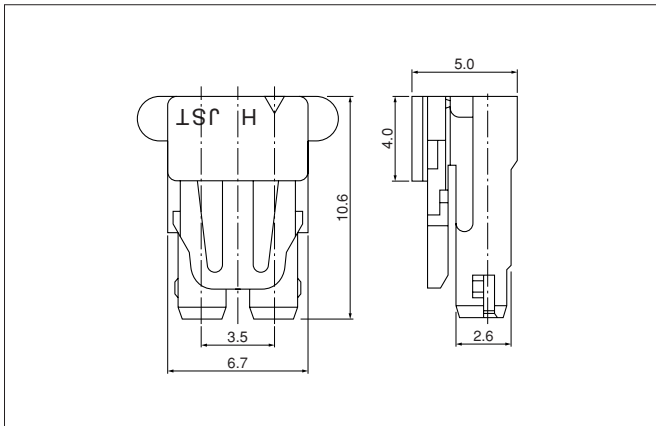
### RoHS compliance

Note: Contact JST for SBHS-002T-P0.5.

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SBHS-002T-P0.5A	AP-K2N	MKS-L	MK/SBHS-002-05	APLMK SBHS002-05

# BD CONNECTOR (3.5mm)

## Housing



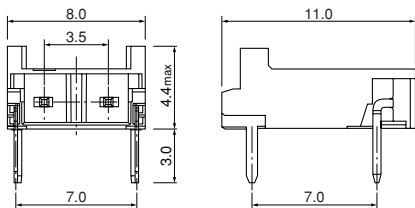
Circuits	Model No.	Q'ty / bag
2	<b>BDMR-02VS-2</b>	1,000

Material
PA 66, UL94V-0, natural (white)

**RoHS compliance**

## Header

### Through-hole type



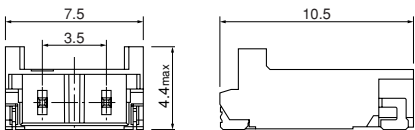
### Through-hole type

Circuits	Model No.	Q'ty / box
2	<b>S02-BDS-3-B</b>	1,000

Material and Finish
Press pin: Brass, Copper-undercoated, tin-plated (reflow treatment) Wafer: Heat resisting resin, UL94V-0, natural (ivory) Solder tab: Brass, Copper-undercoated, tin-plated (reflow treatment)

**RoHS compliance** This product displays (LF)(SN) on a label.

### SMT type

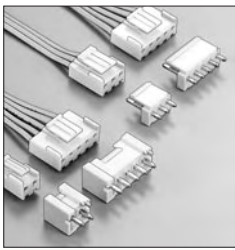


### SMT type

Circuits	Model No.	Q'ty / reel
2	<b>SM02-BDS-3-TB</b>	1,000

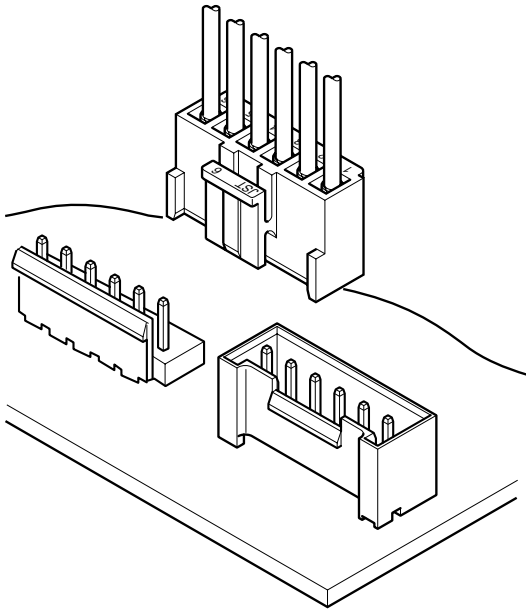
Material and Finish
Post: Brass, Copper-undercoated, tin-plated (reflow treatment) Wafer: Heat resisting resin, UL94V-0, natural (ivory) Solder tab: Brass, Copper-undercoated, tin-plated (reflow treatment)

**RoHS compliance** This product displays (LF)(SN) on a label.  
Note: The product listed above is supplied on embossed tape.



# VH CONNECTOR

3.96mm pitch/Disconnectable Crimp style connectors



**This small, field-proven connector for printed circuit boards is reliable and has a large current carrying capacity. It can be used with a wide variety of signal, power supply, and output circuits that appear in consumer electronic products.**

- Proven box contact
- Compact connector with a large capacity
- Secure contact and mounting

## Specifications

- Current rating: 10A AC, DC (AWG #16)
- Voltage rating: 250V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/10m Ω max.  
After environmental testing/20m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 1,500V AC/minute
- Applicable wire: AWG #22 to #16
- Applicable PC board thickness: 1.6mm

**Note:**

Do not branch in parallel current which exceeds the rated current. If branched in parallel, current imbalance or other problems may develop. If it is absolutely necessary to branch such a large current in parallel, be sure to use contacts made of phosphor bronze. Design the circuits without causing imbalance and provide an extra margin for each circuit.

\* RoHS compliant products are published.

\* Temperature Range:

The aforementioned temperature range of this connector is described in JST Standard Product Specification. Maximum temperature registered in UL is 105°C.

\* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.

\* Contact JST for details.

## Standards

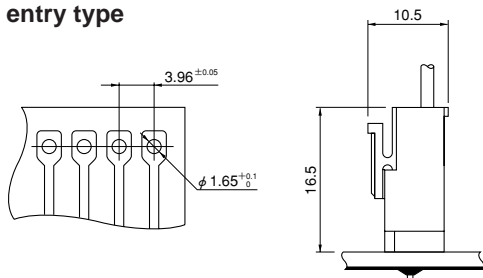
Recognized E60389

Certified LR20812

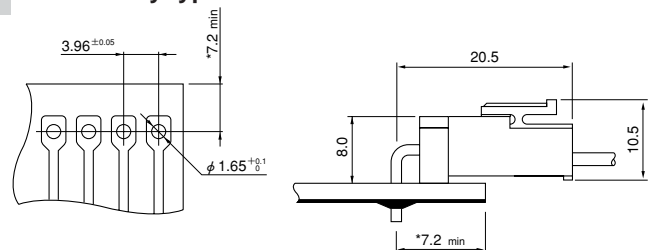
R75122

## PC board layout (viewed from soldering side) and Assembly layout

**Locking header  
Top entry type**

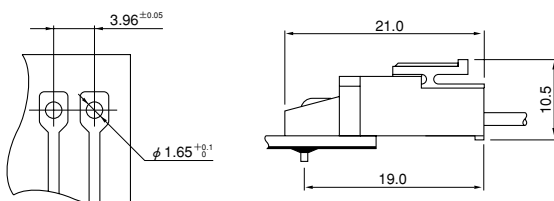


**Locking header  
Side entry type**

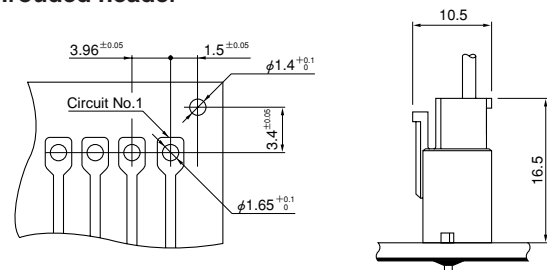


\*11.0 max. when used with the VR connector receptacle.

**Locking header  
Side entry type with PCB stabilizer**



**Shrouded header**



Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.

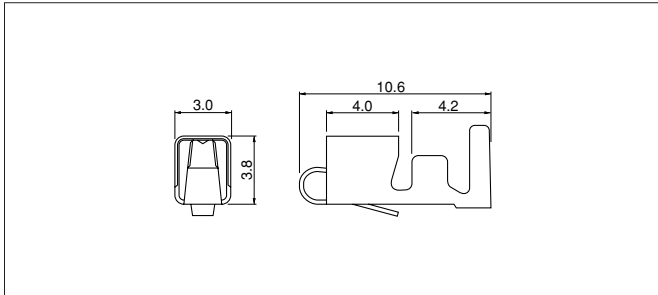
2. Please consider the pattern layout design in case of applying the large current.

3. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.



# VH CONNECTOR

## Contact



Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty / reel
	mm <sup>2</sup>	AWG#		
<b>SVH-21T-P1.1</b>	0.33~0.83	22~18	1.7~3.0	4,500
<b>SVH-41T-P1.1</b>	0.5 ~1.25	20~16	1.7~3.0	3,500

### Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

### RoHS compliance

Note: 1. Contact JST for brass products.

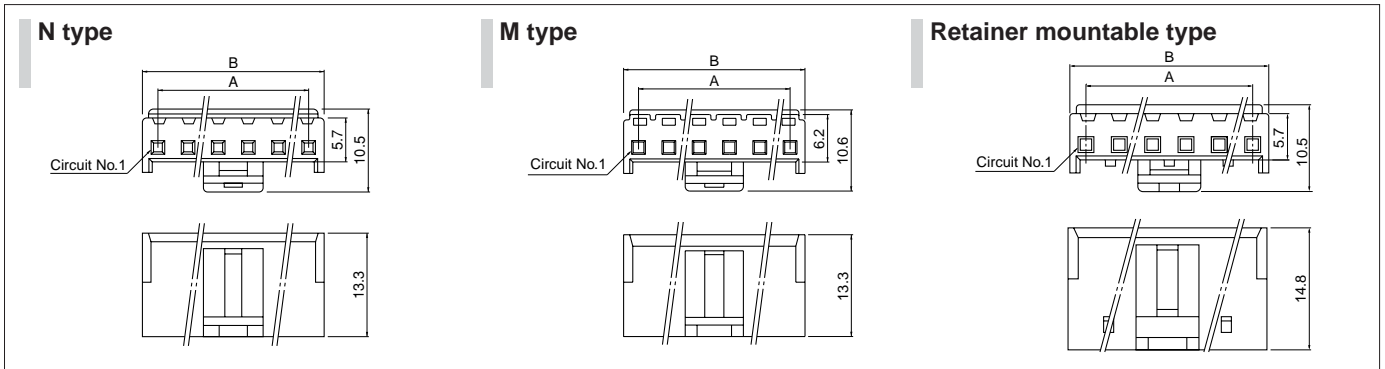
2. When using retainer mountable type housing, applicable wire's insulation O. D. shall be 1.7 to 2.2mm.

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SVH-21T-P1.1</b>	AP-K2N	MKS-L	MK/SVH-21-11	APLMK SVH21-11
		*MKS-SC	SC/SVH-21-11	APLSC SVH21-11

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SVH-41T-P1.1</b>	AP-K2N	MKS-L	MK/SVH-41-11	APLMK SVH41-11
		—	—	—

Note: \*Strip-crimp applicator

## Housing



Circuits	Model No.			Dimensions (mm)		Q'ty / bag
	N type	M type	Retaine mountable type	A	B	
2	<b>VHR-2N</b>	<b>VHR-2M</b>	* <b>VHRR-2N</b>	3.96	7.86	1,000
3	<b>VHR-3N</b>	<b>VHR-3M</b>	* <b>VHRR-3N</b>	7.92	11.82	1,000
4	<b>VHR-4N</b>	<b>VHR-4M</b>	—	11.88	15.78	1,000
5	<b>VHR-5N</b>	<b>VHR-5M</b>	* <b>VHRR-5N</b>	15.84	19.74	1,000
6	<b>VHR-6N</b>	<b>VHR-6M</b>	—	19.80	23.70	500
7	<b>VHR-7N</b>	<b>VHR-7M</b>	* <b>VHRR-7N</b>	23.76	27.66	500
8	<b>VHR-8N</b>	—	* <b>VHRR-8N</b>	27.72	31.62	500
9	<b>VHR-9N</b>	<b>VHR-9M</b>	* <b>VHRR-9N</b>	31.68	35.58	500
10	<b>VHR-10N</b>	—	—	35.64	39.54	500
11	* <b>VHR-11N</b>	—	—	39.60	43.50	500

### Material

PA 6, UL94V-0, natural (white)

### RoHS compliance

- Note: 1. Models identified as VHR-( ) M incorporate measures to prevent electric shock and are thus safer in regard to high voltages.  
 2. The applicable housing for 2 circuits shrouded header is "VHR-2N" only. \*VHRR-2N" is not applicable.  
 3. \*Marked products are not TÜV approved.

<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

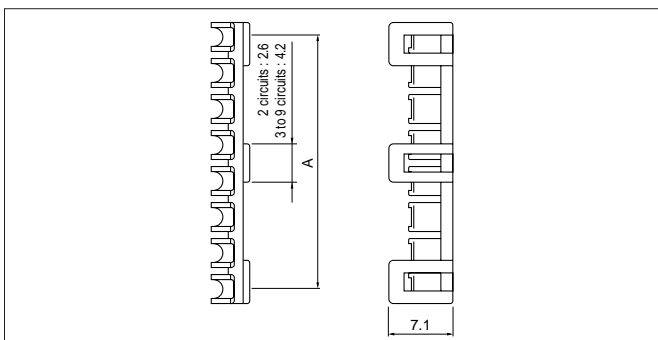
ex. **VHR-2N-oo**

(blank)...natural (white)

BK...black R...red BL...blue M...green D...orange Y...yellow

PK...pink H...gray

## Retainer



Circuits	Model No.	A	Q'ty / bag
2	<b>VHS-2V</b>	3.70	1,000
3	<b>VHS-3V</b>	7.52	1,000
5	<b>VHS-5V</b>	15.44	1,000
7	<b>VHS-7V</b>	23.36	1,000
8	<b>VHS-8V</b>	27.32	1,000
9	<b>VHS-9V</b>	31.28	1,000

### Material

Glass-filled PA 66, UL94V-0, natural (ivory)

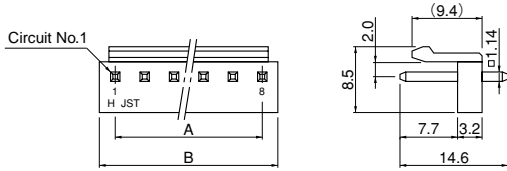
### RoHS compliance

Note: Not TÜV approved.

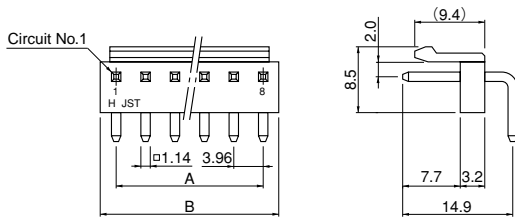
# VH CONNECTOR

## Locking header

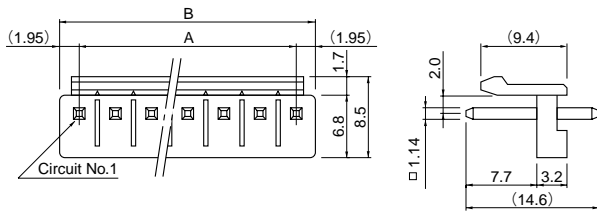
### Top entry type



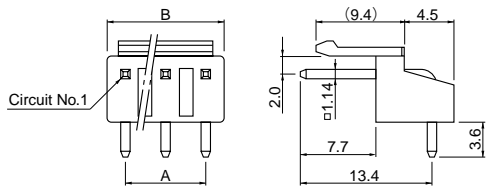
### Side entry type



### Top entry type of PBT



### Side entry type with PCB stabilizer



Circuits	Model No.		Dimensions (mm)		Q'ty / box	
	Top entry type	Side entry type	A	B	Top entry type	Side entry type
2	<b>B2P-VH</b>	<b>B2PS-VH</b>	3.96	7.86	1,000	1,000
3	<b>B3P-VH</b>	<b>B3PS-VH</b>	7.92	11.82	1,000	500
4	<b>B4P-VH</b>	<b>B4PS-VH</b>	11.88	15.78	500	500
5	<b>B5P-VH</b>	<b>B5PS-VH</b>	15.84	19.74	500	250
6	<b>B6P-VH</b>	<b>B6PS-VH</b>	19.80	23.70	250	250
7	<b>B7P-VH</b>	<b>B7PS-VH</b>	23.76	27.66	250	250
8	<b>B8P-VH</b>	<b>B8PS-VH</b>	27.72	31.62	200	200
9	<b>B9P-VH</b>	<b>B9PS-VH</b>	31.68	35.58	200	200
10	<b>B10P-VH</b>	<b>B10PS-VH</b>	35.64	39.54	200	100

#### Material and Finish

Post: Brass, copper-undercoated, tin-plated (reflow treatment)  
Wafer: PA 66 UL94V-0, natural (white)

**RoHS compliance** This product displays (LF)(SN) on a label.  
Note: Headers with a reduced number of posts are also available.  
Contact JST for details.

<For reference> As the color identification, the following alphabet shall be put in the underlined part.  
For availability, delivery and minimum order quantity, contact JST.

ex. **B2P(S)-VH-oo**

(blank)...natural (white)

BK...black R...red TR...tomato red BL...blue M...green

O...orange Y...yellow PK...pink H...gray

Circuits	Model No.		Dimensions (mm)		Q'ty / box	
	Top entry type of PBT	Side entry type with PCB stabilizer	A	B	Top entry type	Side entry type
2	<b>B2P-VH-B</b>	<b>S2P-VH</b>	3.96	7.86	1,000	1,000
3	<b>B3P-VH-B</b>	<b>S3P-VH</b>	7.92	11.82	1,000	500
4	<b>B4P-VH-B</b>	<b>S4P-VH</b>	11.88	15.78	500	500
5	<b>B5P-VH-B</b>	<b>S5P-VH</b>	15.84	19.74	500	250
6	<b>B6P-VH-B</b>	<b>S6P-VH</b>	19.80	23.70	250	250
7	<b>B7P-VH-B</b>	<b>S7P-VH</b>	23.76	27.66	250	250
8	<b>B8P-VH-B</b>	—	27.72	31.62	200	—
9	<b>B9P-VH-B</b>	—	31.68	35.58	200	—
10	<b>B10P-VH-B</b>	—	35.64	39.54	200	—
11	<b>*B11P-VH-B</b>	—	39.60	43.50	200	—

#### Material and Finish

Post: Brass, copper-undercoated, tin-plated (reflow treatment)  
Wafer: Top entry type of PBT: Glass-filled PBT, UL94V-0, natural (ivory)  
Side entry type with PCB stabilizer: PA 66, UL94V-0, natural (white)

**RoHS compliance** This product displays (LF)(SN) on a label.  
Note: \*Marked product is not TÜV approved.

<For reference> As the color identification, the following alphabet shall be put in the underlined part.  
For availability, delivery and minimum order quantity, contact JST.

<Top entry type of PBT>

ex. **B2P-VH-B-oo**

(blank)...natural (ivory)

C...black R...red E...blue M...green Y...yellow

<Side entry type with PCB stabilizer>

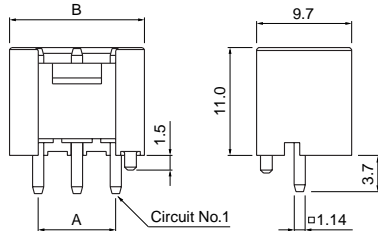
ex. **S2P-VH-oo**

(blank)...natural (white)

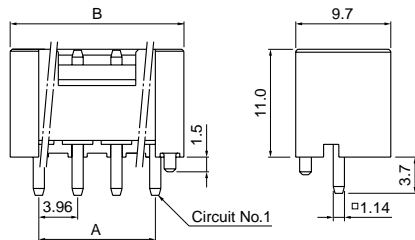
BK...black R...red BL...blue Y...yellow M...green

## Shrouded header

### (2, 3 circuits)



### (4 to 10 circuits)



Circuits	Model No.	Dimensions (mm)		Q'ty / box
		A	B	
2	<b>B2P-VH-FB-B</b>	3.96	9.80	250
3	<b>B3P-VH-FB-B</b>	7.92	13.76	200
4	<b>B4P-VH-FB-B</b>	11.88	17.72	150
5	<b>B5P-VH-FB-B</b>	15.84	21.68	200
6	<b>B6P-VH-FB-B</b>	19.80	25.64	200
7	<b>B7P-VH-FB-B</b>	23.76	29.60	100
8	<b>B8P-VH-FB-B</b>	27.72	33.56	100
9	<b>B9P-VH-FB-B</b>	31.68	37.52	100
10	<b>B10P-VH-FB-B</b>	35.64	41.48	125

#### Material and Finish

Post: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
Wafer: Glass-filled PBT, UL94V-0, natural (white)

**RoHS compliance** This product displays (LF)(SN) on a label.

Note: The applicable housing for 2 circuits shrouded header is "VHR-2N" only.  
"VHRR-2N" is not applicable.

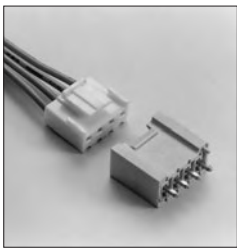
<For reference> As the color identification,  
the following alphabet shall be put in the underlined part.  
For availability, delivery and minimum order quantity, contact JST.

ex. **B2P-VH-FB-B-oo**

(blank)...natural (white)

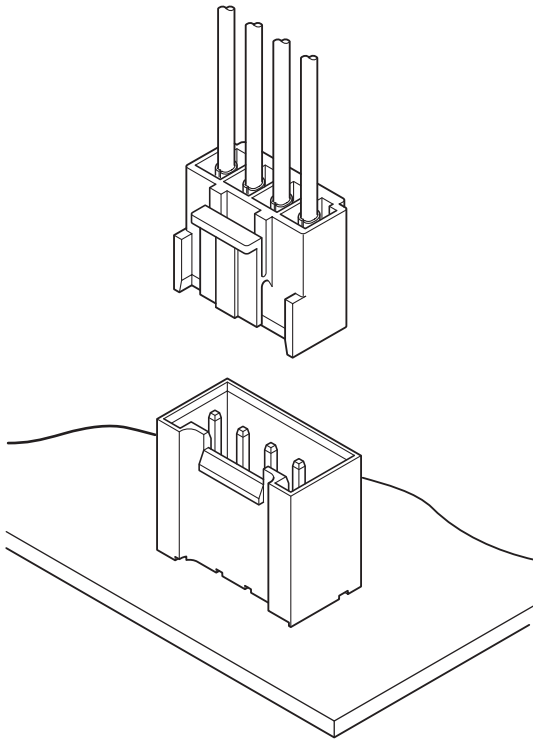
R...red C...black E...blue M...green Y...yellow O...orange

H...gray PK...pink



# VH CONNECTOR (High box type)

## 3.96mm pitch/Disconnectable Crimp style connectors



**Header for 3.96mm pitch VH connector for use specifically with resin coated ("potted") PC boards.**

• **Interchangeability**

### Specifications

- Current rating: 7A AC, DC (AWG #18)
- Voltage rating: 250V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/10m Ω max.  
After environmental testing/20m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 1,500V AC/minute
- Applicable wire: AWG #22 to #18
- Applicable PC board thickness: 1.6mm

*Note: Do not branch in parallel current which exceeds the rated current. If branched in parallel, current imbalance or other problems may develop. If it is absolutely necessary to branch such a large current in parallel, be sure to use contacts made of phosphor bronze. Design the circuits without causing imbalance and provide an extra margin for each circuit.*

\* RoHS compliant products are published.

\* Temperature Range:

The aforementioned temperature range of this connector is described in JST Standard Product Specification. Maximum temperature registered in UL is 105°C.

\* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.

\* Contact JST for details.

### Standards

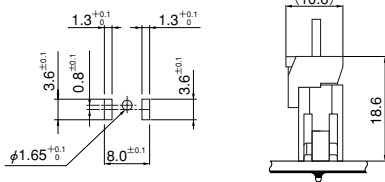
Recognized E60389

Certified LR20812

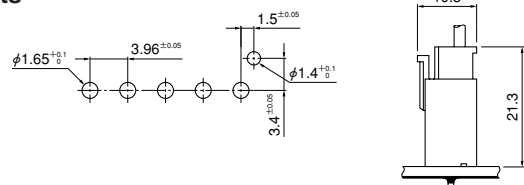
R75122

### PC board layout (viewed from soldering side) and Assembly layout

**1 circuit**



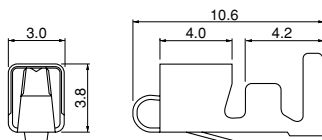
**2 to 8 circuits**



Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.

2. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guide line. Contact JST for details.

### Contact



Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty / reel
	mm <sup>2</sup>	AWG#		
SVH-21T-P1.1	0.33~0.83	22~18	1.7~3.0	4,500

#### Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

#### RoHS compliance

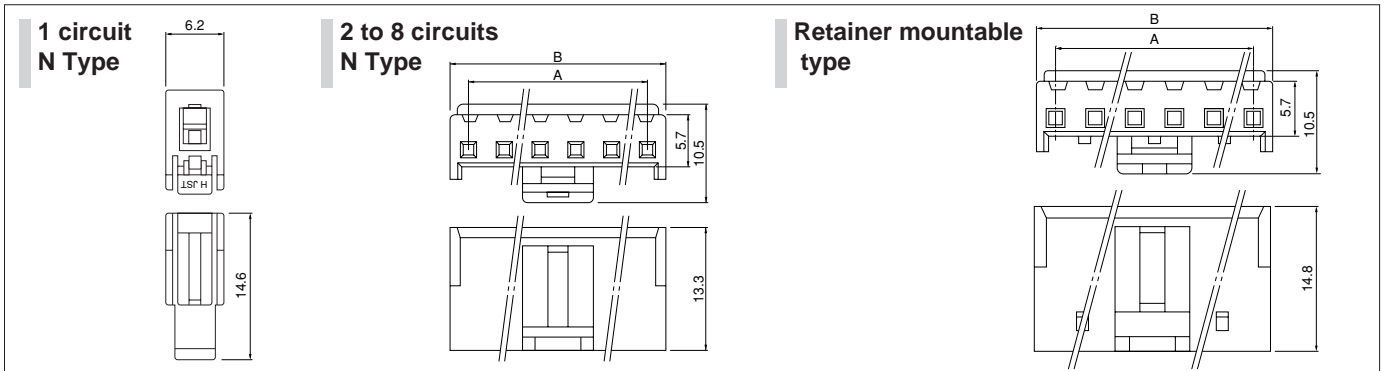
Note: Contact JST for brass products.

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SVH-21T-P1.1	AP-K2N	MKS-L	MK/SVH-21-11	APLMK SVH21-11
		*MKS-SC	SC/SVH-21-11	APLSC SVH21-11

Note: \*Strip-crimp applicator

# VH CONNECTOR (High box type)

## Housing



Circuits	Model No.		Dimensions (mm)		Qty / bag
	N type	Retainer mountable type	A	B	
1	*VHR-1N	—	—	—	1,000
2	VHR-2N	—	3.96	7.86	1,000
3	VHR-3N	*VHRR-3N	7.92	11.82	1,000
4	VHR-4N	—	11.88	15.78	1,000
5	VHR-5N	*VHRR-5N	15.84	19.74	1,000
6	VHR-6N	—	19.80	23.70	500
7	VHR-7N	*VHRR-7N	23.76	27.66	500
8	VHR-8N	*VHRR-8N	27.72	31.62	500

Material	
PA 6, UL94V-0, natural (white)	

### RoHS compliance

Note: \*Marked products are not TÜV approved.

<For reference> As the color identification, the following alphabet shall be put in the underlined part.

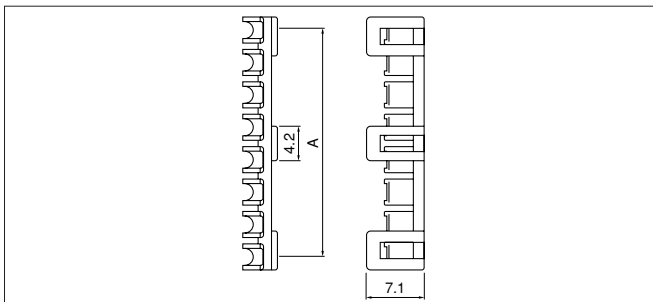
For availability, delivery and minimum order quantity, contact JST.

ex. **VHR-2N-oo**

(blank)...natural (white)

BK...black R...red BL...blue M...green

## Retainer



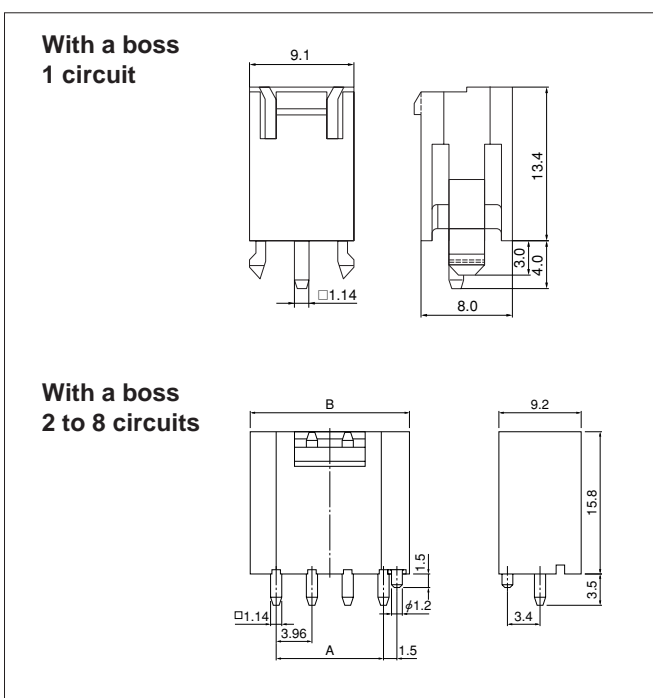
Circuits	Model No.	A	Qty / bag
2	VHS-2V	3.70	1,000
3	VHS-3V	7.52	1,000
5	VHS-5V	15.44	1,000
7	VHS-7V	23.36	1,000
8	VHS-8V	27.32	1,000
9	VHS-9V	31.28	1,000

Material	
Glass-filled PA 66, UL94V-0, natural (ivory)	

### RoHS compliance

Note: Not TÜV approved.

## Shrouded header



Circuits	Model No.	Qty / box
1	BH1P-VH-1	500

Material and Finish	
Post: Brass, copper-undercoated, tin-plated (reflow treatment)	
Wafer: PA 66, UL-94V-0, natural (white)	

RoHS compliance This product displays (LF)(SN) on a label.

Note: Not TÜV approved.

Circuits	Model No.	Dimensions (mm)		Qty / box
		A	B	
2	BH2P-VH-1	3.96	9.80	250
3	BH3P-VH-1	7.92	13.76	200
4	BH4P-VH-1	11.88	17.72	150
5	BH5P-VH-1	15.84	21.68	100
6	BH6P-VH-1	19.80	25.64	100
7	BH7P-VH-1	23.76	29.60	100
8	BH8P-VH-1	27.72	33.56	100

Material and Finish	
Post: Brass, copper-undercoated, tin-plated (reflow treatment)	
Wafer: Glass-filled PA 66, UL-94V-0, natural (ivory)	

RoHS compliance This product displays (LF)(SN) on a label.

<For reference> As the color identification, the following alphabet shall be put in the underlined part.

For availability, delivery and minimum order quantity, contact JST.

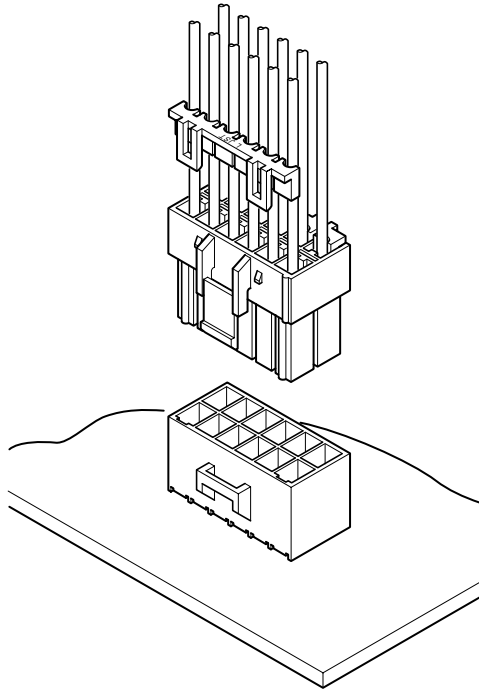
ex. **BH2P-VH-1-oo**

(blank)...natural (ivory) BK...black R...red BL...blue M...green



# HL CONNECTOR

**3.96mm pitch Disconnectable Crimp style connectors**



- **Housing lances for contact retention**
- **Inner-housing lock**
- **Secondary retainer**
- **Low insertion force contact**

## Specifications

- Current rating: 7A AC, DC (Refer to the table below.)
- Voltage rating: 300V AC, DC
- Temperature range: -25°C to +90°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/7m Ω max.  
After environmental testing/10m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 1,500V AC/minute
- Applicable wire: AWG #22 to #18
- Applicable PC board thickness: 1.5 to 2.2mm

Note:

The current rating differs depending on the number of circuits and the wire size used in each connector. The table below lists the current rating as a function of the number of circuits and the wire size.

Current unit:A

Circuits	Wire size(AWG)		
	#18	#20	#22
4□	7□	5□	4□
8□	6□	4□	3□
12	5	3	3

Note:

Do not branch in parallel current which exceeds the rated current (eg. more than 7A in the case of 4 circuits with AWG #18). If branched in parallel, current imbalance or other problems may develop.

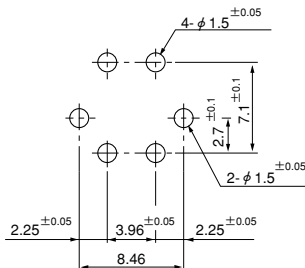
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

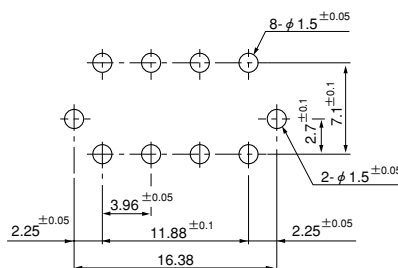
- Ⓜ Recognized E60389
- Ⓢ Certified LR20812
- ⚠ R9551072

### PC board layout (viewed from component side)

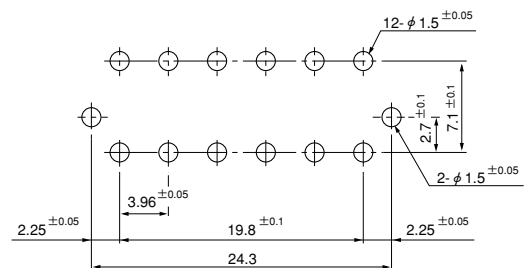
(4 circuits)



(8 circuits)



(12 circuits)

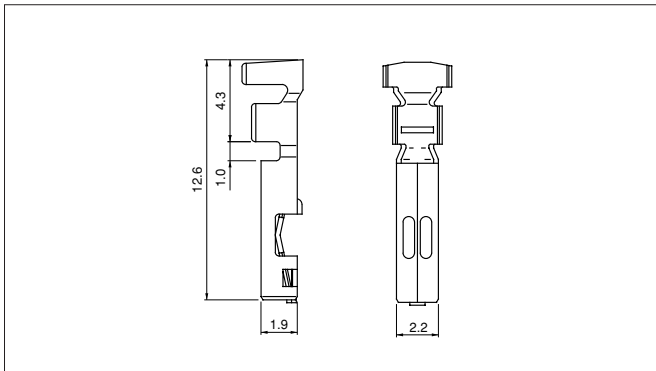


Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.

2. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.

# HL CONNECTOR

## Contact



Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty / reel
	mm <sup>2</sup>	AWG #		
<b>SSF-21T-P1.4</b>	0.3~0.75	22~18	1.5~2.2	6,000

### Material and Finish

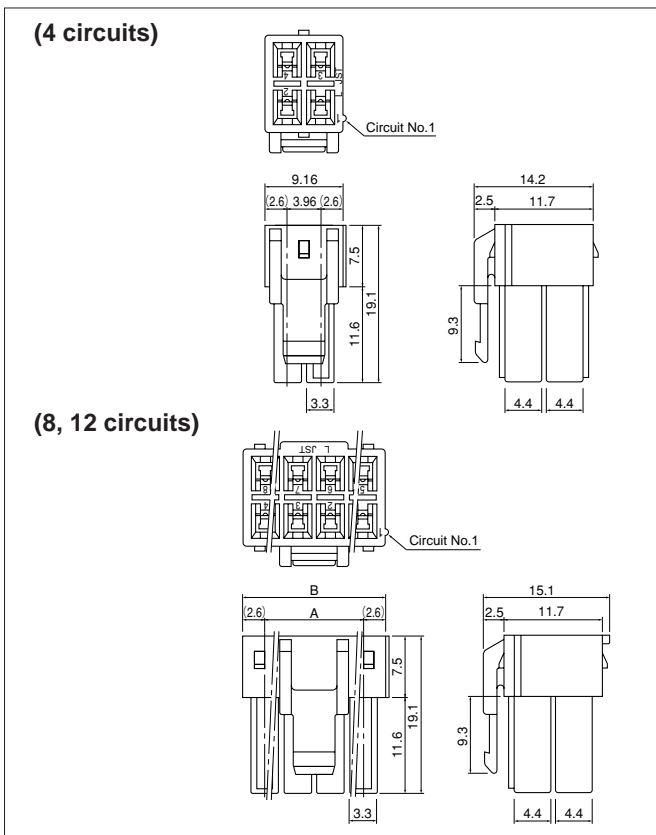
Phosphor bronze, tin-plated (reflow treatment)

### RoHS compliance

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SSF-21T-P1.4</b>	AP-K2N	MKS-L	MK/SSF/M-21-14	APLMK SSF/M21-14
		*MKS-SC	SC/SSF/M-21-14	APLSC SSF/M21-14

Note: \*Strip-crimp applicator

## Housing



Circuits	Model No.	Dimensions (mm)		Q'ty / bag
		A	B	
4	<b>HLP-04V</b>	—	—	500
8	<b>HLP-08V</b>	11.88	17.08	500
12	<b>HLP-12V</b>	19.8	25.0	500

### Material

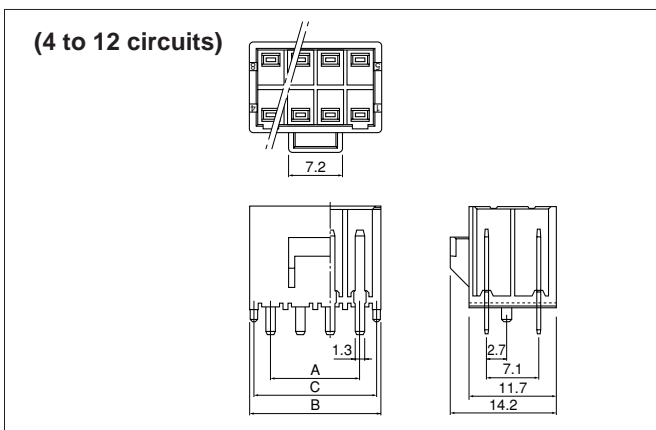
PA 66, UL94V-0, natural (white)

### RoHS compliance

<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. **HLP-04V-oo**  
(blank)...natural (white)  
E...blue

## Locking header



Circuits	Model No.	Dimensions (mm)			Q'ty / box
		A	B	C	
4	<b>B04P-HL-A</b>	3.96	9.56	8.46	200
8	<b>B08P-HL-A</b>	11.88	17.48	16.38	100
12	<b>B12P-HL-A</b>	19.80	25.40	24.30	50

### Material and Finish

Post: Brass, copper-undercoated, tin-plated (reflow treatment)  
Wafer: PA 66, UL94V-0, natural (white)

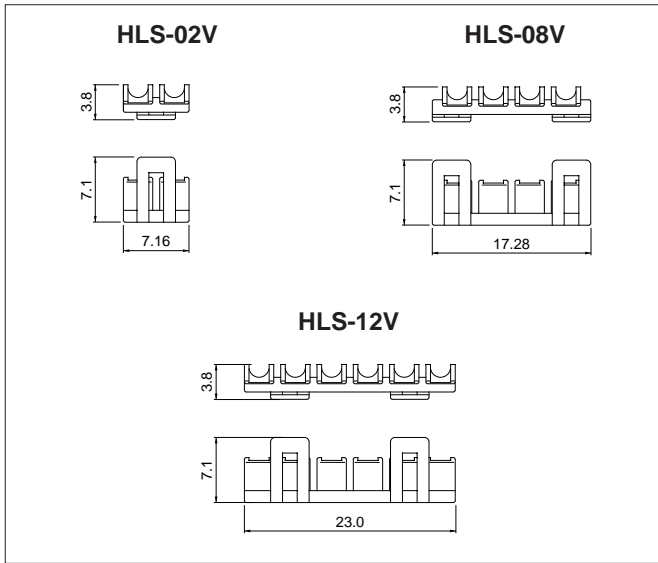
### RoHS compliance

This product displays (LF)(SN) on a label. <For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. **B04P-HL-A-oo**  
(blank)...natural (white)  
E...blue

# HL CONNECTOR

## Retainer

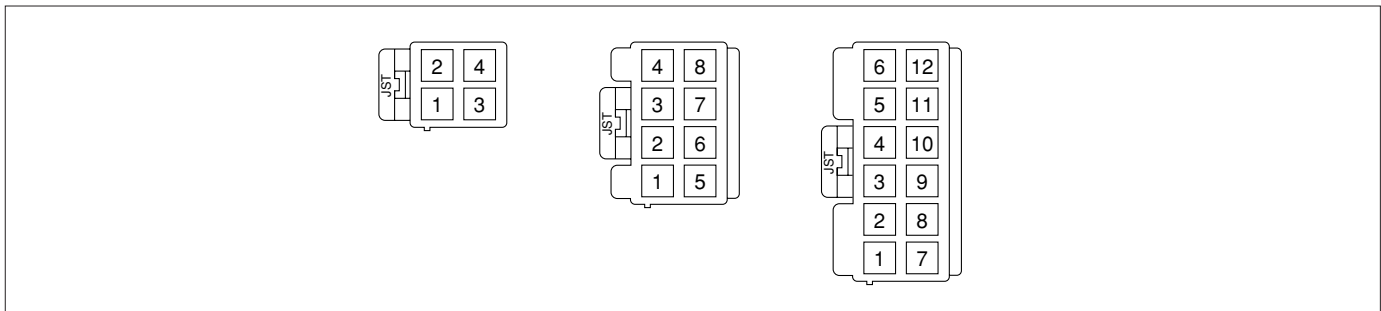


Applicable Housing Model No.	Retainer Model No.	Q'ty / bag
<b>HLP-04V</b>	<b>HLS-02V</b>	1,000
<b>HLP-08V</b>	<b>HLS-08V</b>	1,000
<b>HLP-12V</b>	<b>HLS-12V</b>	1,000

Material
Glass-filled PA 66, UL94V-0, natural (ivory)

**RoHS compliance**

## Contact position location numbers

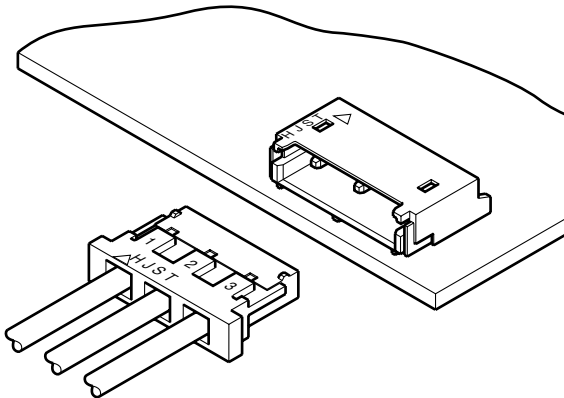






# BH CONNECTOR

4.0/8.0/12.0mm pitch/Disconnectable Crimp style connectors



**Low profile connectors with high withstanding voltage, designed for connecting liquid crystal display back light lamps to their starters.**

- Low profile
- SMT configuration
- Applicable to special wires
- Headers with locating bosses
- Housing lock also serves as polarizing device

## Specifications

- Current rating: 1.0A AC, DC (AWG #22)
- Voltage rating: 600V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/10m Ω max.  
After environmental testing/20m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 1,800V AC/minute
- Applicable wire: AWG #28 to #22
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

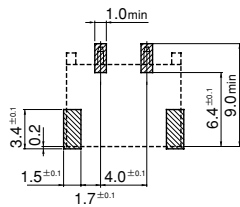
## Standards

- Ⓜ Recognized E60389
- Ⓢ Certified LR20812

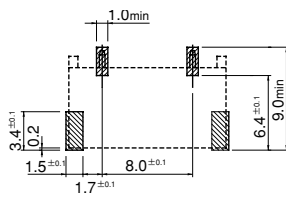
## PC board layout (viewed from component side)

### SMT type

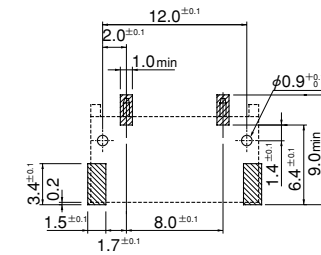
(2 circuits 4.0mm pitch)



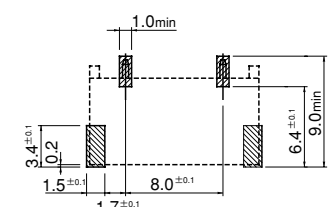
(2 circuits 8.0mm pitch)



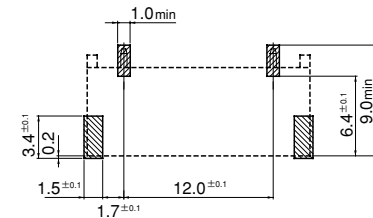
(2 circuits 8.0mm pitch with bosses)



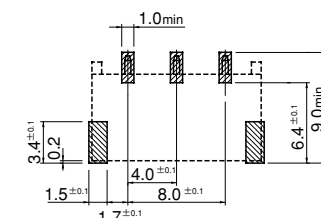
(2 circuits 8.0mm pitch plugged up)



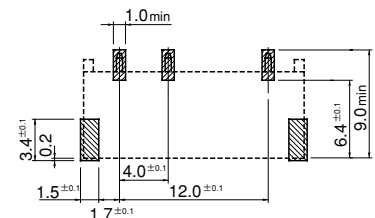
(2 circuits 12.0mm pitch)



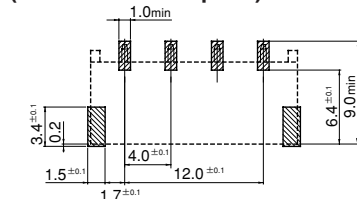
(3 circuits 4.0mm pitch)



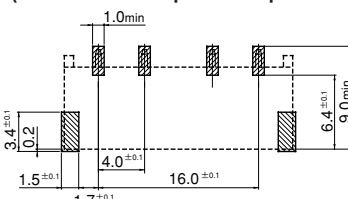
(3 circuits 4.0mm pitch plugged up)



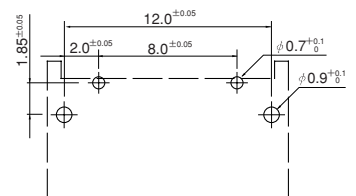
(4 circuits 4.0mm pitch)



(4 circuits 4.0mm pitch with post removed)



### Through-hole type

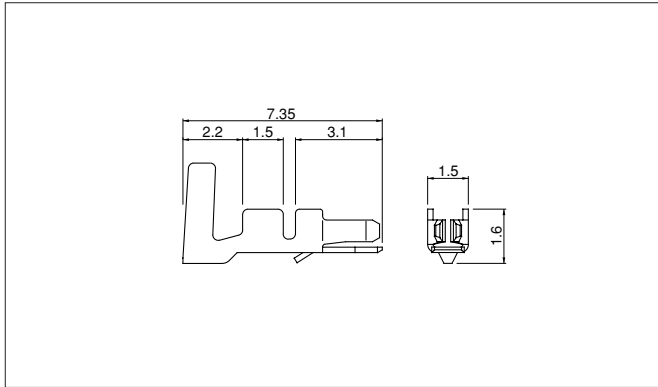


Note: 1. Tolerances are for pattern non-cumulative: ±0.05mm for all centers. Tolerance for hole size is ±0.1.

2. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as guideline. Contact JST for details.

# BH CONNECTOR

## Contact



Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty / reel
	mm <sup>2</sup>	AWG #		
<b>SBH-001T-P0.5</b>	0.08~0.33	28~22	1.6 ~2.4	4,000

### Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

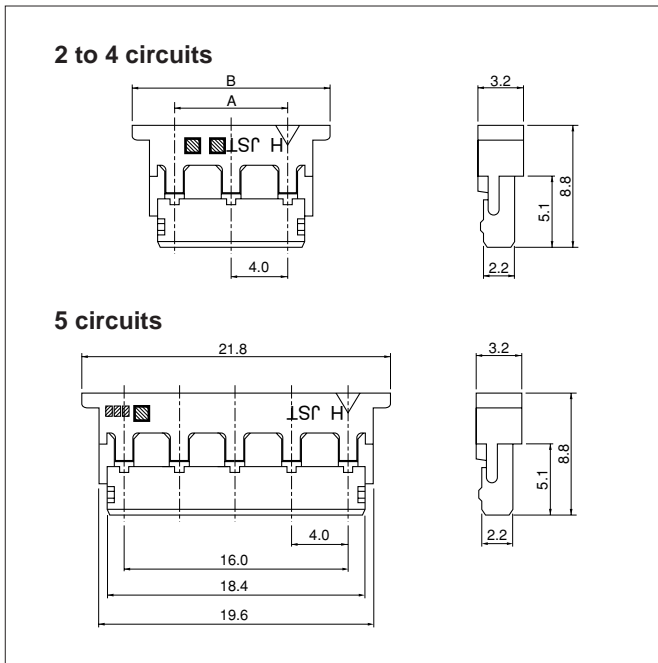
### RoHS compliance

Note: Wire conductors should be tin-plated annealed copper strands.

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SBH-001T-P0.5</b>	AP-K2N	MKS-L	MK/SBH/M-001-05	APLMK SBH/M001-05
		*MKS-SC1-1	SC/SBH/M-001-05	APLSC SBH/M001-05

Note: \*Strip-crimp applicator

## Housing



Circuits	Pitch (mm)	Model No.	Dimensions (mm)		Q'ty / bag
			A	B	
2	4	<b>BHR-02VS-1</b>	4.0	9.8	1,000
	8	<b>BHR-03VS-1</b>	8.0	13.8	1,000
	Note1) 8	<b>BHR-02(8.0)VS-1N</b>	8.0	13.8	1,000
3	12	<b>BHR-04VS-1</b>	12.0	17.8	1,000
	4	<b>BHR-03VS-1</b>	8.0	13.8	1,000
4	Note2) 4	<b>BHR-03(4-3)VS-1N</b>	12.0	17.8	1,000
	4	<b>BHR-04VS-1</b>	12.0	17.8	1,000
5	4	<b>BHR-05VS-1</b>	16.0	21.8	1,000

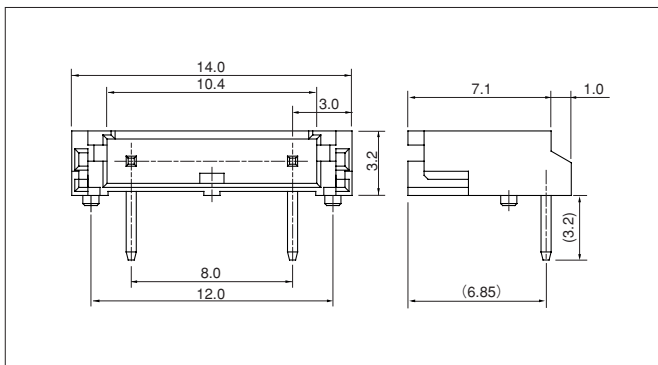
### Material

PA 66, UL94V-0, natural (white)

### RoHS compliance

Note: 1. BHR-02(8.0)VS-1N: 2 circuits 8.0mm pitch plugged up.  
2. BHR-03(4-3)VS-1N: 4 circuits 4.0mm pitch header with circuit No.3 plugged up.

## Through-hole type shrouded header



Circuits	Pitch (mm)	Model No.	Q'ty / tray
2	8	<b>S02(8.0)B-BHS</b>	1,000

### Material and Finish

Post: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
Wafer: PA, UL94V-0, natural (ivory)

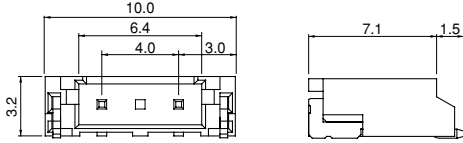
### RoHS compliance

This product displays (LF)(SN) on a label.

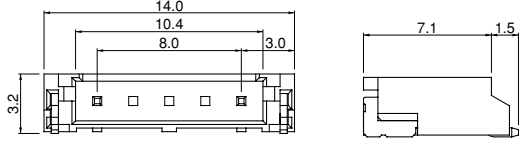
Note: The applicable housing is "BHR-02(8.0)VS-1N" only.

## SMT type shrouded header

(2 circuits 4.0mm pitch)

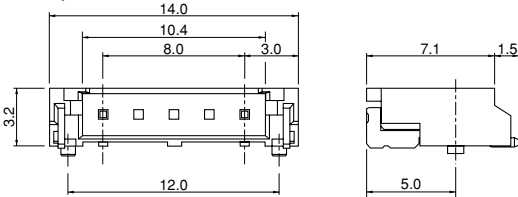


(2 circuits 8.0mm pitch)



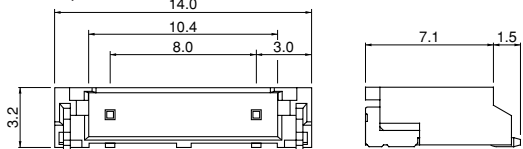
(2 circuits 8.0mm pitch with bosses)

Note 1)



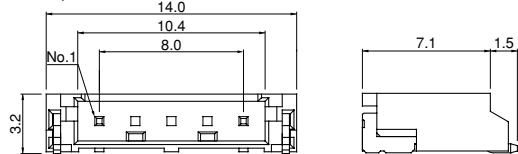
(2 circuits 8.0mm pitch plugged up)

Note 2)

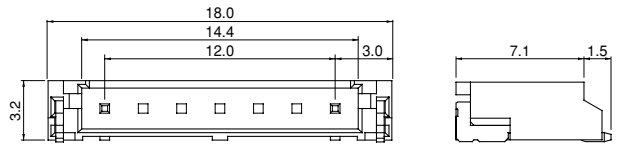


(2 circuits 8.0mm pitch with ribs against prying)

Note 4)

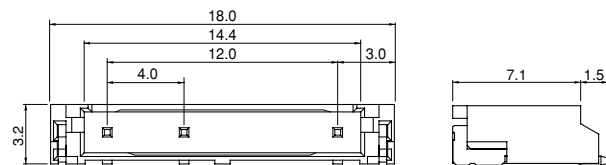


(2 circuits 12.0mm pitch)

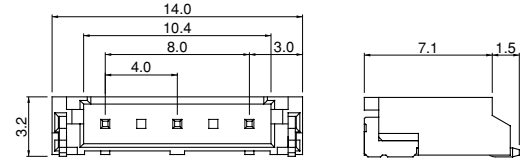


(3 circuits 4.0mm pitch plugged up)

Note 3)



(3 circuits 4.0mm pitch)

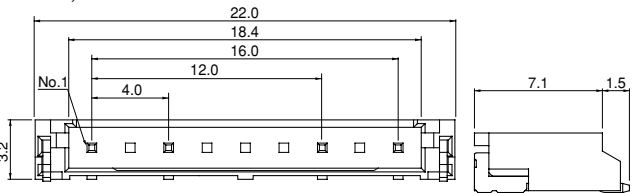


(4 circuits 4.0mm pitch)



(4 circuits 4.0mm pitch with post removed)

Note 5)



Circuits	Pitch(mm)	Model No.	Qty / reel
2	4	SM02(4.0)B-BHS-1-TB	1,000
	8	SM02(8.0)B-BHS-1-TB	1,000
	Note1) 8	SM02(8.0)B-BHS-TB	1,000
	Note2) 8	SM02(8.0)B-BHS-1N-TB	1,000
	Note4) 8	SM02(8.0)B-BHS-1R-TB	1,000
	12	SM02(12)B-BHS-1-TB	1,000
3	4	SM03(4.0)B-BHS-1-TB	1,000
	Note3) 4	SM03(7-D1)B-BHS-1N-TB	1,000
4	4	SM04(4.0)B-BHS-1-TB	1,000
5	Note5) 4	SM04(9-E2)B-BHS-1-TB	1,000

### Material and Finish

Post: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
 Wafer: PA, UL94V-0, natural (ivory)  
 Solder tab: Brass, copper-undercoated, tin-plated (reflow treatment)

**RoHS compliance** This product displays (LF)(SN) on a label.

Note: 1. Header with bosses. Contact JST for other circuits headers with bosses.

2. 2 circuits 8.0mm pitch plugged up.

3. 4 circuits 4.0mm pitch header with circuit No.3 plugged up.

4. Header with ribs against prying. Contact JST for other circuits headers with ribs against prying.

5. 5 circuits 4.0mm pitch header with circuit No.3 post removed.

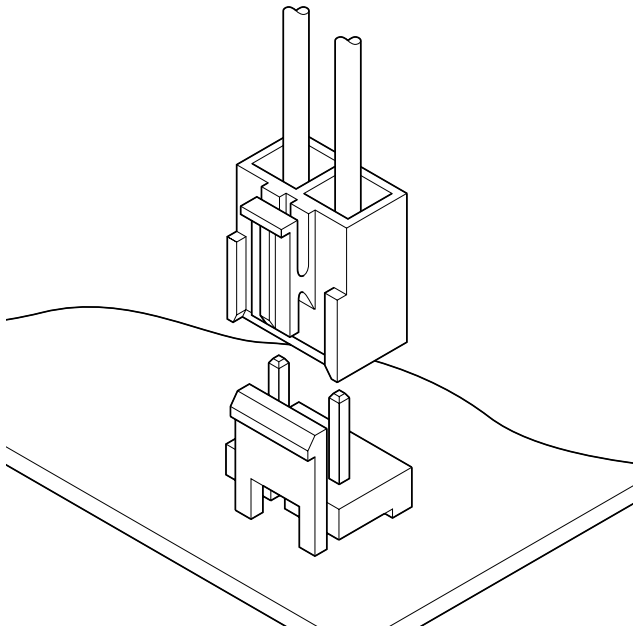
6. The products listed above are supplied on embossed tape.

7. Products with bosses supplied in loose piece are also available. Contact JST for details.



# NV CONNECTOR

5.0mm pitch/Disconnectable Crimp style connectors



- Side stackable
- Box contact
- Compact connector with a large capacity
- Secure contact and mounting

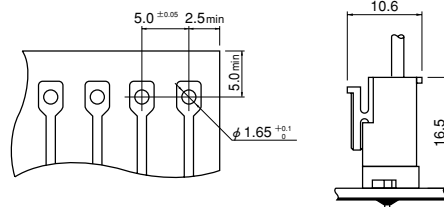
## Specifications

- Current rating: 10A AC, DC (AWG #16)
- Voltage rating: 250V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/10m Ω max.  
After environmental testing/20m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 1,500V AC/minute
- Applicable wire: AWG #22 to #16
- Applicable PC board thickness: 1.6mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

- Ⓜ Recognized E60389
- Ⓢ Certified LR20812
- Ⓡ R9251676

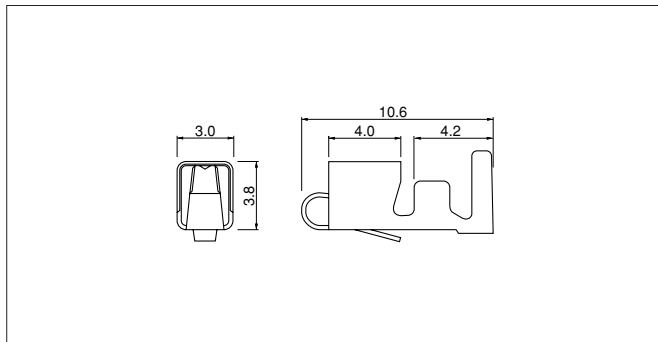
## PC board layout (viewed from soldering side) and Assembly layout



Note: 1. Tolerances are non-cumulative:  $\pm 0.05\text{mm}$  for all centers.

2. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.

## Contact



Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty / reel
	mm <sup>2</sup>	AWG #		
SVH-21T-P1.1	0.33~0.83	22~18	1.7~3.0	4,500
SVH-41T-P1.1	0.5 ~1.25	20~16	1.7~3.0	3,500

### Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

### RoHS compliance

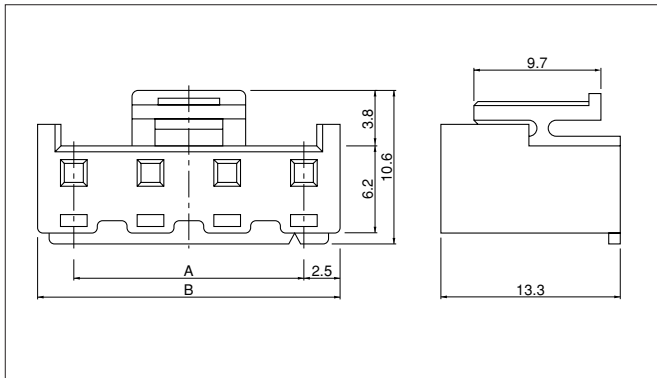
Note: Contact JST for brass products.

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SVH-21T-P1.1	AP-K2N	MKS-L	MK/SVH-21-11	APLMK SVH21-11
		*MKS-SC	SC/SVH-21-11	APLSC SVH21-11
SVH-41T-P1.1		MKS-L	MK/SVH-41-11	APLMK SVH41-11
		—	—	—

Note: \*Strip-crimp applicator

# NV CONNECTOR

## Housing



Circuits	Model No.	Dimensions (mm)		Q'ty / bag
		A	B	
2	<b>NVR-02</b>	5.0	10.0	1,000
3	<b>NVR-03</b>	10.0	15.0	500
4	<b>NVR-04</b>	15.0	20.0	1,000

### Material

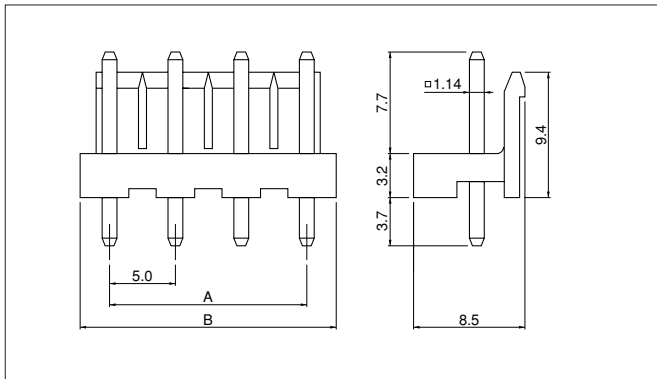
PA 6, UL94V-0, natural (white)

### RoHS compliance

<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. **NVR-02-oo**  
 (blank)...natural (white)  
 E...blue

## Locking header



Circuits	Model No.	Dimensions (mm)		Q'ty / box
		A	B	
2	<b>B02P-NV</b>	5.0	10.0	1,000
3	<b>B03P-NV</b>	10.0	15.0	700
4	<b>B04P-NV</b>	15.0	20.0	500

### Material and Finish

Post: Brass, copper-undercoated, tin-plated (reflow treatment)  
 Wafer: B02P-NV...PA 66,UL94V-0, natural (white)  
 B03P-NV & B04P-NV...Glass-filled PBT, UL94V-0, natural (white)

### RoHS compliance

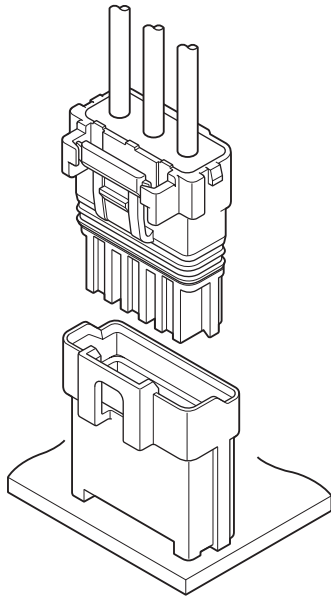
This product displays (LF)(SN) on a label. <For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. **B02P-NV-oo**  
 (blank)...natural (white)  
 BL...blue



# WPJ CONNECTOR

**5.0mm pitch/Disconnectable Crimp style connectors**



**Compact, Water Resist and Durable. This connector for electrical connection can be used on both waterproof and non-waterproof conditions, depending on the usage. Just by placing a rubber part will change it into a water resistant connector. Both conditions are using the same header.**

- **Waterproof Performance [Grade 7 ingress protection of JIS C 0920 (IEC 60529 IPX7) ]**
- **Control Key System**
- **Contacting part of contact is hardly deformed**
- **Inner-housing lock**
- **Compact Design**

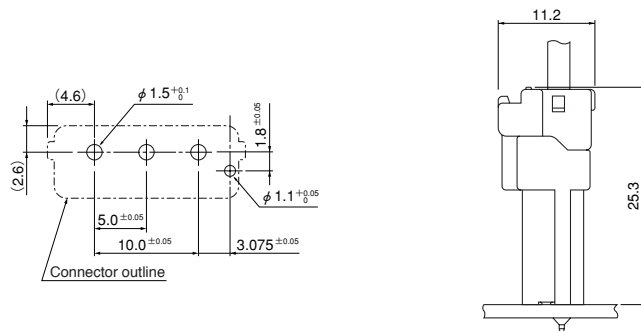
## Specifications

- Current rating: 7A AC, DC (AWG #18)
- Voltage rating: 300V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/10m Ω max.  
After environmental testing/20m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 1,500V AC/minute
- Applicable wire: Conductor size/AWG #22 to #18  
Insulation O.D./2.32 to 2.83mm  
1.52 to 2.03mm
- Waterproof grade: Grade 7 ingress protection of JIS C 0920(IEC 60529 IPX7)
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

- Ⓜ Recognized E60389
- Ⓢ Certified LR20812
- Ⓛ File No.R50073100

**PC board layout (viewed from component side) and Assembly layout**

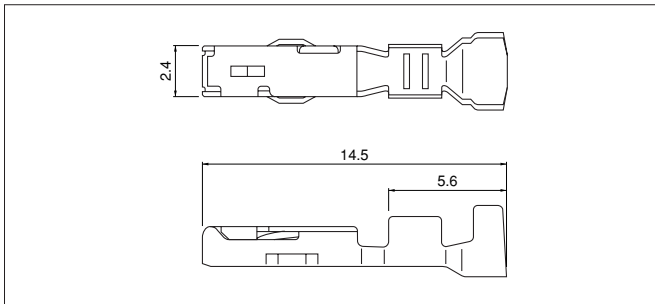


Note: 1. Tolerances are non-cumulative:  $\pm 0.05\text{mm}$  for all centers.  
2. The dimensions above should serve as a guideline. Contact JST for details.

# WPJ CONNECTOR

(Non-waterproof type)

## Contact



Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty / reel
	mm <sup>2</sup>	AWG#		
<b>SWPJR-21T-M0.5</b>	0.33~0.83	22~18	2.32~2.83	4,500
<b>*SWPJR-21T-M0.5A</b>	0.33~0.83	22~18	1.52~2.03	4,500

### Material and Finish

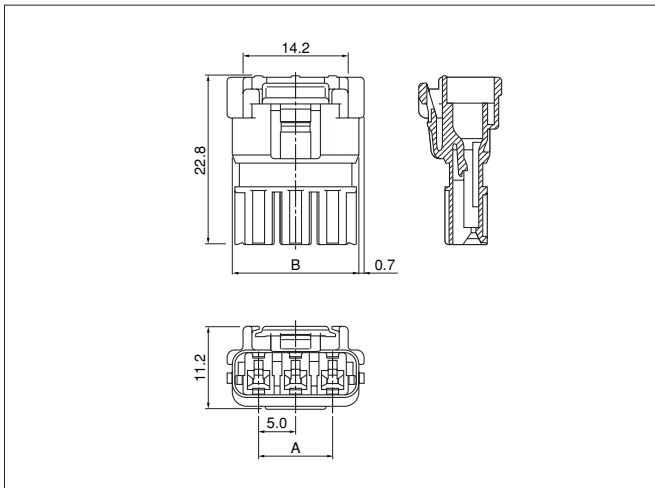
Copper alloy, tin-plated (reflow treatment)

### RoHS compliance

Note: \*Marked product is not UL/CSA/TÜV approved.

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SWPJR-21T-M0.5</b>	AP-K2N	MKS-L	MK/SWPJR/T-21-05	APLMK SWPJR/T21-05
		—	—	—
<b>SWPJR-21T-M0.5A</b>	—	MKS-L	MK/SWPJR/T-21-05A	APLMK SWPJR/T21-05A
		—	—	—

## Housing



### Receptacle housing

Circuits	Model No.	A	B	Q'ty / bag
2	<b>WPJR-02V-1-S</b>	—	12.1	1,000
3	<b>WPJR-03V-1-S</b>	10.0	17.1	1,000

### Material

Glass-filled PBT, UL94V-0, natural (white)

### RoHS compliance

<For reference> Polarizing key pattern

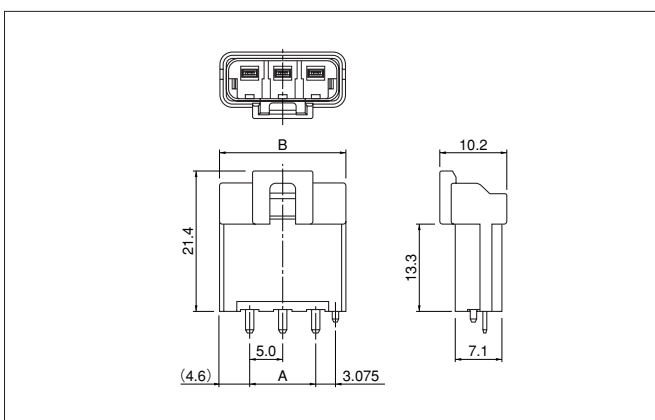
Key pattern No.1(Color: Natural): **WPJR-02V-1-S**

Key pattern No.2(Color: Red): **WPJR-02V-2-R**

Key pattern No.3(Color: Blue): **WPJR-02V-3-E**

For availability, delivery and minimum order quantity, contact JST.

## Header



Circuits	Model No.	A	B	Q'ty / bag
2	<b>B02B-WPJSS-1</b>	—	14.2	400
3	<b>B03B-WPJSS-1</b>	10.0	19.2	300

### Material and Finish

Wafer: Glass-filled PBT, UL94V-0

Post: Copper alloy, copper-undercoated, tin-plated (reflow treatment)

### RoHS compliance

This product displays (LF)(SN) on a label.

<For reference> Polarizing key pattern

Key pattern No.1(Color: Natural): **B02B-WPJSS-1**

Key pattern No.2(Color: Red): **B02B-WPJRS-2**

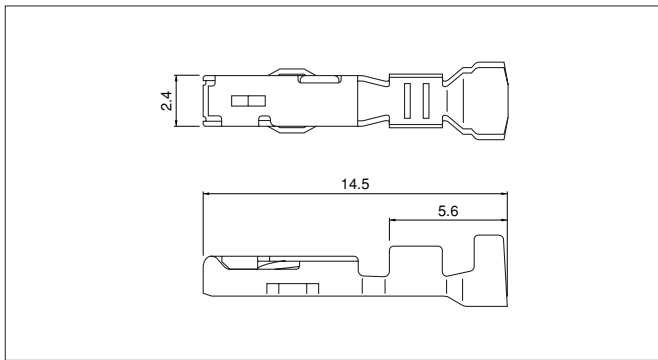
Key pattern No.3(Color: Blue): **B02B-WPJES-3**

For availability, delivery and minimum order quantity, contact JST.

# WPJ CONNECTOR

(Waterproof type)

## Contact



Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty / reel
	mm <sup>2</sup>	AWG#		
<b>SWPJR-21T-M0.5</b>	0.33~0.83	22~18	2.32~2.83	4,500

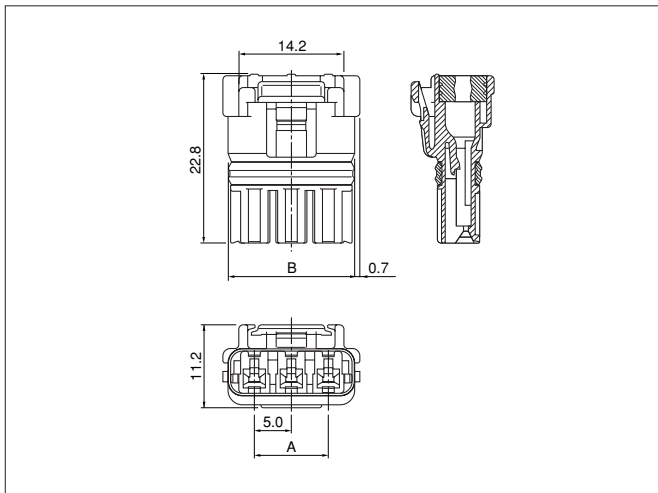
### Material and Finish

Copper alloy, tin-plated (reflow treatment)

### RoHS compliance

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SWPJR-21T-M0.5</b>	AP-K2N	MKS-L	MK/SWPJR/T-21-05	APLMK SWPJR/T21-05
		—	—	—

## Housing



### Receptacle housing assembly

Circuits	Model No.	A	B	Q'ty / box
2	<b>02R-WPJV-1-SMM</b>	—	12.1	240
3	<b>03R-WPJV-1-SMM</b>	10.0	17.1	192

### Material

Receptacle housing: Glass-filled PBT, UL94V-0, natural (white)  
Seal ring: Silicon, green  
Seal rubber plate: Silicon, green

### RoHS compliance

<For reference> Polarizing key pattern

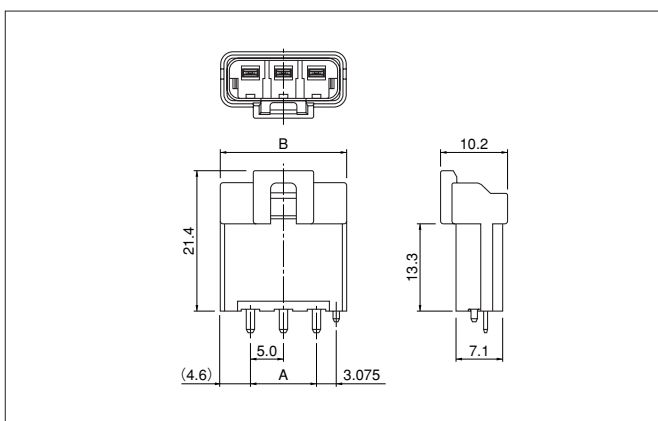
Key pattern No.1(Color: Natural): **02R-WPJV-1-SMM**

Key pattern No.2(Color: Red): **02R-WPJV-2-RMM**

Key pattern No.3(Color: Blue): **02R-WPJV-3-EMM**

For availability, delivery and minimum order quantity, contact JST.

## Header



Circuits	Model No.	A	B	Q'ty / bag
2	<b>B02B-WPJSS-1</b>	—	14.2	400
3	<b>B03B-WPJSS-1</b>	10.0	19.2	300

### Material and Finish

Wafer: Glass-filled PBT, UL94V-0  
Post: Copper alloy, copper-undercoated, tin-plated (reflow treatment)

### RoHS compliance

This product displays (LF)(SN) on a label.

<For reference> Polarizing key pattern

Key pattern No.1(Color: Natural): **B02B-WPJSS-1**

Key pattern No.2(Color: Red): **B02B-WPJRS-2**

Key pattern No.3(Color: Blue): **B02B-WPJES-3**

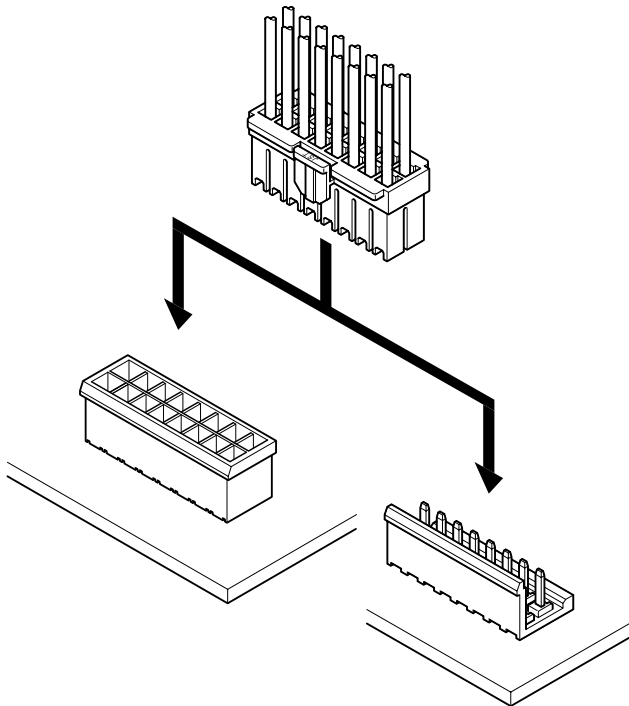
For availability, delivery and minimum order quantity, contact JST.





# XL CONNECTOR

5.0mm pitch/Disconnectable Crimp style connectors



The reliable XL connectors have been developed by utilizing the technology of JST's field proven VH and SM connectors. The XL connectors are being used in electric appliances, vending machines, and office automation equipment.

- Reliable housing construction
- Easy contact insertion
- Box-shaped contact
- Two kinds of connections

## Specifications

- Current rating: 10A AC, DC (Refer to the table below.)
- Voltage rating: 150V AC, DC
- Temperature range: -25°C to +90°C (including temperature rise in applying electrical current)
- Contact resistance: Initial value/7m Ω max. After environmental testing/10m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 1,500V AC/minute
- Applicable wire: AWG #26 to #16
- Applicable PC board thickness: 1.6mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

Note:

The rated current varies depending on the number of circuits and the size of the wire to be connected by crimping.

Circuits	Wire size(AWG)					
	#16	#18	#20	#22	#24	#26
2	10	6	5	4	3	3
3	9	5	4	3	3	2
4	9	5	4	3	3	2
8	6	4	3	3	2	2
12	6	4	3	3	2	2
16	5	3	2	2	1	1

Note:

Do not branch in parallel current which exceeds the rated current per circuit listed below. (Example: more than 10A in the case of a 2-circuit connector using AWG #16 wires.) If branched in parallel, current imbalance or other problems may develop.

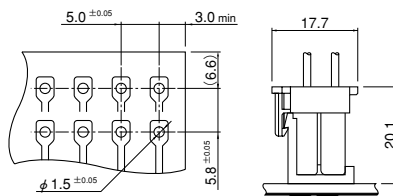
## Standards

Recognized E60389

Certified LR20812

R75150

### Locking header PC board layout (viewed from soldering side) and Assembly layout

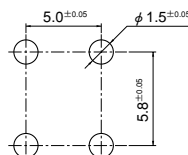


Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.

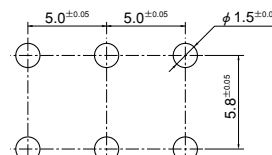
2. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.

### Shrouded header PC board layout (viewed from component side)

[HDS type]  
Top entry type



[HDS type]  
Side entry type

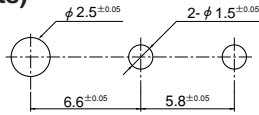


# XL CONNECTOR

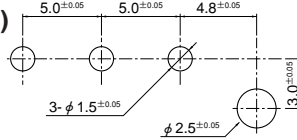
## Shrouded header PC board layout (viewed from component side)

[HDB type]  
Top entry type

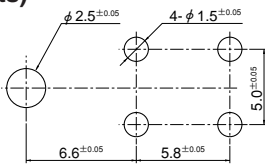
(2 circuits)



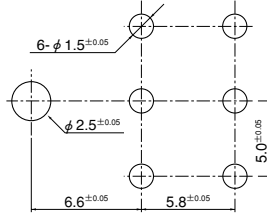
(3 circuits)



(4 circuits)

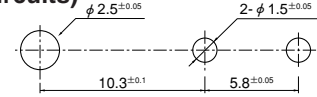


(6 circuits)

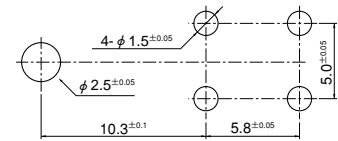


[HDB type]  
Side entry type

(2 circuits)



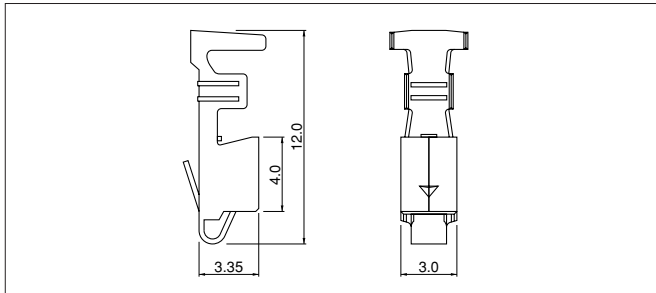
(4 circuits)



Note: 1. Tolerances are non-cumulative:  $\pm 0.05\text{mm}$  for all centers.

2. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.

## Contact



Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty / reel
	mm <sup>2</sup>	AWG #		
<b>SXF-01T-P0.7</b>	0.13~0.5	26~20	1.3~2.7	3,000
<b>SXF-41T-P0.7</b>	0.5 ~1.25	20~16	1.9~3.1	
	0.3×2 ~ 0.5×2	22×2 ~ 20×2	1.7×2 ~ 2.0×2	

### Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

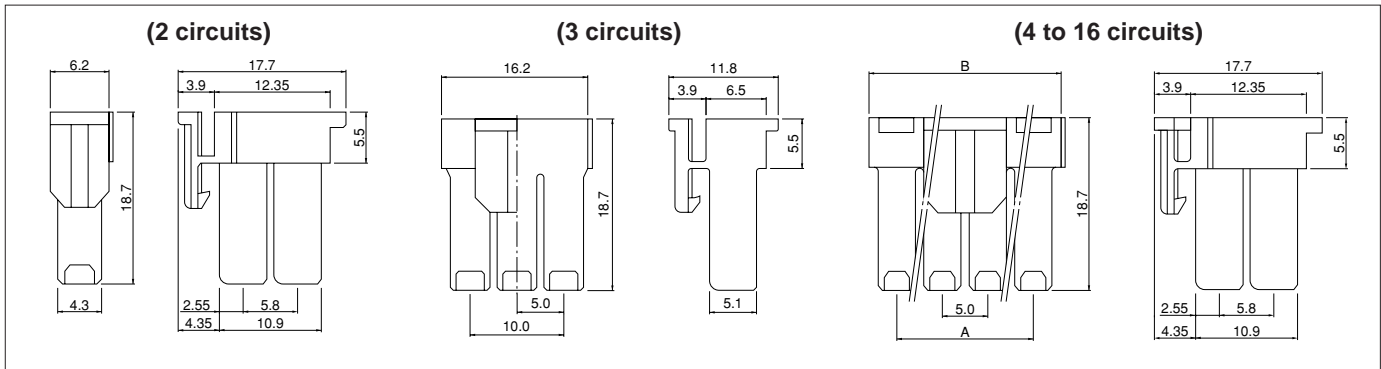
### RoHS compliance

Note: Contact JST for brass products.

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SXF-01T-P0.7</b>	AP-K2N	MKS-L	MK/SXF-01-07	APLMK SXF01-07

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SXF-41T-P0.7</b>	AP-K2N	MKS-L	MK/SXF-41-07	APLMK SXF41-07

## Housing



Circuits	Model No.	Dimensions (mm)		Q'ty / bag
		A	B	
2	<b>XLP-02V</b>	—	—	500
3	<b>XLP-03V</b>	—	—	500
4	<b>XLP-04V</b>	5.0	11.2	500
8	<b>XLP-08V</b>	15.0	21.2	500
12	<b>XLP-12V</b>	25.0	31.2	200
16	<b>XLP-16V</b>	35.0	41.2	200

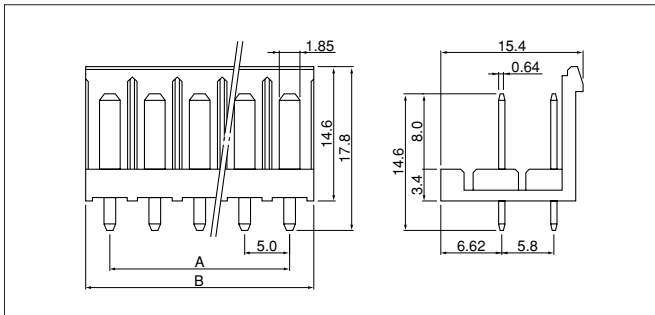
### Material

PA 66, UL94V-0, natural (white)

<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. **XLP-02V-oo**  
(blank)...natural (white)  
K...black R...red E...blue Y...yellow

## Locking header



Circuits	Model No.	Dimensions (mm)		Q'ty / box
		A	B	
2	<b>B02P-XL</b>	—	5.0	250
4	<b>B04P-XL</b>	5.0	10.0	200
8	<b>B08P-XL</b>	15.0	20.0	100
12	<b>B12P-XL</b>	25.0	30.0	50
16	<b>B16P-XL</b>	35.0	40.0	50

### Material and Finish

Post: Brass, copper-undercoated, tin-plated (reflow treatment)  
Wafer: PA 66, UL94V-0, natural (white)

**RoHS compliance** This product displays (LF)(SN) on a label.

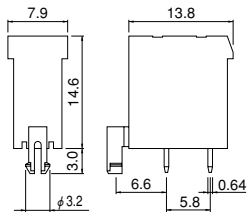
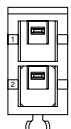
<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. **B02P-XL-oo**  
(blank)...natural (white) K...black R...red E...blue Y...yellow

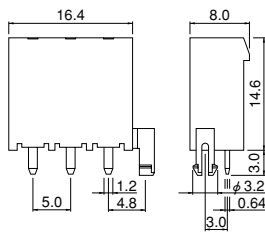
## Shrouded header <HDB type>

### Top entry type

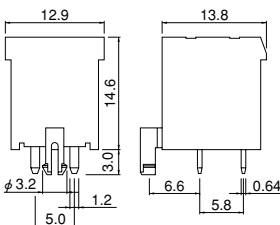
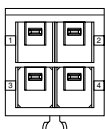
#### (2 circuits)



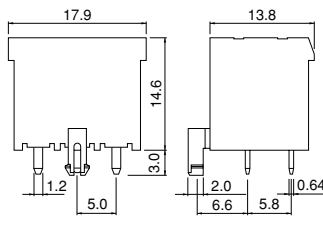
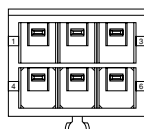
#### (3 circuits)



#### (4 circuits)

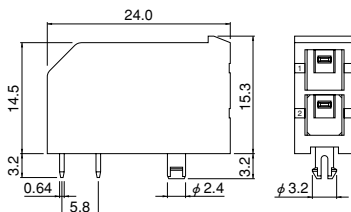


#### (6 circuits)

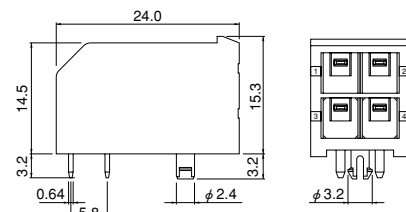
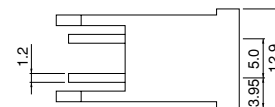


### Side entry type

#### (2 circuits)



#### (4 circuits)



Circuits	Model No.		Q'ty / box	
	Top entry type	Side entry type	Top entry type	Side entry type
2	<b>B02P-XL-HDB</b>	<b>S02P-XL-HDB</b>	200	100
3	<b>B03P-XL-HDB</b>	—	200	—
4	<b>B04P-XL-HDB</b>	<b>S04P-XL-HDB</b>	200	100
6	<b>B06P-XL-HDB</b>	—	100	—

### Material and Finish

Post: Brass, copper-undercoated, tin-plated (reflow treatment)  
Wafer: PA 66, UL94V-0, natural (white)

**RoHS compliance** This product displays (LF)(SN) on a label.

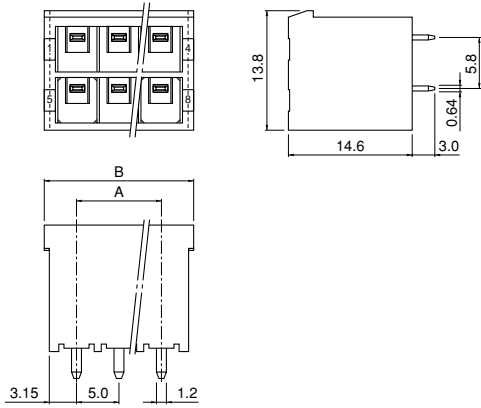
<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. **B02P-XL-HDB-oo**, **S02P-XL-HDB-oo**  
(blank)...natural (white)  
K...black R...red E...blue Y...yellow  
M...green H...gray N...brown D...orange  
L...lemon yellow

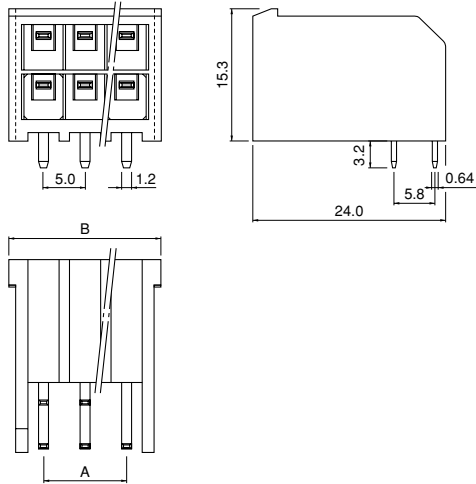
# XL CONNECTOR

## Shrouded header <HDS type>

### Top entry type



### Side entry type



Circuits	Model No.		Dimensions (mm)		Qty	
	Top entry type	Side entry type	A	B	Top/bag	Side/box
2	<b>B02P-XL-HDS</b>	—	—	7.9	200	—
4	<b>B04P-XL-HDS</b>	—	5.0	12.9	200	—
8	<b>B08P-XL-HDS</b>	<b>S08P-XL-HDS</b>	15.0	22.9	100	40
12	<b>B12P-XL-HDS</b>	<b>S12P-XL-HDS</b>	25.0	32.9	50	30
16	<b>B16P-XL-HDS</b>	<b>S16P-XL-HDS</b>	35.0	42.9	40	20

### Material and Finish

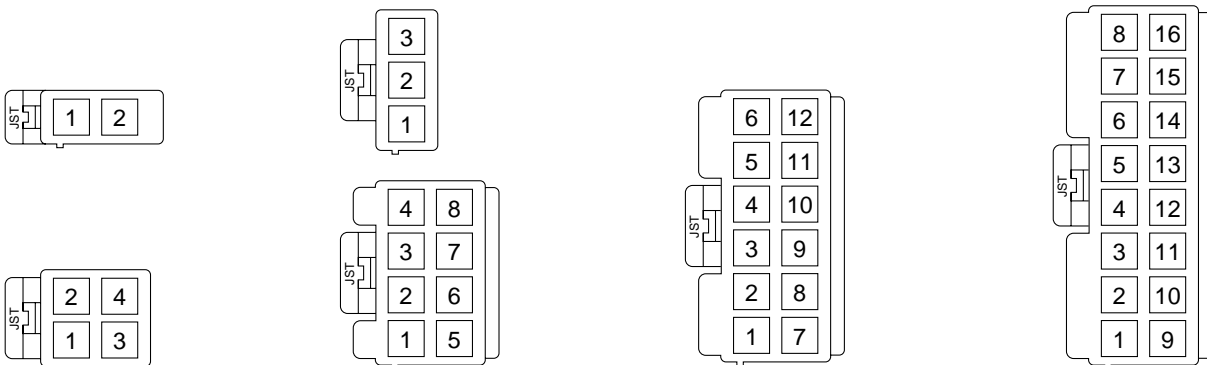
Post: Brass, copper-undercoated, tin-plated (reflow treatment)  
Wafer: PA 66, UL94V-0, natural (white)

**RoHS compliance** This product displays (LF)(SN) on a label.

<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. **B08P-XL-HDS-oo** , **S08P-XL-HDS-oo**  
(blank)...natural (white)  
K...black R...red E...blue Y...yellow

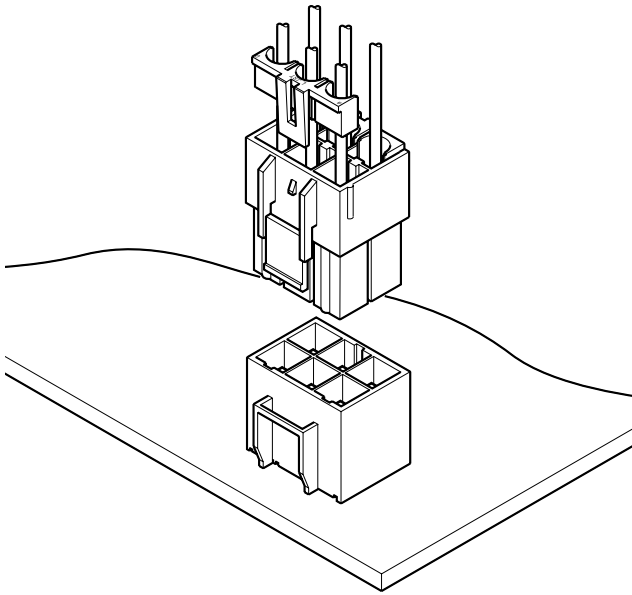
## Contact position location numbers





# VL CONNECTOR

## 6.2mm pitch/Disconnectable Crimp style connectors



**This VL connector is designed for wire-to-wire and wire-to-board 6.2mm pitch connector corresponding to large current. Secondary retainer, which prevents from insufficient insertion of contact and coming off contact, may use and large current circuit can be connected certainly and safety.**

- Housing lances for contact retention
- Secondary retainer
- Suited for large current
- Two kinds of connections

### Specifications

- Current rating: 20A AC, DC (Refer to the table below.)
- Voltage rating: 600V AC, DC
- Temperature range: -25°C to +90°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/7m Ω max.  
After environmental testing/10m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 2,000V AC/minute
- Applicable wire: AWG #22 to #12
- Applicable PC board thickness: 1.6mm
- \* RoHS compliant products are published.
- \* Temperature Range:  
The aforementioned temperature range of this connector is described in JST Standard Product Specification. Maximum temperature registered in UL is 105°C.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

Note: The current rating differs depending on the number of circuits and the wire size used in each connector. The table below lists the current rating as a function of the number of circuits and the wire size.

Circuits	Wire size(AWG)					Current unit:A
	# 12	# 14	# 16	# 18	# 20	# 22
2	20	15	10	8	6	4
3	17	14	9	8	6	4
4	16	13	9	7	6	4
6	15	12	8	7	5	3
8	14	11	7	6	5	3
12	13	10	7	6	4	3

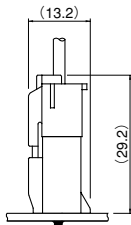
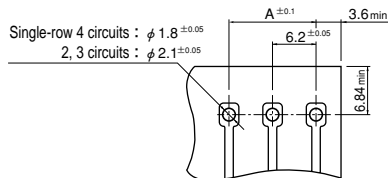
Note: Do not branch in parallel current which exceeds the rated current (eg. more than 17A in the case of 3 circuits with AWG #12). If branched in parallel, current imbalance or other problems may develop. If it is absolutely necessary to branch such a large current in parallel, design the circuits without causing any imbalance and provide an extra margin for each circuit.

### Standards

- TM Recognized E60389
- CP Certified LR20812
- △ R9351103

### PC board layout (viewed from soldering side) and Assembly layout

(2, 3, Single-row 4 circuits)

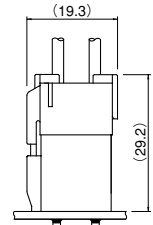
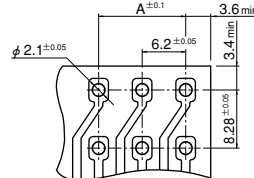


<Inner-housing lock>



<Outer-housing lock>

(4, 6, 8, 12 circuits)



<Inner-housing lock>



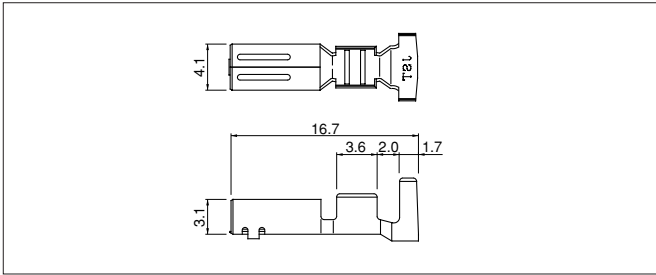
<Outer-housing lock>

Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.

2. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.

# VL CONNECTOR

## Contact



Model No.	Applicable wire		Insulation O.D.(mm)	Q'ty / reel
	mm <sup>2</sup>	AWG #		
<b>*SVF-42T-P2.0</b>	0.3 ~1.25	22~16	1.7 ~3.2	2,000
<b>SVF-61T-P2.0</b>	0.5 ~2.0	20~14	1.9 ~3.4	2,000
<b>SVF-81T-P2.0</b>	3.5	12	4.1	2,000

### Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

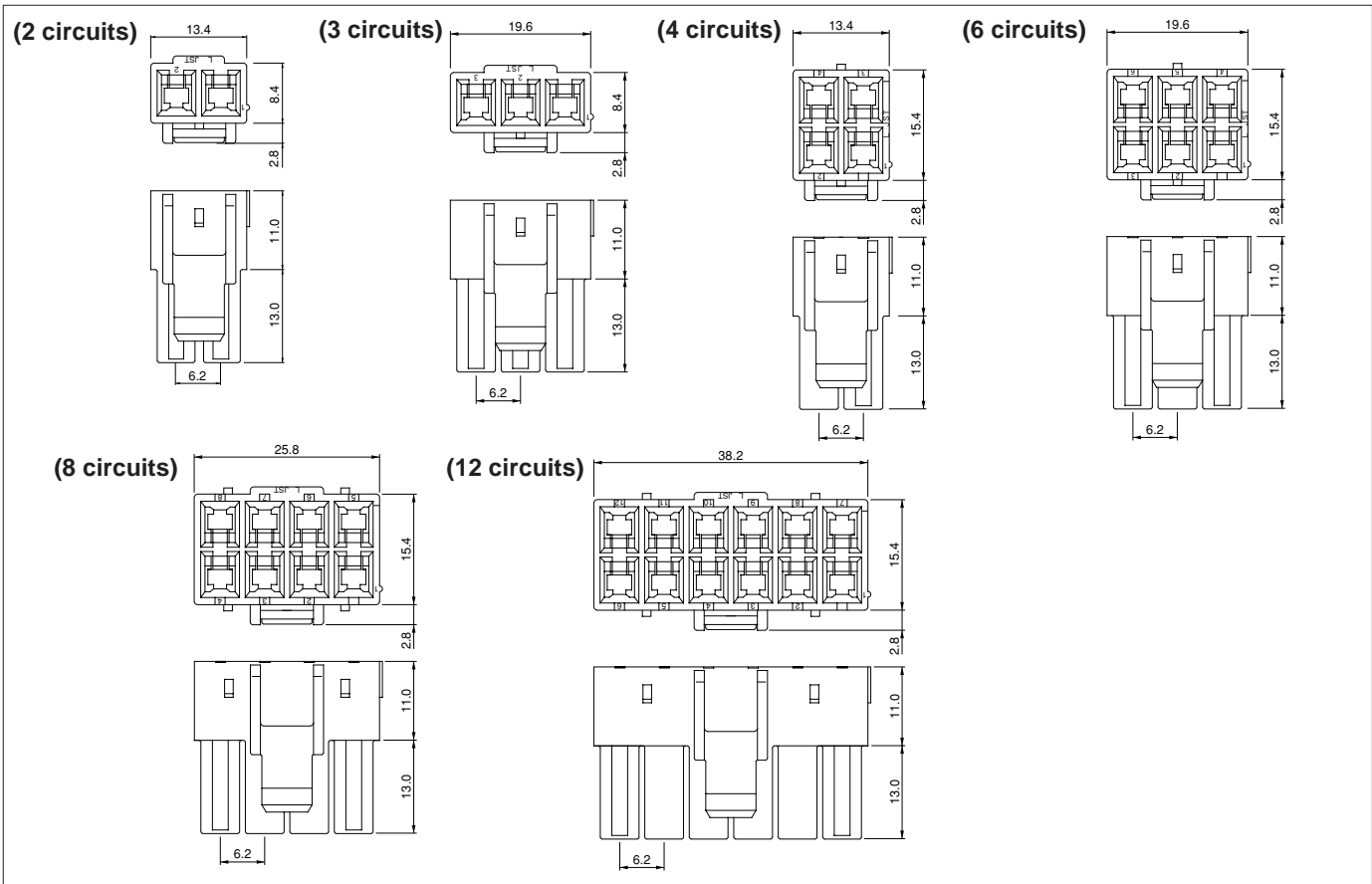
### RoHS compliance

Note: \*Marked product is not TÜV approved.

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SVF-42T-P2.0</b>	AP-K2N	MKS-L	MK/SVF/M-42-20	APLMK SVF/M42-20
		—	—	—
<b>SVF-61T-P2.0</b>	AP-K2N	MKS-L	MK/SVF/M-61-20	APLMK SVF/M61-20
		—	—	—

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SVF-81T-P2.0</b>	AP-K2N	MKS-L	MK/SVF/M-81-20	APLMK SVF/M81-20
		—	—	—

## Housing (Inner-housing lock)



Circuits	Model No.	Q'ty / bag
2	<b>VLP-02V</b>	500
3	<b>VLP-03V</b>	500
4	<b>VLP-04V</b>	500
6	<b>VLP-06V</b>	500
8	<b>VLP-08V</b>	200
12	<b>VLP-12V</b>	100

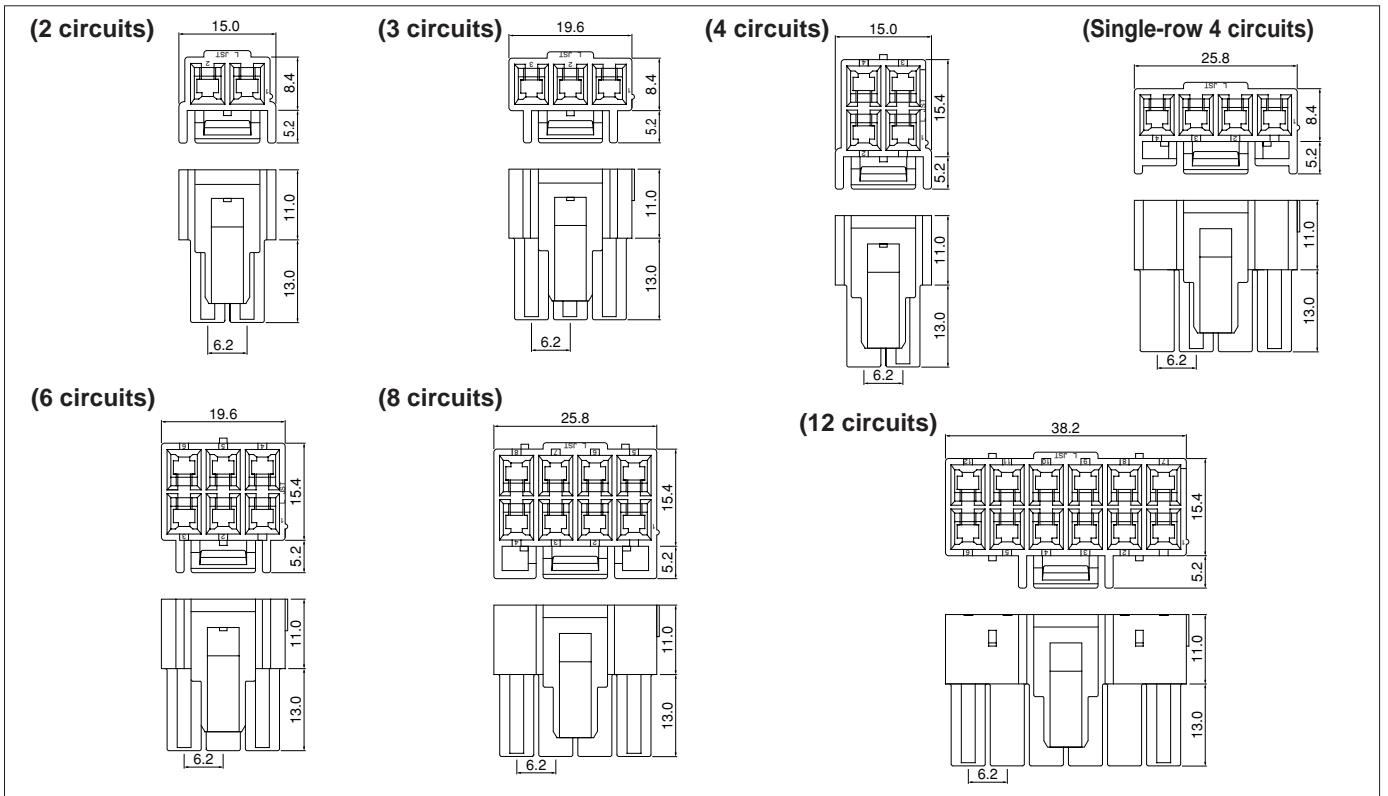
### Material

PA 66, UL94V-0, natural (white)

### RoHS compliance

# VL CONNECTOR

## Housing (Outer-housing lock)

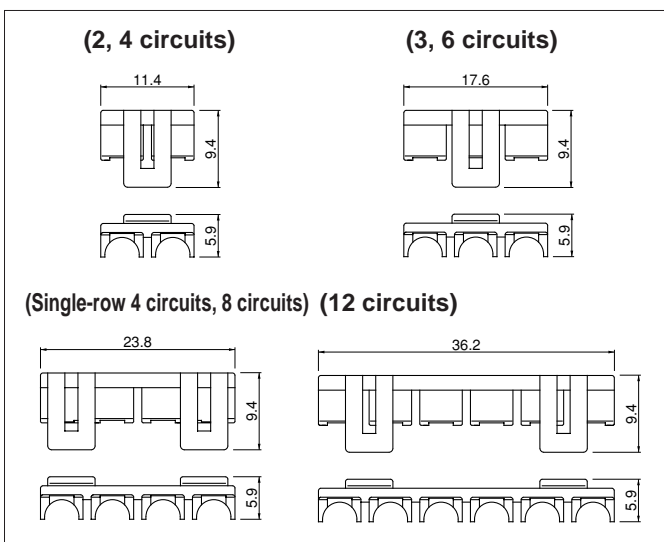


Circuits	Model No.	Qty / bag
2	<b>VLP-02V-1</b>	500
3	<b>VLP-03V-1</b>	500
4	<b>VLP-04V-1</b>	500
4 (single-row)	<b>VLP-04VN-1</b>	500
6	<b>VLP-06V-1</b>	500
8	<b>VLP-08V-1</b>	200
12	<b>VLP-12V-1</b>	100
<b>Material</b>		

PA 66, UL94V-0, natural (white)

RoHS compliance

## Retainer



Cir-cuits	Model No.	Qty / bag
2, 4	<b>VLS-02V</b>	1,000
3, 6	<b>VLS-03V</b>	1,000
4 (single-row), 8	<b>VLS-08V</b>	1,000
12	<b>VLS-12V</b>	1,000

**Material**

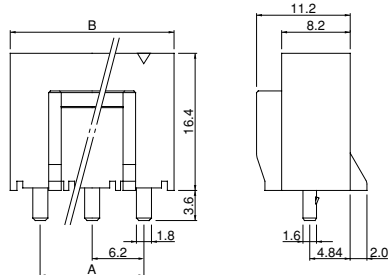
Glass-filled PA 66, UL94V-0, natural (ivory)

RoHS compliance

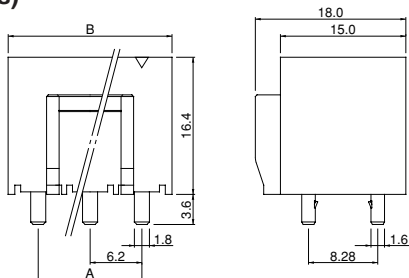
# VL CONNECTOR

## Shrouded header

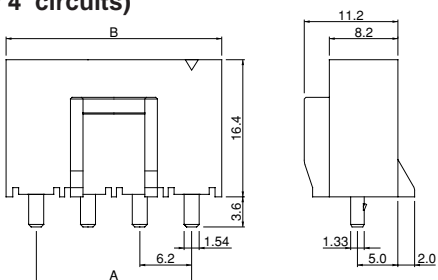
(2, 3 circuits)



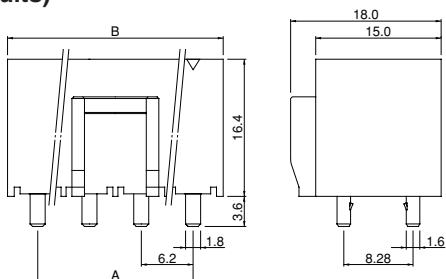
(4, 6 circuits)



(Single-row 4 circuits)



(8, 12 circuits)



Cir- cuits	Model No.	Dimensions (mm)		Q'ty / box
		A	B	
2	<b>B02P-VL</b>	6.2	13.4	100
3	<b>B03P-VL</b>	12.4	19.6	100
4	<b>B04P-VL</b>	6.2	13.4	100
4(single-row)	<b>B04P-VL-VN-1.8</b>	18.6	26.2	100
6	<b>B06P-VL</b>	12.4	19.6	50
8	<b>B08P-VL</b>	18.6	26.2	50
12	<b>B12P-VL</b>	31.0	38.6	40

### Material and Finish

Post: Copper-alloy, tin-plated (reflow treatment)  
Wafer: PA 66, UL94V-0, natural (white)

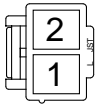
### RoHS compliance



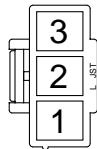
## Contact position location numbers

### <Inner-housing lock>

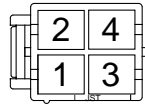
(2 circuits)



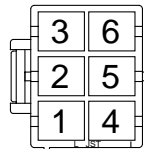
(3 circuits)



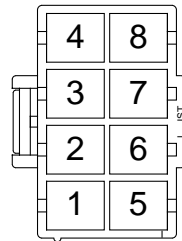
(4 circuits)



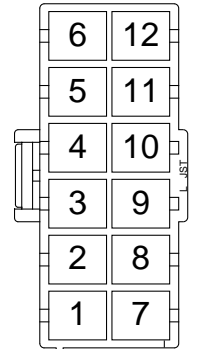
(6 circuits)



(8 circuits)

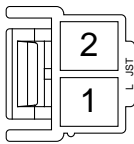


(12 circuits)

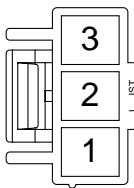


### <Outer-housing lock>

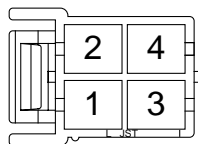
(2 circuits)



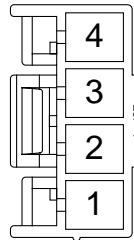
(3 circuits)



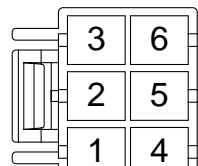
(4 circuits)



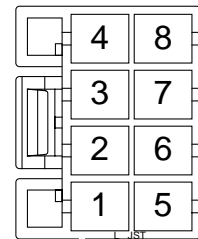
(Single-row  
4 circuits)



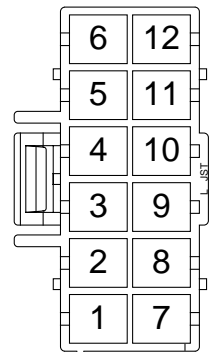
(6 circuits)



(8 circuits)



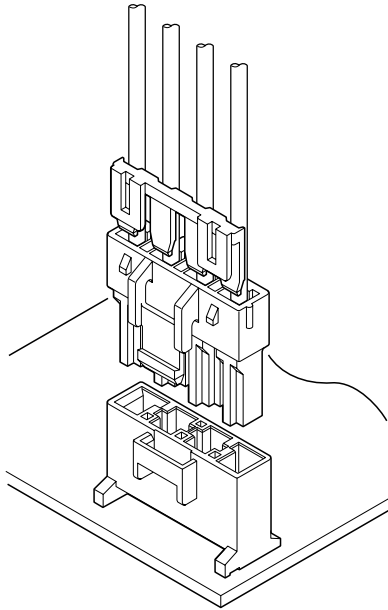
(12 circuits)





# VYH CONNECTOR

6.5mm pitch/Disconnectable Crimp style connectors



**This VYH connector is designed for wire-to-board 6.5mm pitch connector corresponding to large current. Secondary retainer, which prevents from insufficient insertion of contact and coming off contact, may use and large current circuit can be connected certainly and safely.**

- Corresponding to large current
- Misinsertion prevention
- Housing lance for contact retention
- Secondary retainer

## Specifications

- Current rating: 15A AC, DC (2 circuits/ AWG #14)
- Voltage rating: 300V AC, DC
- Temperature range: -25°C to +85°C (including temperature rise in applying electrical current)
- Contact resistance: Initial value/10m Ω max. After environmental testing/20m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 1,500V AC/minute
- Applicable wire: AWG #26 to #14
- Applicable PC board thickness: 1.6mm

Note: The current rating differs depending on the number of circuits and the wire size used in each connector. The table below lists the current rating as a function of the number of circuits and the wire size.

Circuits	Wire size(AWG)						Current unit:A
	# 14	# 16	# 18	# 20	# 22	# 24	# 26
2	15	10	7	5	4	3	2
3	14	9	6	4	4	3	2
4	13	9	6	4	4	3	2
6	12	8	5	3	3	2	2

Note: Do not branch in parallel current which exceeds the rated current (eg. more than 15A in the case of 2 circuits with AWG #14). If branched in parallel, current imbalance or other problems may develop. If it is absolutely necessary to branch such a large current in parallel, design the circuits without causing any imbalance and provide an extra margin for each circuit.

- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

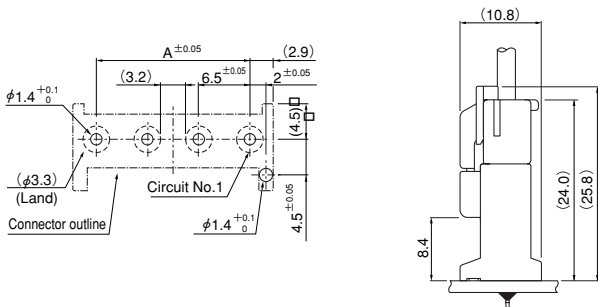
## Standards

Recognized E60389

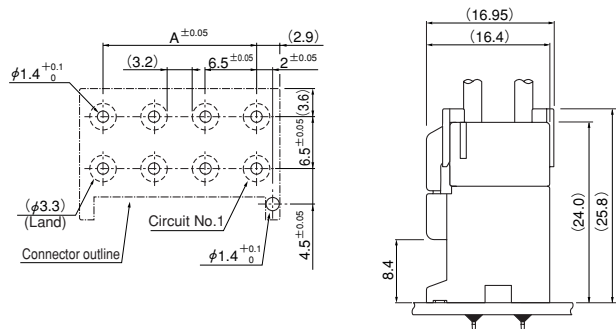
R50036139

## PC board layout (viewed from component side) and Assembly layout

### Single-row type



### Double-row type

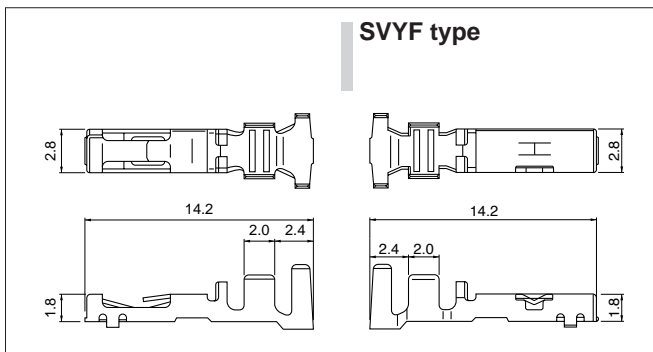


Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.

2. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.

# VYH CONNECTOR

## Contact



Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty / reel
	mm <sup>2</sup>	AWG #		
<b>SYF-01T-P0.5A</b>	0.13~0.5	26~20	1.3~2.5	4,000
<b>SYF-41T-P0.5A</b>	0.5 ~1.25	20~16	2.0~3.4	4,000
<b>SYF-61T-P0.5A</b>	0.75~2.0	18~14	2.1~3.4	2,000
<b>*SVYF-41T-P0.5A-13.5</b>	0.5 ~1.25	20~16	2.0~3.4	4,000
<b>*SVYF-61T-P0.5A</b>	0.75~2.0	18~14	2.1~3.6	2,000

### Material and Finish

Copper alloy, tin-plated (reflow treatment)

### RoHS compliance

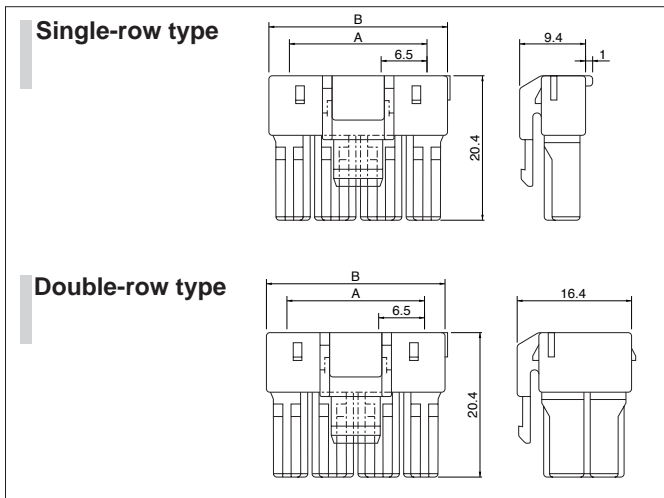
- Note: 1. SVYF type contact was developed only for VYH connector in order to improve the prevention of prying.  
 2. Retainer cannot be used when using 41 type contact AWG#16 and 61 type contact.  
 3. \*Marked products are not TÜV approved.

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SYF-01T-P0.5A</b>	AP-K2N	MKS-L	MK/SYF/M-01-05	APLMK SYF/M01-05
		*MKS-SC-YL	SC/SYF/M-01-05	APLSC SYF/M01-05
<b>SYF-61T-P0.5A</b>		MKS-L	MK/SYF/M-61-05	APLMK SYF/M61-05
		—	—	—
<b>SVYF-61T-P0.5A</b>	MKS-L	MK/SYF/M-61-05	APLMK SYF/M61-05	
	—	—	—	

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SYF-41T-P0.5A</b>	AP-K2N	MKS-L	MK/SYF/M-41-05	APLMK SYF/M41-05
		*MKS-SC-YL	SC/SYF/M-41-05	APLSC SYF/M41-05
<b>SVYF-41T-P0.5A-13.5</b>		MKS-L	MK/SYF/M-41-05-13.5	APLMK SVYF41-05-13.5
		—	—	—

Note: \*Strip-crimp applicator

## Housing



Type	Cir-uits	Model No.	Dimensions (mm)		Q'ty / bag
			A	B	
Single-row type	2	<b>VYHP-02V</b>	6.5	12.3	400
	3	<b>VYHP-03V</b>	13.0	18.8	300
	4	<b>VYHP-04V</b>	19.5	25.3	200
Double-row type	4	<b>VYHP-04VD</b>	6.5	12.3	200
	6	<b>VYHP-06VD</b>	13.0	18.8	150

### Material

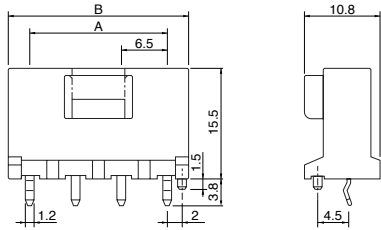
PA 66, UL94V-0, natural (white)

### RoHS compliance

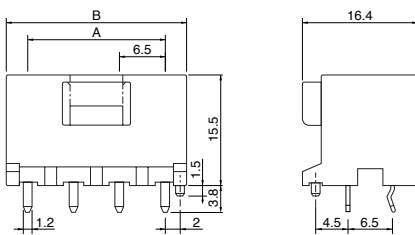
# VYH CONNECTOR

## Shrouded header

### Single-row type



### Double-row type



Type	Cir- cuits	Model No.	Dimensions (mm)		Q'ty / box
			A	B	
Single- row type	2	<b>B02B-VYHSK-1</b>	6.5	12.3	400
	3	<b>B03B-VYHSK-1</b>	13.0	18.8	300
	4	<b>B04B-VYHSK-1</b>	19.5	25.3	200
Double- row type	4	<b>B04B-VYHSK-D-1</b>	6.5	12.3	200
	6	<b>B06B-VYHSK-D-1</b>	13.0	18.8	150

#### Material and Finish

Post: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
Wafer: Glass-filled PBT, UL94V-0, natural (white)

**RoHS compliance** This product displays (LF)(SN) on a label.

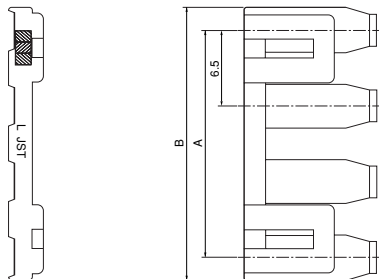
Type	Cir- cuits	Model No.	Dimensions (mm)		Q'ty / box
			A	B	
Single- row type	2	<b>B02B-VYHSK-M-1</b>	6.5	12.3	400
	3	<b>B03B-VYHSK-M-1</b>	13.0	18.8	300
	4	<b>B04B-VYHSK-M-1</b>	19.5	25.3	200
Double- row type	4	<b>B04B-VYHSK-DM-1</b>	6.5	12.3	200
	6	<b>B06B-VYHSK-DM-1</b>	13.0	18.8	150

#### Material and Finish

Post: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
Wafer: Glass-filled PA66, UL94V-0, natural (ivory)

**RoHS compliance** This product displays (LF)(SN) on a label.  
Note: Not UL/TÜV approved.

## Retainer



Cir- cuits	Model No.	Dimensions (mm)		Q'ty / bag
		A	B	
2	<b>VYHS-02V-S</b>	6.5	10.3	4,000
3	<b>VYHS-03V-S</b>	13.0	16.8	3,000
4	<b>VYHS-04V-S</b>	19.5	23.3	2,000

#### Material

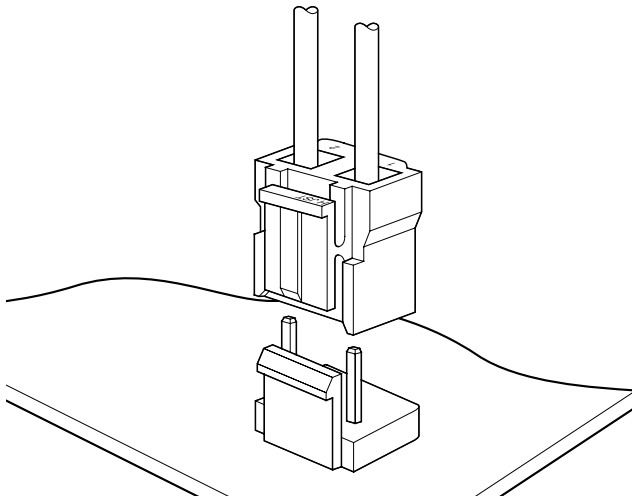
Glass-filled PA 66, UL94V-0, natural (ivory)

**RoHS compliance**  
Note: Not TÜV approved.



# VA CONNECTOR

## 7.92mm pitch/Disconnectable Crimp style connectors



**This 7.92mm pitch large current carrying capacity connector is used with primary power supply circuits and various other circuits requiring large currents. It features an anti-misinsertion construction and a reliable locking mechanism to ensure maximum safety.**

- **Box contact**
- **Secure contact and mounting**
- **Compact connector with a large capacity**

### Specifications

- Current rating: 7A AC, DC (AWG #18)
- Voltage rating: 250V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/10m Ω max.  
After environmental testing/20m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 1,200V AC/minute
- Applicable wire: AWG #20 to #18
- Applicable PC board thickness: 1.6mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

### Standards

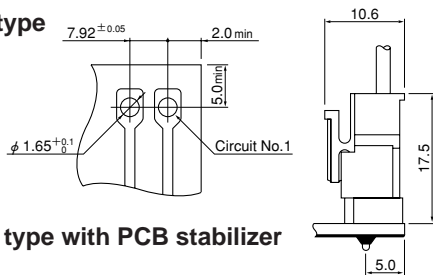
Recognized E60389

Certified LR20812

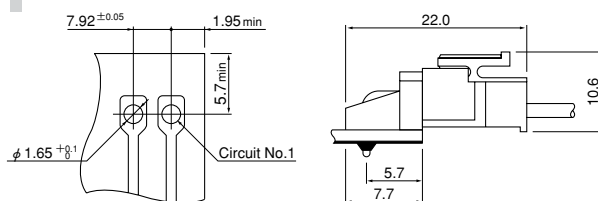
R75122

### PC board layout (viewed from soldering side) and Assembly layout

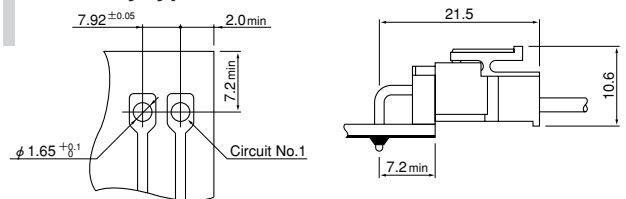
#### Top entry type



#### Side entry type with PCB stabilizer

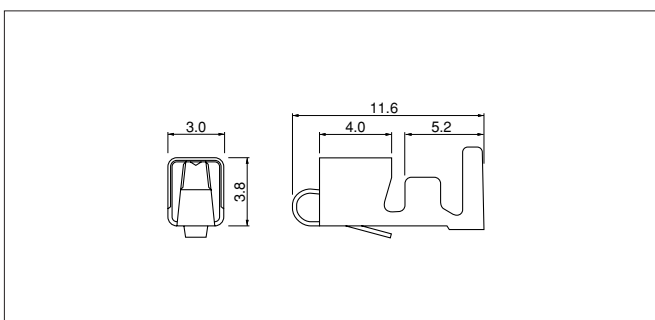


#### Side entry type



Note: 1. Tolerances are non-cumulative:  $\pm 0.05$ mm for all centers.  
 2. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline.  
 Contact JST for details.

### Contact



Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty / reel
	mm <sup>2</sup>	AWG #		
SVA-41T-P1.1	0.5~0.83	20~18	1.9~3.7	3,500

#### Material and Finish

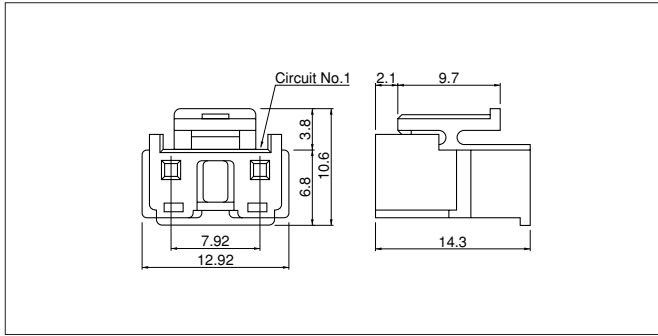
Phosphor bronze, tin-plated (reflow treatment)

#### RoHS compliance

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SVA-41T-P1.1	AP-K2N	MKS-L	MK/SVA-41-11	APLMK SVA41-11
		—	—	—

# VA CONNECTOR

## Housing



Circuits	Model No.	Q'ty / bag
2	<b>VAR-2</b>	1,000

### Material

PA 6, UL94V-0, natural (white)

### RoHS compliance

<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

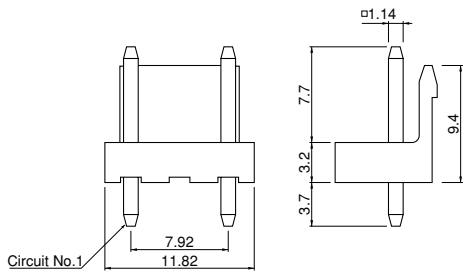
ex. **VAR-2-oo**

(blank)...natural (white)

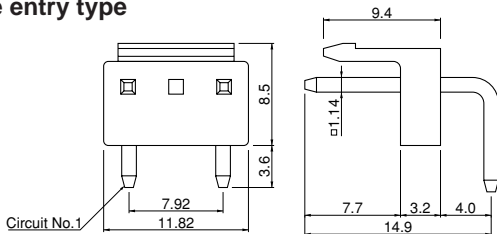
K...black R...red E...blue Y...yellow M...green N...brown

## Locking header

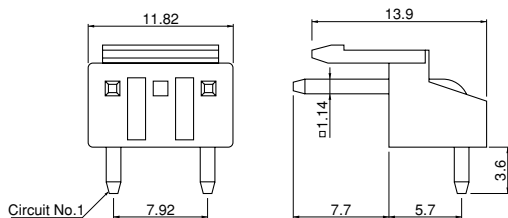
### Top entry type



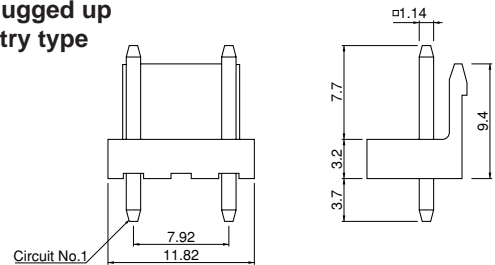
### Side entry type



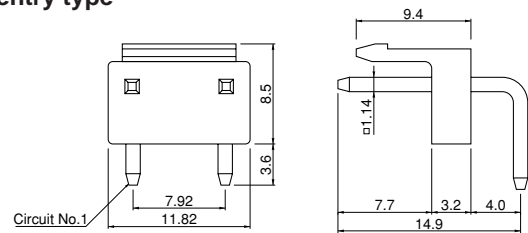
### Side entry type with PCB stabilizer



### With plugged up Top entry type



### Side entry type



	Circuits	Model No.	Q'ty / box
Top entry type	2	<b>B2P3-VH</b>	1,000
Side entry type	2	<b>B2P3S-VH</b>	500
Side entry type with PCB stabilizer	2	<b>S2P3-VH</b>	500

### With plugged up

	Circuits	Model No.	Q'ty / box
Top entry type	2	<b>*B2P-VA</b>	1,000
Side entry type	2	<b>*B2PS-VA</b>	500

### Material and Finish

Post: Brass, copper-undercoated, tin-plated (reflow treatment)  
Wafer: PA 66, UL94V-0, natural (white)

**RoHS compliance** This product displays (LF)(SN) on a label.

Note: \*Marked products are not CSA/TÜV approved.

<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. **B2P3(S)-VH-oo**

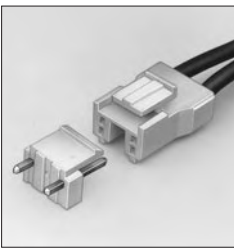
(blank)...natural (white)

BK...black R...red BL...blue Y...yellow M...green N...brown  
O...orange PK...pink P...purple H...gray

ex. **S2P3-VH-oo**

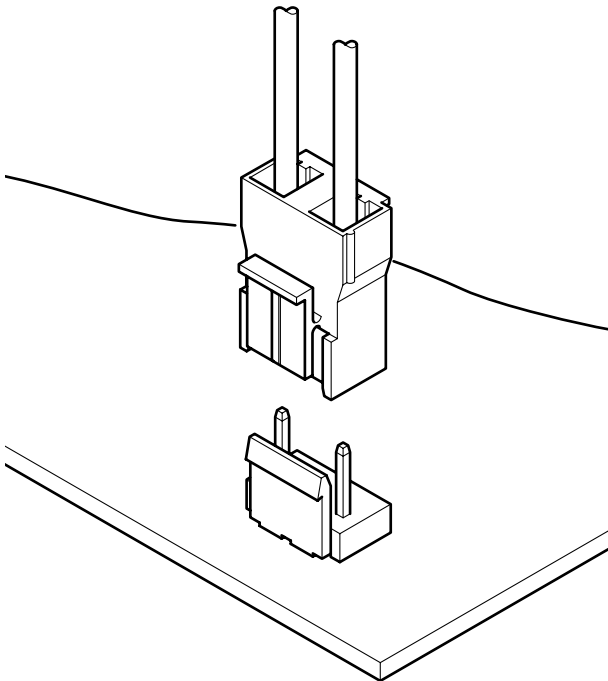
(blank)...natural (white)

BK...black R...red Y...yellow M...green



# NVA CONNECTOR

**7.92mm pitch/Disconnectable Crimp style connectors**



**7.92mm pitch crimp style, large current carrying capacity connector, that is best suited for various kinds of power supply circuits. Box-shaped contacts offer reliable connection.**

- **Housing lances**
- **Box contact**
- **Secure contact and mounting**
- **Applicable up to 10A**

## Specifications

- Current rating: 10A AC, DC (AWG #16)
- Voltage rating: 250V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/10m Ω max.  
After environmental testing/20m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 1,500V AC/minute
- Applicable wire: AWG #20 to #16
- Applicable PC board thickness: 1.6mm
- \* RoHS compliant products are published.
- \* Temperature Range:  
The aforementioned temperature range of this connector is described in JST Standard Product Specification. Maximum temperature registered in UL is 105°C.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

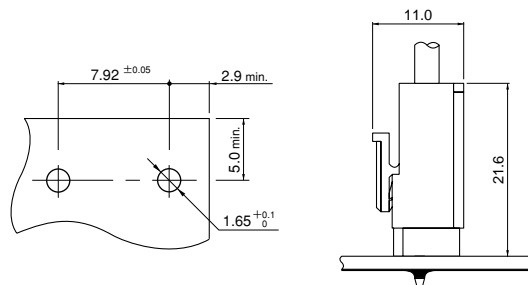
## Standards

Recognized E60389

Certified LR20812

R9251675

## PC board layout (viewed from component side) and Assembly layout

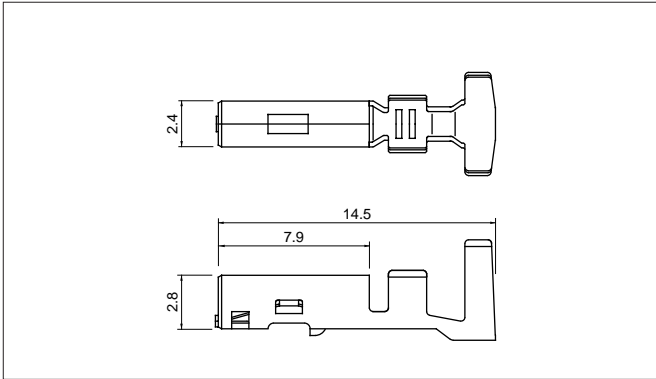


Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.

2. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.

# NVA CONNECTOR

## Contact



Model No.	AWG #	Insulation O.D.(mm)	Q'ty / reel
<b>SVT-41T-P1.1</b>	20 ~16	3.9~2.7	2,500

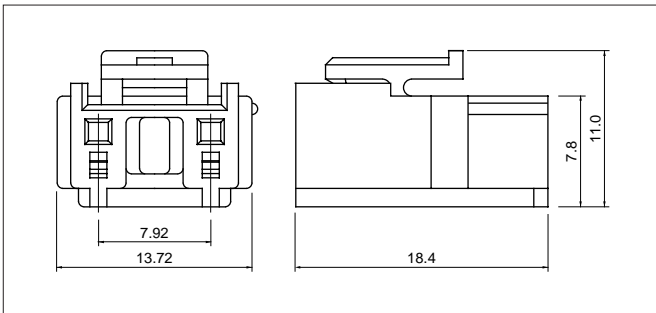
### Material and Finish

Alloy (phosphor bronze system), tin-plated (reflow treatment)

### RoHS compliance

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SVT-41T-P1.1</b>	AP-K2N	MKS-L	MK/SVT-41-11	APLMK SVT41-11
		—	—	—

## Housing



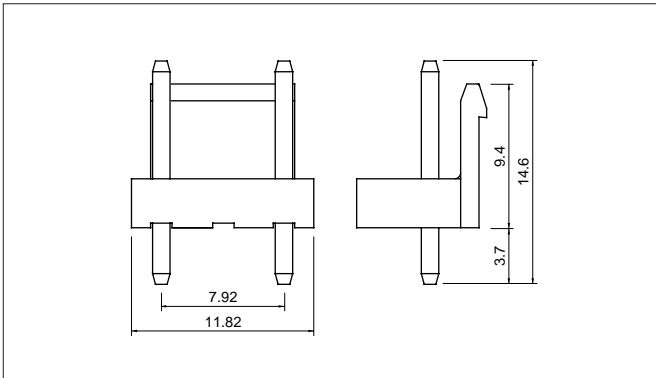
Circuit	Model No.	Q'ty / bag
2	<b>NVAR-02VS</b>	1,000

### Material

PA 66, UL94V-0, natural (white)

### RoHS compliance

## Locking header



Circuit	Model No.	Q'ty / box
2	<b>B2P3-VH</b>	1,000

### Material and Finish

Post: Brass, copper-undercoated, tin-plated (reflow treatment)  
Wafer: PA 66, UL94V-0, natural (white)

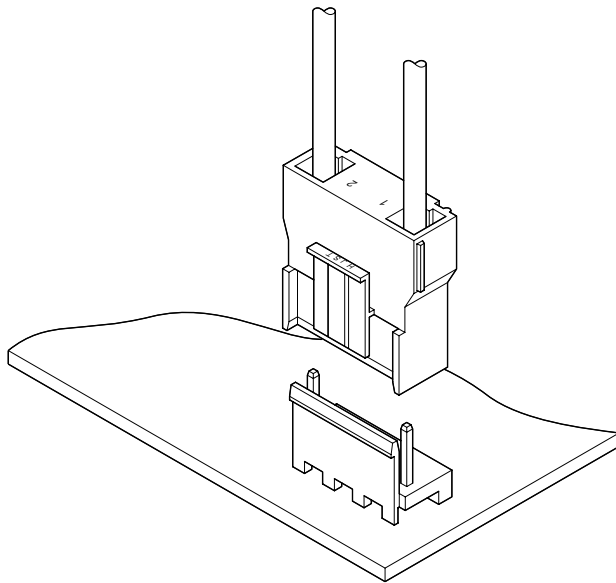
**RoHS compliance** This product displays (LF)(SN) on a label.





# VT CONNECTOR

**11.88mm pitch/Disconnectable Crimp style connectors**



**The VT connector is a 11.88mm pitch disconnectable crimp style connector with current rating of 12A. It has features such as the PC board locking device, misinsertion preventive construction and arm-lock mechanism. Its header is applicable to reinforced PC boards with eyelets.**

- Connectable to vinyl insulated flat cables
- Use of PC board locking device
- Correct and secure mating
- Applicable to reinforced PC boards with eyelets

## Specifications

- Current rating: 12A AC, DC (AWG #16)
- Voltage rating: 250V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/10m Ω max.  
After environmental testing/20m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 1,500V AC/minute
- Applicable wire: AWG #20 to #16
- Applicable PC board thickness: 1.6mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

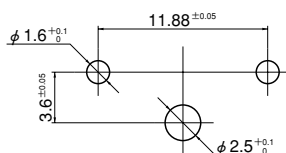
## Standards

Recognized E60389

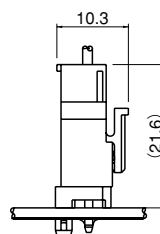
Certified LR20812

R9151561

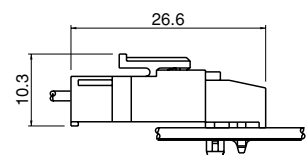
## PC board layout (viewed from component side) and Assembly layout



Top entry type



Side entry type

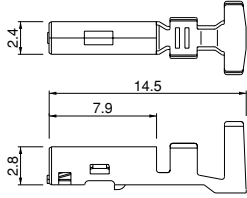


Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.

2. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.

# VT CONNECTOR

## Contact



Model No.	Applicable wire		Q'ty / reel
	AWG #	Insulation O.D. (mm)	
SVT-41T-P1.1	20~16	2.7 ~3.9	2,500

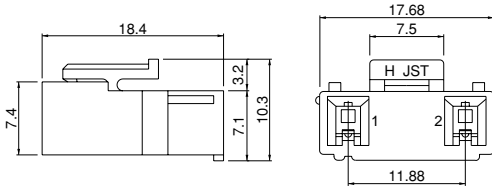
### Material and Finish

Alloy (phosphor bronze system), tin-plated (reflow treatment)

### RoHS compliance

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SVT-41T-P1.1	AP-K2N	MKS-L	MK/SVT-41-11	APLMK SVT41-11

## Housing



Circuits	Model No.	Q'ty / bag
2	VTR-02	500

### Material

PA 66, UL94V-0, natural (white)

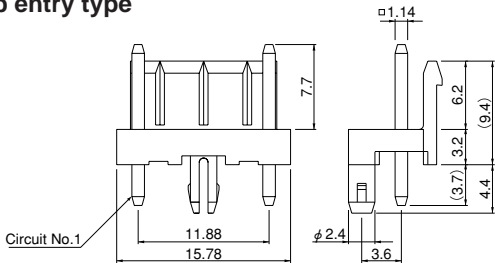
### RoHS compliance

<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

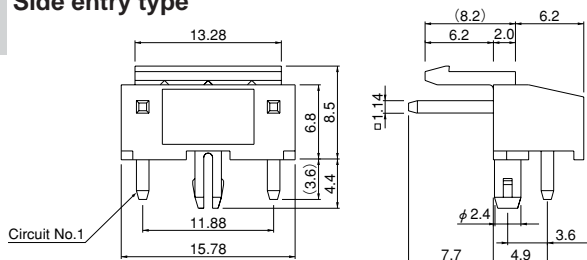
ex. **VTR-02-oo**  
(blank)...natural (white)  
Z...ivory

## Locking header

### Top entry type



### Side entry type

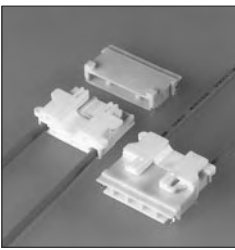


Circuits	Model No.		Q'ty / box	
	Top entry type	Side entry type	Top entry type	Side entry type
2	B02B-VT	S02B-VT	500	250

### Material and Finish

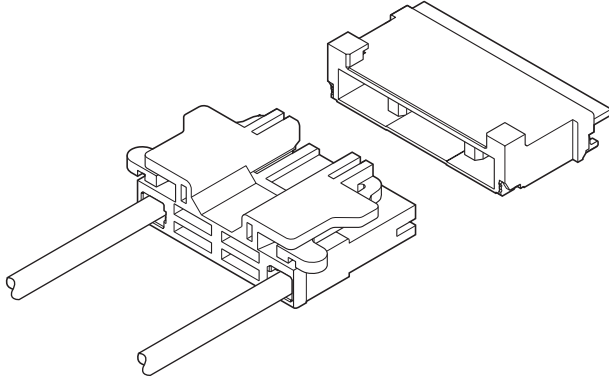
Post: Copper, tin-plated (reflow treatment)  
Wafer: Glass-filled PA 66, UL94V-0, natural (ivory)

**RoHS compliance** This product displays (LF)(SN) on a label.



# BD CONNECTOR (13mm)

**13.0mm pitch/Disconnectable Crimp style connectors**



**Board-to-wire crimping type connector with high withstanding voltage, used for power supply of large LCD (Liquid Crystal Display or Liquid Crystal Television) back light. Secure locking mechanism prevents from coming off housing when handling the wire harness.**

- **Secure locking mechanism**
- **Space saving**
- **High withstand voltage design**
- **Crimping special wire**

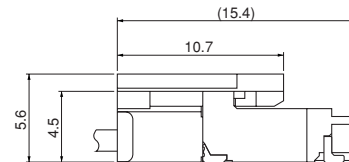
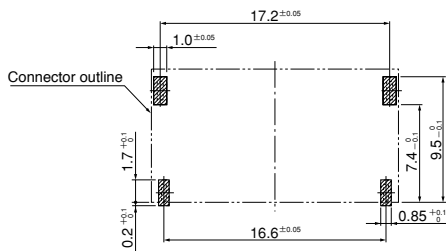
## Specifications

- Current rating: 1.0A AC, DC (AWG #24)
- Voltage rating: 3,000V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/10m Ω max.  
After environmental testing/20m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 5,000V AC/minute
- Applicable wire: AWG #28 to #24
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

Ⓜ Recognized E60389

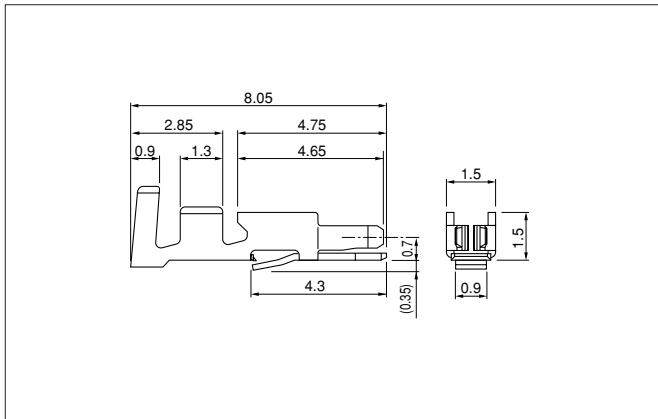
### PC board layout (viewed from component side) and Assembly layout



Note: 1. Tolerances are non-cumulative:  $\pm 0.05\text{mm}$  for all centers.  
2. The dimensions above should serve as a guideline. Contact JST for details.

# BD CONNECTOR (13mm)

## Contact



Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty / reel
	mm <sup>2</sup>	AWG#		
<b>SBHS-002T-P0.5A</b>	0.08~0.22	28~24	0.9~1.7	10,000

### Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

### RoHS compliance

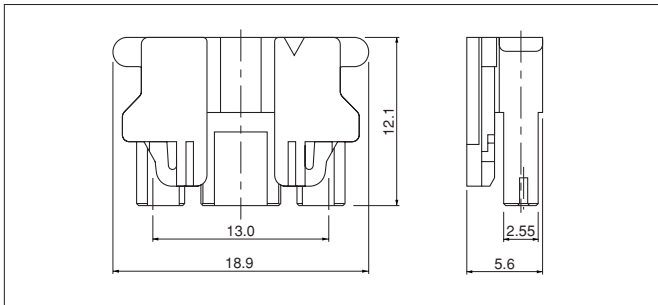
Note: Contact JST for SBHS-002T-P0.5.

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SBHS-002T-P0.5A</b>	AP-K2N	MKS-L	MK/SBHS-002-05-BDA	APLMK SBHS002-05-BDA
		—	—	—

Note: When using this housing, standard applicator and dies for SBHS contact can not be applied.

Contact JST for applicable wires in case that it is not usable due to wire size.

## Housing



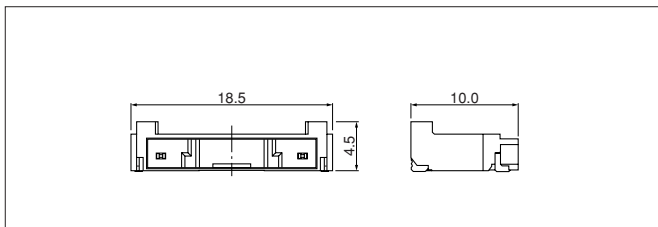
Circuits	Model No.	Q'ty / bag
2	<b>BDAMR-02VAS-3</b>	1,000

### Material

PBT·UL94V-0, natural (white)

### RoHS compliance

## Shrouded header



Circuits	Model No.	Q'ty / reel
2	<b>SM02-BDAS-3-TB</b>	1,500

### Material and Finish

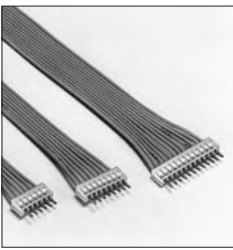
Press post: Copper alloy, nickel-undercoated, tin/copper alloy-plated

Wafer: PPA, UL94V-0, natural (ivory)

Solder tab: Copper alloy, nickel-undercoated, tin/copper alloy-plated

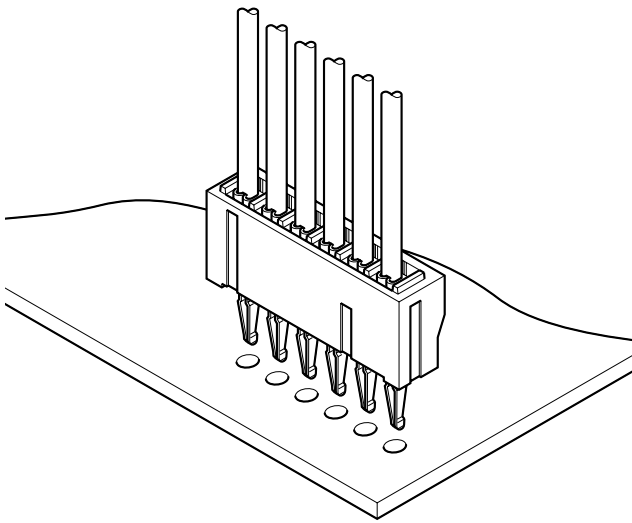
**RoHS compliance** This product displays (LF) on a label.

Note: The product listed above is supplied on embossed tape.



# SZN CONNECTOR

1.5mm pitch/Board-in crimp style connectors



**This low-profile, board-in connector, with a mounting height of only 4.25mm and a thickness of 2.4mm, is soldered directly onto printed circuit boards. The solder tail of the contact is resilient for easy assembly. The housing lances facilitate insertion of contacts.**

- Slim, low-profile design
- Housing lances
- Easy mounting onto printed circuit boards
- Rugged contact construction

## Specifications

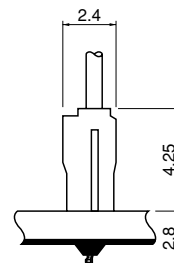
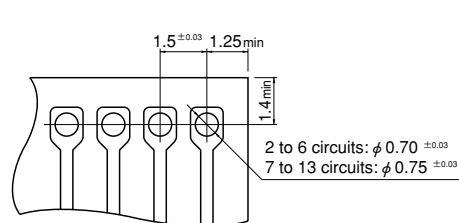
- Current rating: 0.7A AC, DC (AWG #26)
- Voltage rating: 50V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Insulation resistance: 500M  $\Omega$  min.
- Withstanding voltage: 500V AC/minute
- Applicable wire: AWG #30 to #26
- Applicable PC board thickness: 0.6 to 1.2mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

Recognized E60389

Certified LR20812

### PC board layout (viewed from soldering side) and Assembly layout

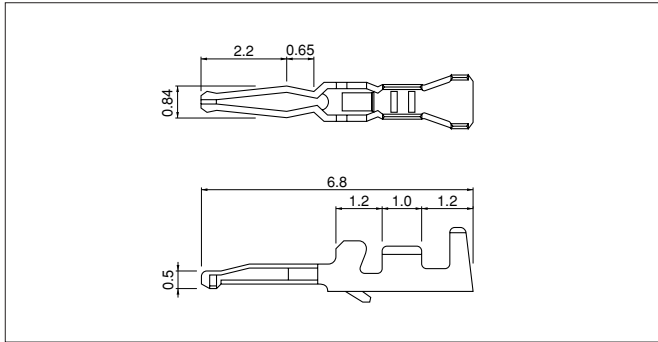


Note: 1. Tolerances are non-cumulative:  $\pm 0.03$ mm for all centers.

2. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.

# SZN CONNECTOR

## Contact



Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty/reel
	mm <sup>2</sup>	AWG#		
<b>SZN-002T-P0.7K</b>	0.08~0.13	28~26	0.8~1.1	14,000
<b>SZN-003T-P0.7K</b>	0.05~0.08	30~28	0.7~0.9	15,000

### Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

### RoHS compliance

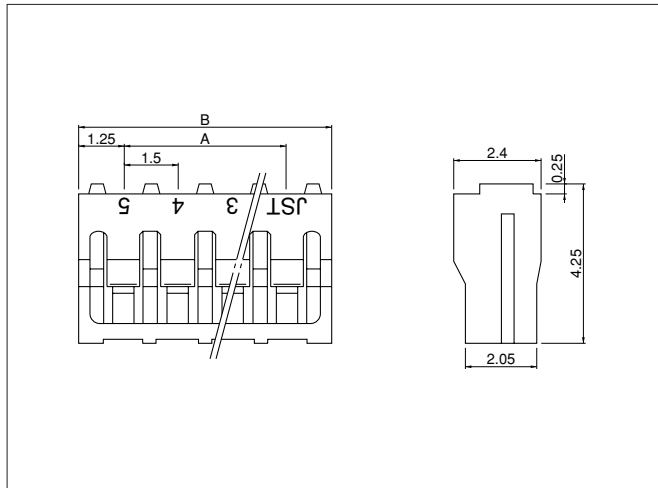
Note: Contact JST for brass products.

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SZN-002T-P0.7K</b>	AP-K2N	MKS-L	MK/SZN-002-07	APLMK SZN002-07

Note: \*Strip-crimp applicator

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SZN-003T-P0.7K</b>	AP-K2N	MKS-L	MK/SZN-003-07	APLMK SZN003-07
		*MKS-SC	SC/SZN-003-07	APLSC SZN003-07

## Housing

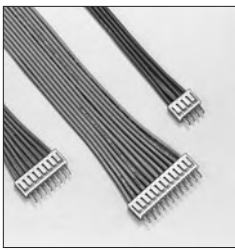


Circuits	Model No.	Dimensions (mm)		Q'ty /bag
		A	B	
2	<b>2P-SZN</b>	1.5	4.0	1,000
3	<b>3P-SZN</b>	3.0	5.5	1,000
4	<b>4P-SZN</b>	4.5	7.0	1,000
5	<b>5P-SZN</b>	6.0	8.5	1,000
6	<b>6P-SZN</b>	7.5	10.0	1,000
7	<b>7P-SZN</b>	9.0	11.5	1,000
8	<b>8P-SZN</b>	10.5	13.0	1,000
9	<b>9P-SZN</b>	12.0	14.5	1,000
10	<b>10P-SZN</b>	13.5	16.0	1,000
11	<b>11P-SZN</b>	15.0	17.5	1,000
12	<b>12P-SZN</b>	16.5	19.0	1,000
13	<b>13P-SZN</b>	18.0	20.5	1,000

### Material

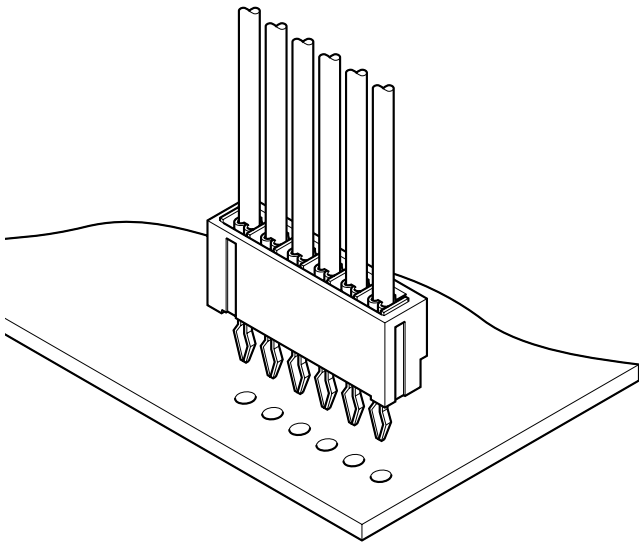
PA 66, UL94V-0, natural (white)

### RoHS compliance



# SAN CONNECTOR

2.0mm pitch/Board-in Crimp style connectors



**Measuring 2.0mm in pitch, 6.0mm in mounting height, and 3.25mm in thickness, this board-in connector meets the needs for high-density mounting on printed circuit boards efficiently and economically. The connector is ideal for VCRs, car stereo systems, audio products and many other consumer oriented electronic products.**

- Compact
- Housing lances
- Easy mounting onto printed circuit boards
- Two types of contacts

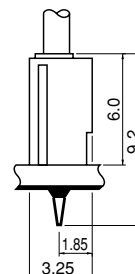
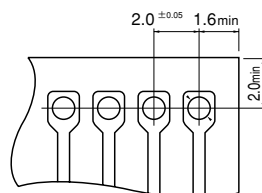
## Specifications

- Current rating: 2A AC, DC (AWG #24)
- Voltage rating: 250V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Insulation resistance: 1,000M  $\Omega$  min.
- Withstanding voltage: 800V AC/minute
- Applicable wire: AWG #30 to #24
- Applicable PC board thickness:
  - Type A contact: 1.2mm, 1.6mm
  - Type B contact: 1.6mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

- Recognized E60389
- Certified LR20812
- R9251673

### PC board layout (viewed from soldering side) and Assembly layout



Note: 1. Tolerances are non-cumulative:  $\pm 0.05\text{mm}$  for all centers.

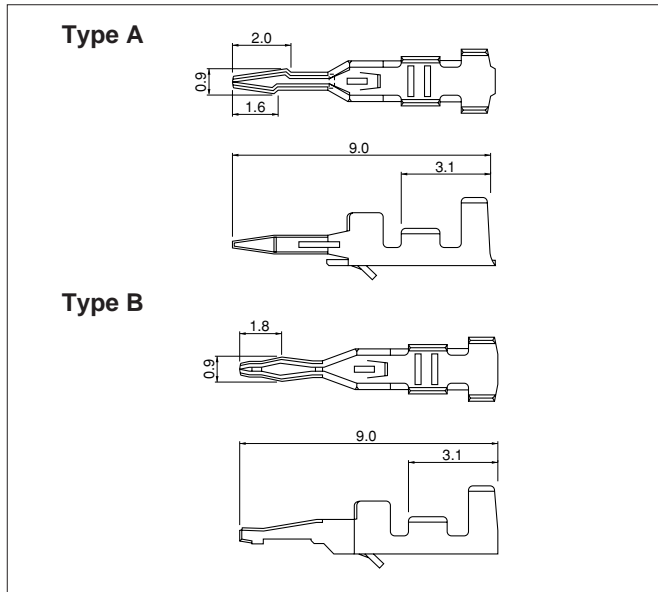
\*Type A 0.8 $^{+0.1}_{-0.05}$  dia.

\*Type B 2 to 7 circuits: 0.75  $\pm 0.05$  dia.  
8 to 15 circuits: 0.85  $\pm 0.05$  dia.

2. Hole dimensions differ according to the kind of PC board and piercing method.  
The dimensions above should serve as a guideline. Contact JST for details.

# SAN CONNECTOR

## Contact



Model No.	Type	Applicable wire		Insulation O.D.(mm)	Qty/ reel
		mm <sup>2</sup>	AWG #		
<b>SAN-002T-0.8A</b>	A	0.05~0.22	30~24	0.9~1.3	14,000
<b>SAN-002T-0.8K</b>	B				

### Material and Finish

Brass, tin-plated (reflow treatment)

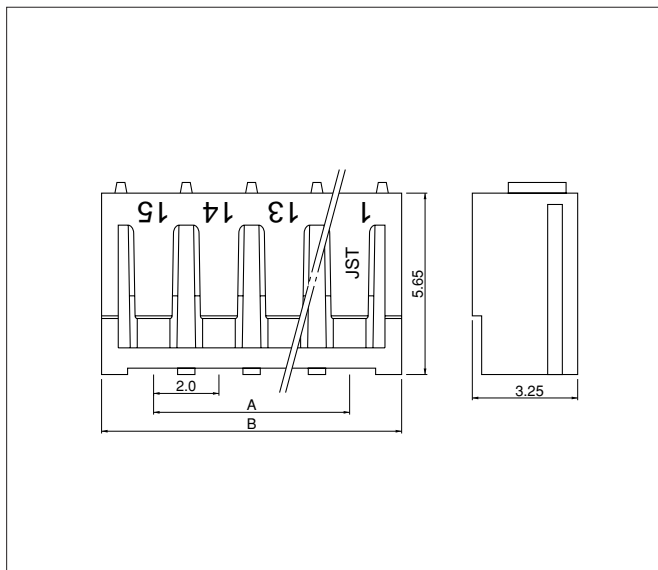
### RoHS compliance

Note: Contact JST if you require shielded wires, thin wires or other special wires.

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SAN-002T-0.8A</b>	AP-K2N	MKS-LS · MKS-L	MK/SAN-002-08	APLMK SAN002-08
<b>SAN-002T-0.8K</b>		*MKS-SC	SC/SAN-002-08	APLSC SAN002-08

Note: \*Strip-crimp applicator

## Housing



Circuits	Model No.	Dimensions (mm)		Qty / bag
		A	B	
2	<b>2P-SAN</b>	2.0	5.2	1,000
3	<b>3P-SAN</b>	4.0	7.2	1,000
4	<b>4P-SAN</b>	6.0	9.2	1,000
5	<b>5P-SAN</b>	8.0	11.2	1,000
6	<b>6P-SAN</b>	10.0	13.2	1,000
7	<b>7P-SAN</b>	12.0	15.2	1,000
8	<b>8P-SAN</b>	14.0	17.2	1,000
9	<b>9P-SAN</b>	16.0	19.2	1,000
10	<b>10P-SAN</b>	18.0	21.2	1,000
11	<b>11P-SAN</b>	20.0	23.2	1,000
12	<b>12P-SAN</b>	22.0	25.2	1,000
13	<b>13P-SAN</b>	24.0	27.2	1,000
14	<b>14P-SAN</b>	26.0	29.2	1,000
15	<b>15P-SAN</b>	28.0	31.2	1,000

### Material

PA 66, UL94V-0, yellow

### RoHS compliance

<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

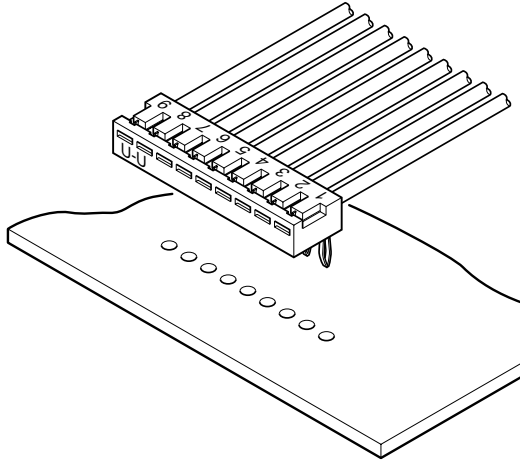
ex. **2P-SAN-o**  
(blank)...yellow K...black W...white R...red





# SJN CONNECTOR

2.0mm pitch/Board-in Crimp style connectors



**Side entry type board-in connector, with a mounting height of only 2.8mm and a thickness of 4.9mm.**

- Housing lances
- Easy mounting onto printed circuit boards

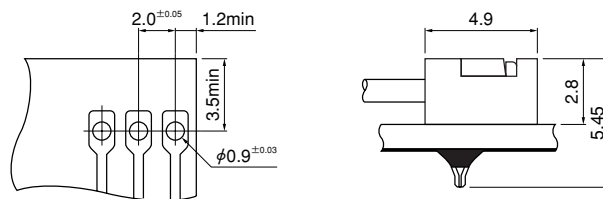
## Specifications

- Current rating: 3A AC, DC (AWG #22)
- Voltage rating: 250V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Insulation resistance: 1,000M  $\Omega$  min.
- Withstanding voltage: 800V AC/minute
- Applicable wire: AWG #28 to #22
- Applicable PC board thickness: 1.2 to 1.6mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

Recognized E60389

### PC board layout (viewed from soldering side) and Assembly layout

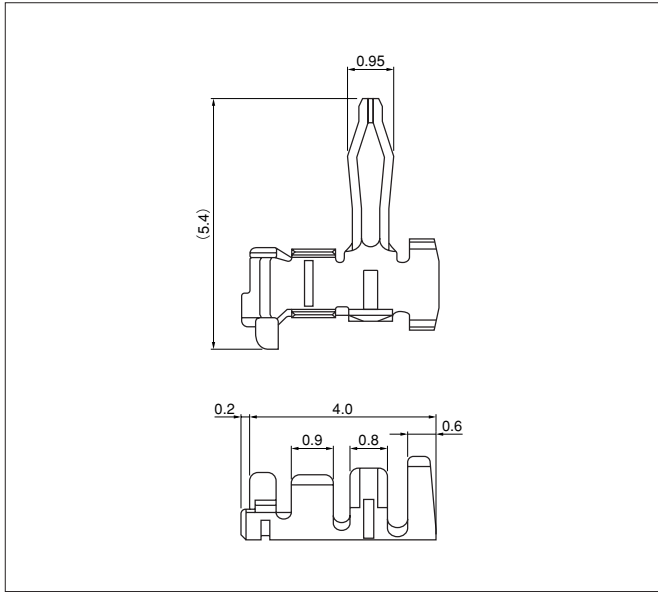


Note: 1. Tolerances are non-cumulative:  $\pm 0.05\text{mm}$  for all centers.

2. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.

# SJN CONNECTOR

## Contact



Model No.	Applicable wire		Insulation O.D.(mm)	Q'ty/ reel
	mm <sup>2</sup>	AWG #		
<b>SJN-001PT-0.9</b>	0.20~0.33	24~22	1.1~1.4	15,000
<b>SJN-002PT-0.9</b>	0.08~0.22	28~24	0.9~1.4	18,000

### Material and Finish

Brass, tin-plated (reflow treatment)

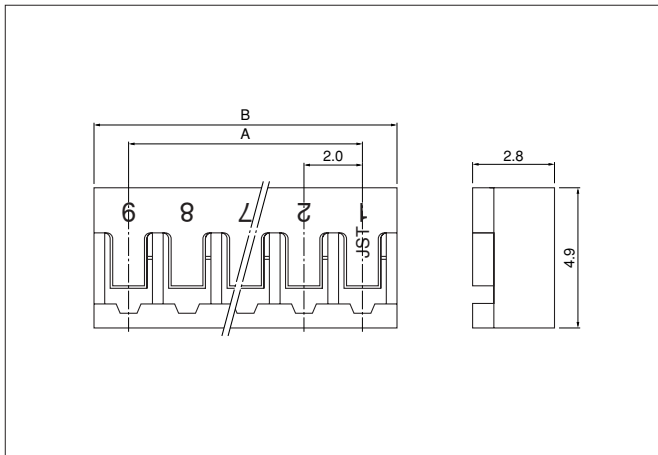
### RoHS compliance

Note:

Contact JST if you require shielded wires, thin wires or other special wires.

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SJN-001PT-0.9</b>	AP-K2N	MKS-L	MK/SJN-001-09	APLMK SJN001-09
		—	—	—
<b>SJN-002PT-0.9</b>	AP-K2N	MKS-L	MK/SJN-002-09	APLMK SJN002-09
		—	—	—

## Housing

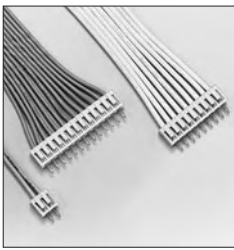


Circuits	Model No.	Dimensions (mm)		Q'ty / bag
		A	B	
2	<b>02P-SJN</b>	2.0	4.4	2,000
3	<b>03P-SJN</b>	4.0	6.4	1,000
4	<b>04P-SJN</b>	6.0	8.4	1,000
6	<b>06P-SJN</b>	10.0	12.4	1,000
7	<b>07P-SJN</b>	12.0	14.4	1,000
8	<b>08P-SJN</b>	14.0	16.4	1,000
9	<b>09P-SJN</b>	16.0	18.4	1,000
10	<b>10P-SJN</b>	18.0	20.4	1,000

### Material

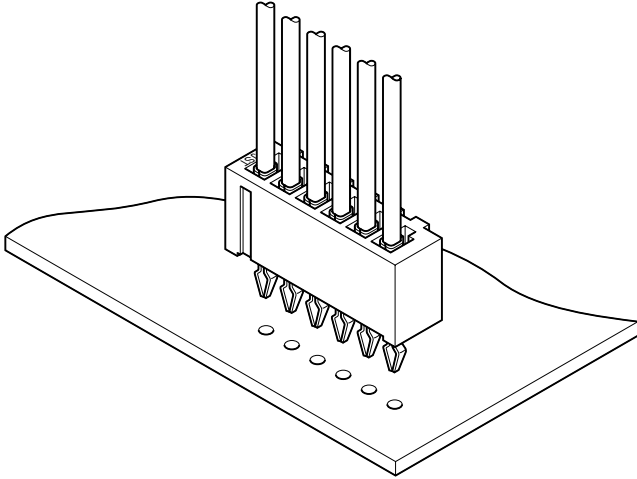
PA 66, UL94V-0, natural (white)

### RoHS compliance



# SCN CONNECTOR

**2.5mm pitch/Board-in Crimp style connectors**



**This 2.5mm pitch multi-circuit board-in connector meets the needs for high-density mounting on printed circuit boards efficiently and economically. The connector can be used for VCRs, car stereo systems, audio products, and many other consumer-oriented electronic products.**

- Housing lances
- Secure mounting on printed circuit boards
- Two types of contacts

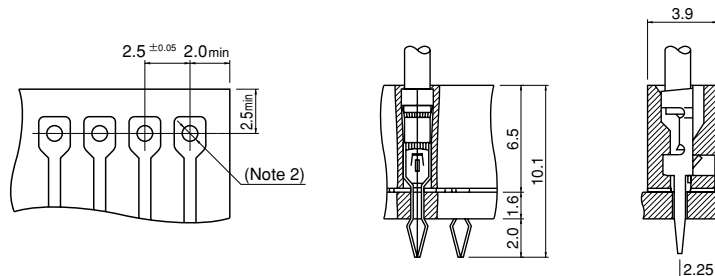
## Specifications

- Current rating: 3A AC, DC (AWG #22)
- Voltage rating: 250V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Insulation resistance: 1,000M  $\Omega$  min.
- Withstanding voltage: 800V AC/minute
- Applicable wire: AWG #28 to #22
- Applicable PC board thickness: 1.2mm, 1.6mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

- Ⓜ Recognized E60389
- Ⓢ Certified LR20812

### PC board layout (viewed from soldering side) and Assembly layout



Note 1. Applicable PC board thickness: Type A 1.6mm  
Type B 1.6mm and 1.2mm.

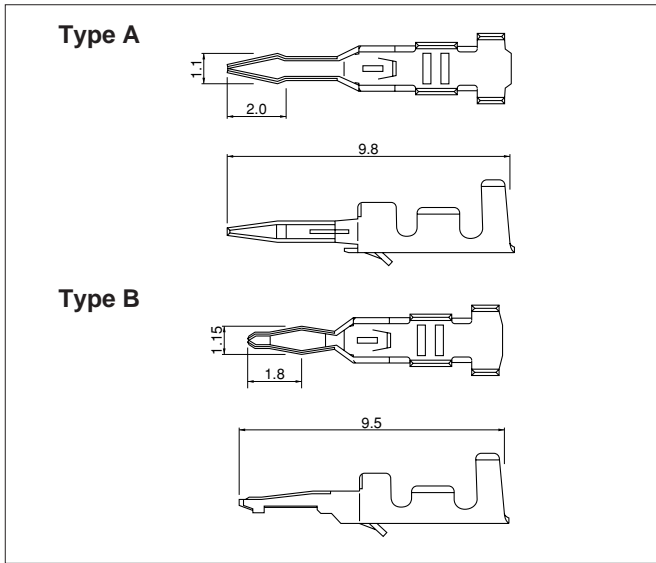
Note 2. Tolerances are non-cumulative:  $\pm 0.05\text{mm}$   
Type A:  $1.0 \pm 0.05\text{mm}$  dia.  
Type B: 2 to 6 circuits/ $1.0 \pm 0.05\text{mm}$  dia.

7 circuits and more/Hole dimensions differ from the above values. Contact JST for details.

Note 3. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.

# SCN CONNECTOR

## Contact



Model No.	Type	Applicable wire		Insulation O.D. (mm)	Material	Qty / reel
		mm <sup>2</sup>	AWG #			
<b>SCN-001T-P1.0</b>	A	0.08~0.33	28~22	0.9~1.7	Phosphor bronze	11,000
<b>SCN-001T-1.0K</b>	B				Brass	

### Finish

Tin-plated (reflow treatment)

### RoHS compliance

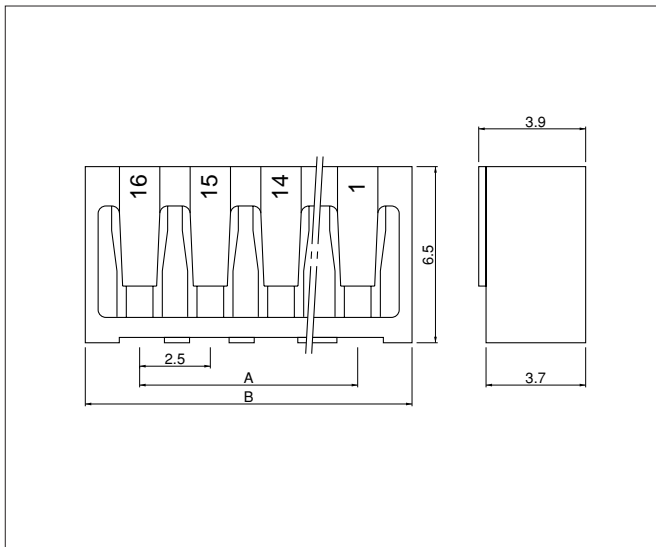
Note: 1. Contact JST if you require shielded wires, thin wires or other special wires.

2. Contact JST for brass products.

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SCN-001T-P1.0</b>	AP-K2N	MKS-LS · MKS-L	MK/SCN-001-10	APLMK SCN001-10
<b>SCN-001T-1.0K</b>		*MKS-SC	SC/SCN-001-10	APLSC SCN001-10

Note: \*Strip-crimp applicator

## Housing



Cir-cuits	Model No.	Dimensions (mm)		Qty / bag
		A	B	
2	<b>2P-SCN</b>	2.5	6.5	1,000
3	<b>3P-SCN</b>	5.0	9.0	1,000
4	<b>4P-SCN</b>	7.5	11.5	1,000
5	<b>5P-SCN</b>	10.0	14.0	1,000
6	<b>6P-SCN</b>	12.5	16.5	1,000
7	<b>7P-SCN</b>	15.0	19.0	1,000
8	<b>8P-SCN</b>	17.5	21.5	1,000
9	<b>9P-SCN</b>	20.0	24.0	1,000
10	<b>10P-SCN</b>	22.5	26.5	1,000
11	<b>11P-SCN</b>	25.0	29.0	1,000
12	<b>12P-SCN</b>	27.5	31.5	1,000
13	<b>13P-SCN</b>	30.0	34.0	1,000
14	<b>14P-SCN</b>	32.5	36.5	1,000
15	<b>15P-SCN</b>	35.0	39.0	1,000
16	<b>16P-SCN</b>	37.5	41.5	1,000

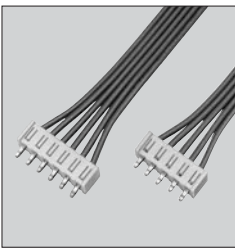
### Material

PA 66, UL94V-0, ivory

### RoHS compliance

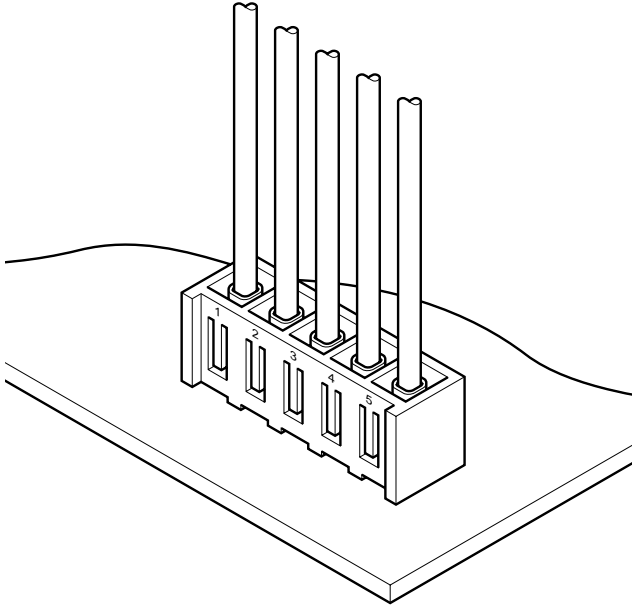
<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. **2P-SCN-oo**  
 (blank)...ivory  
 K...black R...red Y...yellow



# SDN CONNECTOR

**3.96mm pitch/Board-in Crimp style connectors**



**The SDN connector is a 3.96mm pitch board-in crimp style connector capable of connecting a wide variety of circuits including signal and power supply circuits. The connector features a slim, low-profile design. In addition, it has an exclusive lance construction to reduce insertion force, thus substantially improving the working efficiency in mounting the contact.**

- Slim, low-profile design
- Easy and secure contact mounting
- Improved solderability
- Polarizing boss

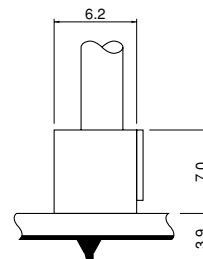
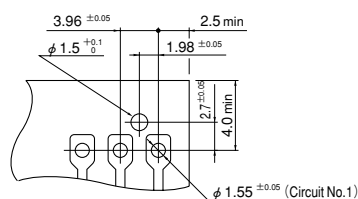
## Specifications

- Current rating: 7A AC, DC (AWG #18)
- Voltage rating: 250V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Insulation resistance: 1,000M  $\Omega$  min.
- Withstanding voltage: 1,500V AC/minute
- Applicable wire: AWG #22 to #18
- Applicable PC board thickness: 1.6mm
- \* RoHS compliant products are published.
- \* Temperature Range:  
The aforementioned temperature range of this connector is described in JST Standard Product Specification. Maximum temperature registered in UL is 105°C.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

- Ⓜ Recognized E60389
- Ⓢ Certified LR20812
- Ⓡ R50100763

### PC board layout (viewed from soldering side) and Assembly layout

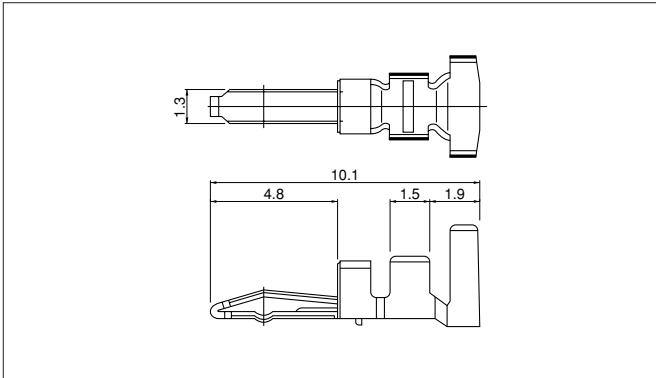


Note: 1. Tolerances are non-cumulative:  $\pm 0.05\text{mm}$  for all centers. For connectors with 5 or more circuits the hole dimensions will differ from the above values. Contact JST for details.

2. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline.

# SDN CONNECTOR

## Contact



Model No.	Applicable wire		Insulation O.D.(mm)	Qty / reel
	mm <sup>2</sup>	AWG #		
<b>SDN-21T-P1.5</b>	0.33~0.83	22~18	1.6~3.0	5,000

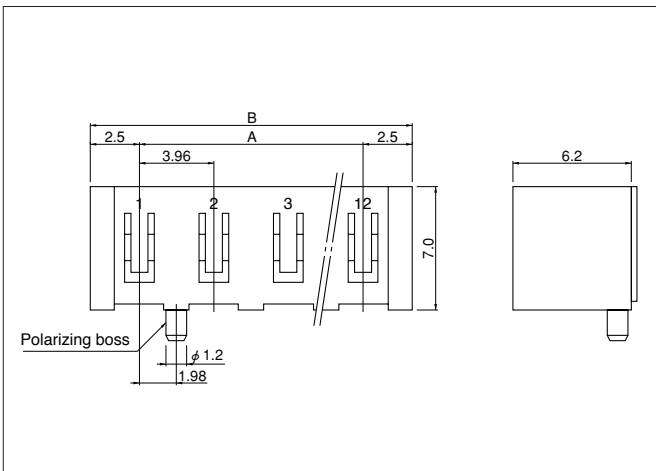
### Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

### RoHS compliance

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SDN-21T-P1.5</b>	AP-K2N	MKS-L	MK/SDN-21-15	APLMK SDN21-15

## Housing



Cir-cuits	Model No.		Dimensions (mm)		Qty / bag
	With polarizing boss	Without polarizing boss	A	B	
2	<b>2P-SDN</b>	<b>2P-SDN-A</b>	3.96	8.96	1,000
3	<b>3P-SDN</b>	<b>3P-SDN-A</b>	7.92	12.92	1,000
4	<b>4P-SDN</b>	<b>4P-SDN-A</b>	11.88	16.88	1,000
5	<b>5P-SDN</b>	<b>5P-SDN-A</b>	15.84	20.84	1,000
6	<b>6P-SDN</b>	<b>6P-SDN-A</b>	19.80	24.80	500
7	<b>7P-SDN</b>	<b>7P-SDN-A</b>	23.76	28.76	500
8	<b>8P-SDN</b>	<b>8P-SDN-A</b>	27.72	32.72	500
9	<b>9P-SDN</b>	<b>9P-SDN-A</b>	31.68	36.68	500
10	<b>10P-SDN</b>	<b>10P-SDN-A</b>	35.64	40.64	500
11	<b>11P-SDN</b>	<b>11P-SDN-A</b>	39.60	44.60	500
12	<b>12P-SDN</b>	<b>12P-SDN-A</b>	43.56	48.56	500

### Material

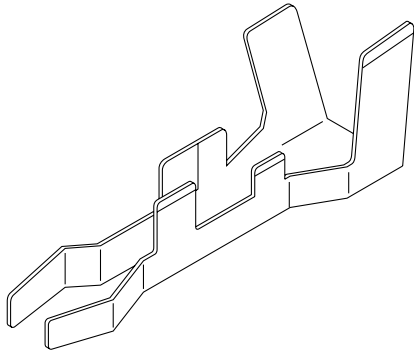
PA 66, UL94V-0, natural (white)

### RoHS compliance



# SIN TERMINAL

**Single-circuit/Board-in Crimp style terminals**



***It is time consuming to directly solder the many wires that are required on densely packed printed circuit boards. The SIN terminal is crimped to a wire, inserted into a hole in a printed circuit board, then soldered. Solderability is enhanced because solder does not enter the wire, thus ensuring a safe and secure connection. This terminal is ideal for permanent connection of jumper wires onto a printed circuit board or for connection to external circuits.***

## Specifications

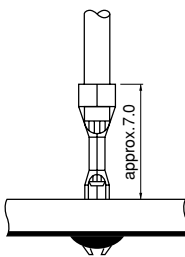
- Current rating: Depends on applicable wires
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Applicable wire: AWG #30 to #12
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

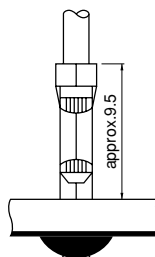
- Ⓜ Recognized E60389
- Ⓢ Certified LR20812

## Assembly layout

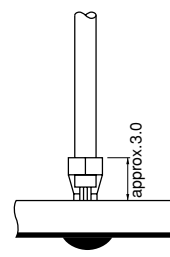
SIN-001T-1.2B



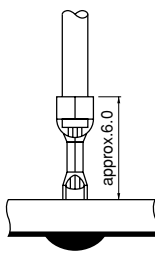
SIN-21T-1.8



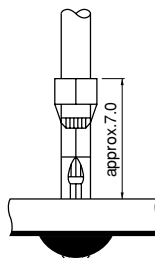
SIN-002T-1.0  
SIN-002T-1.2N



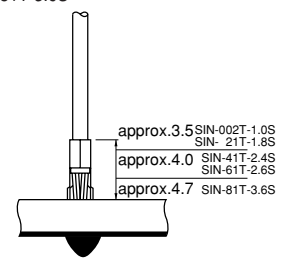
SIN-001T-1.2  
SIN-01T-1.2



SIN-01T-1.8  
SIN-01T-1.8N

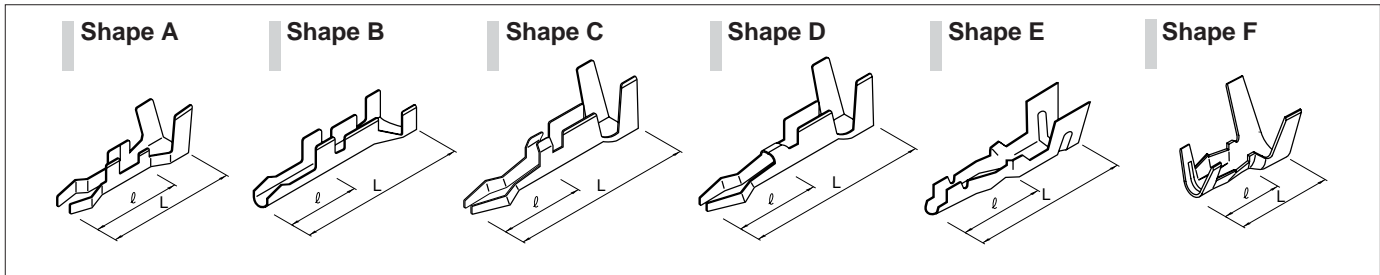


SIN-002T-1.0S SIN-41T-2.4S  
SIN-21T-1.8S SIN-61T-2.6S  
SIN-81T-3.6S



# SIN TERMINAL

## Terminal



Model No.	Shape	Applicable wire		Insulation O.D. (mm)	L(mm)	ℓ (mm)	Applicable PCB		Q'ty / reel
		mm <sup>2</sup>	AWG #				Thickness(mm)	Hole diameter(mm)	
SIN-002T-1.0	A	0.08~0.13	28~26	0.8~1.3	5.8	3.1	1.6	1.0 <sup>+0.05</sup>	9,000
SIN-002T-1.2N		0.08~0.13	28~26	0.9~1.4	6.0	3.3		1.2 <sup>+0.05</sup>	9,000
SIN-01T-1.8	C	0.13~0.5	26~20	1.2~2.5	10.0	3.55		1.8 <sup>+0.1</sup> <sub>0</sub>	7,000
SIN-001T-1.2B	D	0.05~0.22	30~24	0.9~1.5	10.0	3.5		1.2 <sup>+0.05</sup>	11,000
SIN-21T-1.8		0.30~0.83	22~18	1.7~3.8	12.6	3.6		1.8 <sup>+0.1</sup> <sub>0</sub>	3,000
SIN-002T-1.0S	E	0.08~0.13	28~26	0.8~1.3	7.0	3.5		1.2~1.6	1.0 <sup>+0.05</sup>
*SIN-21T-1.8S	F	0.30~0.83	22~18	1.5~3.0	7.6	4.1	1.6	1.8 <sup>+0.1</sup> <sub>0</sub>	4,500
*SIN-41T-2.4S		0.83~1.31	18,16	2.8~3.4	8.3	4.3		2.4 <sup>+0.05</sup>	3,000
*SIN-61T-2.6S		2.0	14	3.4~3.8	8.3	4.3		2.5 <sup>+0.1</sup> <sub>0</sub>	3,000
*SIN-81T-3.6S		3.3	12	4.0~4.2	9.2	4.5		3.55 <sup>+0.05</sup>	2,000

### Material and Finish

Brass, tin-plated (reflow treatment)

Model No.	Shape	Applicable wire		Insulation O.D. (mm)	L(mm)	ℓ (mm)	Applicable PCB		Q'ty / reel
		mm <sup>2</sup>	AWG #				Thickness(mm)	Hole diameter(mm)	
SIN-001T-1.2	B	0.05~0.15	30~26	0.8~1.4	9.1	3.05	1.2	(1.20)	7,500
SIN-01T-1.2		0.2~0.5	24~20	1.5~2.3	9.1	3.05			5,000
SIN-01T-1.8N	C	0.13~0.5	26~20	1.2~2.5	10.0	3.55	1.6	1.8 <sup>+0.1</sup> <sub>0</sub>	7,000

### Material and Finish

Brass, copper-undercoated, tin-plated

### RoHS compliance

Note: 1. The SIN-01T-1.8N terminal requires less force for insertion into a PC board.

2. \*marked terminals are for the use of larger wires (Wire conductors are to be soldered). Contact JST for the details of regarding specifications.

3. Hole dimensions may differ according to the kind of PC board and piercing method.

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SIN-002T-1.0	AP-K2N	MKS-L	MK/SIN-002-10	APLMK SIN002-10
		*MKS-SC	SC/SIN-002-10	APLSC SIN002-10
SIN-001T-1.2		MKS-L	MK/SIN-001-12	APLMK SIN001-12
		*MKS-SC	SC/SIN-001-12	APLSC SIN001-12
SIN-01T-1.2		MKS-L	MK/SIN-01-12	APLMK SIN01-12
		*MKS-SC	SC/SIN-01-12	APLSC SIN01-12
SIN-01T-1.8(N)		MKS-L	MK/SIN-01-18	APLMK SIN01-18
		*MKS-SC	SC/SIN-01-18	APLSC SIN01-18
SIN-001T-1.2B		MKS-L	MK/SIN-001-12B	APLMK SIN001-12B
		*MKS-SC	SC/SIN-001-12B	APLSC SIN001-12B
SIN-002T-1.2N		MKS-L	MK/SIN-002-12N	APLMK SIN002-12N
		*MKS-SC	SC/SIN-002-12N	APLSC SIN002-12N

Note: \*Strip-crimp applicator

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SIN-21T-1.8	AP-K2N	MKS-L	MK/SIN-21-18	APLMK SIN21-18
SIN-002T-1.0S		---	---	---
		MKS-L-IN	MK/SIN-002-10S	APLMK SIN002-10S
SIN-21T-1.8S		MKS-L-SIN	MK/SIN-21-18S	APLMK SIN21-18S
		*MKS-SC	SC/SIN-21-18S	APLSC SIN21-18S
SIN-41T-2.4S		MKS-L-SIN	MK/SIN-41-24S	APLMK SIN41-24S
SIN-61T-2.6S		---	---	---
		MKS-L-SIN	MK/SIN-61-26S	APLMK SIN61-26S
SIN-81T-3.6S		---	---	---
		MKS-L-SIN3	MK/SIN-81-36S	APLMK SIN81-36S

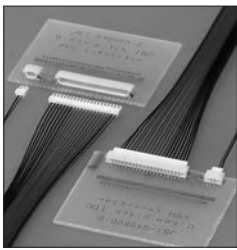


# 1-B

## Wire to Board Insulation Displacement Connectors

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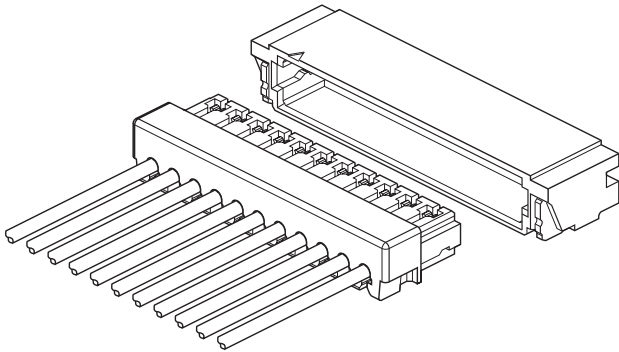
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# XSR CONNECTOR



0.6mm pitch/Disconnectable Insulation displacement connectors



**This is the world's smallest 0.6mm pitch ID connector for discrete wires.**  
**This Wire to Board miniaturized connector has a mounting height of 1.45mm and depth of 3.0mm.**

- Space saving
- Twin U-slot insulation displacement section
- New strain relief structure
- Suitable for fine wires
- Applicable to automatic ID machines

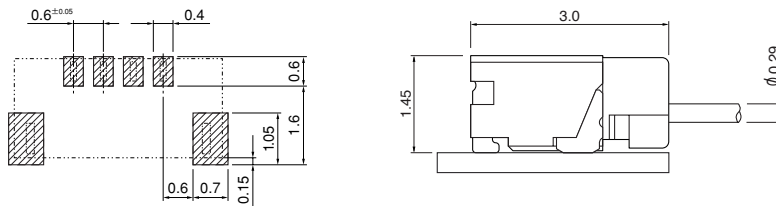
## Specifications

- Current rating: 0.2A AC, DC
  - Voltage rating: 30V AC, DC
  - Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
  - Contact resistance: Initial value/30m Ω max.  
After environmental testing/50m Ω max.
  - Insulation resistance: 100M Ω min.
  - Withstanding voltage: 200V AC/minute
  - Applicable wire: Conductor size/AWG #36  
Conductor/7 strands,  
tin-coated copper alloy  
Insulation O.D./0.29mm
- \* RoHS compliant products are published.  
 \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.  
 \* Contact JST for details.

## Standards

- Ⓡ Recognized E60389
- Ⓢ Certified LR20812

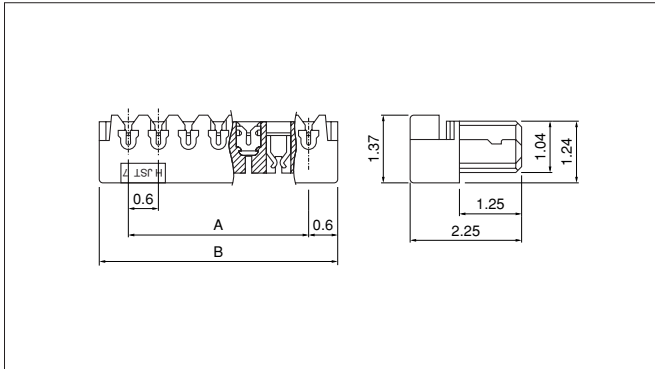
PC board layout (viewed from component side) and Assembly layout



Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.  
 2. The dimensions above should serve as a guideline. Contact JST for details.

# XSR CONNECTOR

## Socket



Circuits	Model No.	Dimensions (mm)		Qty / box
		A	B	
2	<b>02XSR-36S</b>	0.6	1.8	4,000
4	<b>04XSR-36S</b>	1.8	3.0	4,000
6	<b>06XSR-36S</b>	3.0	4.2	4,000
10	<b>10XSR-36S</b>	5.4	6.6	4,000
16	<b>16XSR-36S</b>	9.0	10.2	4,000
20	<b>20XSR-36S</b>	11.4	12.6	4,000
22	<b>*22XSR-36S</b>	12.6	13.8	4,000

### Material and Finish

Contact: Copper alloy, tin-plated (reflow treatment)

Housing: PA, UL94V-0, natural

### RoHS compliance

Note: \*Marked products are not UL/CSA approved.

<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

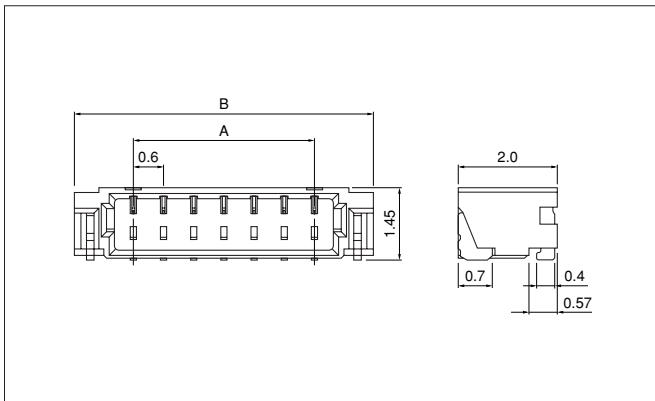
ex. **02XSR-36S**

S...natural (standard color)

LG...light green LP...light purple L...lemon yellow

PK...pink LE...light blue O...orange

## Header



Circuits	Model No.	Dimensions (mm)		Qty / reel
		A	B	
2	<b>SM02B-XSRS-ETB</b>	0.6	3.0	3,500
4	<b>SM04B-XSRS-ETB</b>	1.8	4.2	3,500
6	<b>SM06B-XSRS-ETB</b>	3.0	5.4	3,500
10	<b>SM10B-XSRS-ETB</b>	5.4	7.8	3,500
16	<b>SM16B-XSRS-ETB</b>	9.0	11.4	3,500
20	<b>SM20B-XSRS-ETB</b>	11.4	13.8	3,500
22	<b>*SM22B-XSRS-ETB</b>	12.6	15.0	3,500

### Material and Finish

Contact: Copper alloy, copper-undercoated, tin-plated (reflow treatment)

Housing: PA, UL94V-0, natural

Solder tab: Brass, copper-undercoated, tin-plated (reflow treatment)

### RoHS compliance

This product displays (LF)(SN) on a label.

Note: 1. This products listed above are supplied on embossed-tape.

2. \*Marked products are not UL/CSA approved.

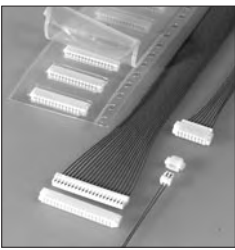
<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. **SM02B-XSRS-TB**

S...natural (standard color)

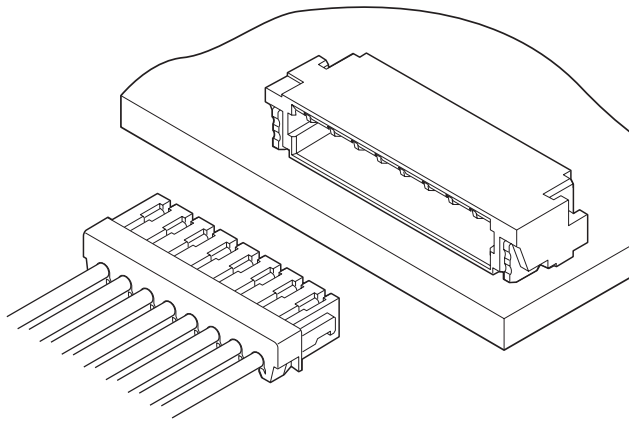
LG...light green LP...light purple L...lemon yellow

PK...pink LE...light blue O...orange



# SUR CONNECTOR

0.8mm pitch/Disconnectable Insulation displacement connectors



**The world's first 0.8mm pitch wire-to-board insulation displacement connector. Side entry type is only 3.9mm depth and 1.75mm height after mounting on the PC board, and top entry type is only 2.2mm depth and 3.9mm height.**

**Compared to the conventional 1.0mm pitch SSR connector, occupation space on the board is reduced by 34% (side entry type).**

- 3-point grip construction
- Super fine wires are applicable
- Shrouded header
- Twin U-slot insulation displacement section

## Specifications

- Current rating: 0.5A AC, DC (AWG #32)  
0.2A AC, DC (AWG #36)
- Voltage rating: 30V DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/20m Ω max.  
After environmental testing/40m Ω max.
- Insulation resistance: 100M Ω min.
- Withstanding voltage: 200V AC/minute
- Applicable wire: Conductor size/AWG #32, #36  
Conductor/7 strands,  
tin-coated copper alloy  
Insulation O.D./0.39mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

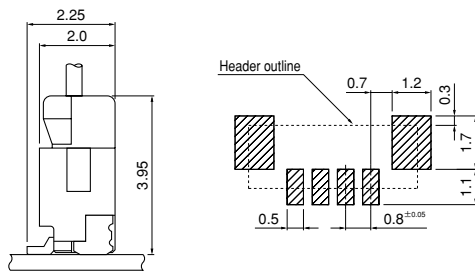
## Standards

Recognized E60389

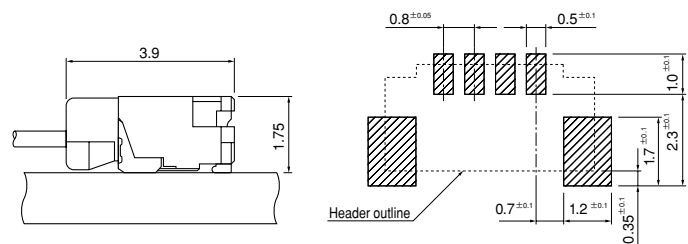
Certified LR20812

## PC board layout (viewed from component side) and Assembly layout

### Top entry type



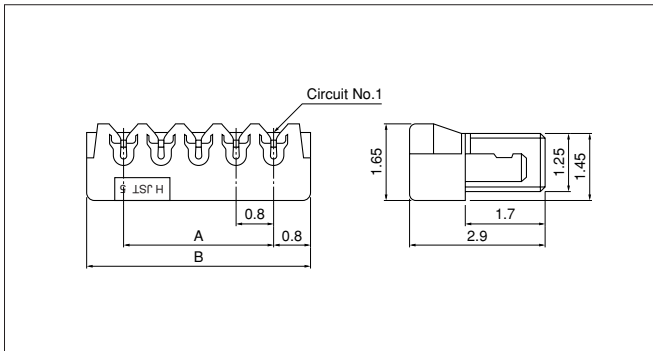
### Side entry type



Note: 1. Tolerances are non-cumulative:  $\pm 0.05\text{mm}$  for all centers.  
2. Dimensions above should serve as a guideline. Contact JST for details.

# SUR CONNECTOR

## Receptacle



Circuits	Model No.		Dimensions (mm)		Q'ty/box
	#32(Natural)	#36(Lemon yellow)	A	B	
2	02SUR-32S	02SUR-36L	0.8	2.4	2,000
3	03SUR-32S	03SUR-36L	1.6	3.2	2,000
4	04SUR-32S	04SUR-36L	2.4	4.0	2,000
5	05SUR-32S	05SUR-36L	3.2	4.8	2,000
6	06SUR-32S	06SUR-36L	4.0	5.6	2,000
8	08SUR-32S	08SUR-36L	5.6	7.2	2,000
10	10SUR-32S	10SUR-36L	7.2	8.8	2,000
12	12SUR-32S	12SUR-36L	8.8	10.4	2,000
14	14SUR-32S	14SUR-36L	10.4	12.0	2,000
15	15SUR-32S	15SUR-36L	11.2	12.8	2,000
16	16SUR-32S	16SUR-36L	12.0	13.6	2,000
17	17SUR-32S	17SUR-36L	12.8	14.4	2,000
20	20SUR-32S	20SUR-36L	15.2	16.8	2,000
22	22SUR-32S	22SUR-36L	16.8	18.4	2,000

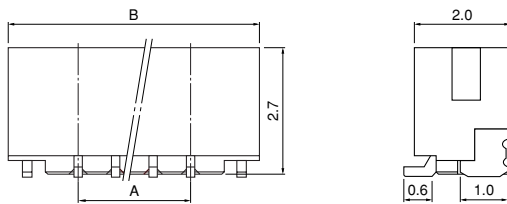
### Material and Finish

Contact: Copper alloy, tin-plated (reflow treatment)  
Housing: PA, UL94V-0

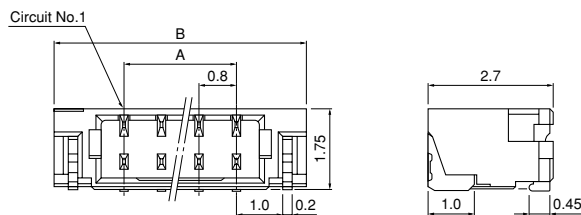
### RoHS compliance

## Shrouded header

### Top entry type



### Side entry type



Circuits	Model No.		Dimensions (mm)		Q'ty/ reel	
	Top entry type	Side entry type	A	B	Top entry type	Side entry type
2	BM02B-SURS-TF	SM02B-SURS-TF	0.8	3.8	2,500	3,500
3	BM03B-SURS-TF	SM03B-SURS-TF	1.6	4.6	2,500	3,500
4	BM04B-SURS-TF	SM04B-SURS-TF	2.4	5.4	2,500	3,500
5	—	SM05B-SURS-TF	3.2	6.2	—	3,500
6	—	SM06B-SURS-TF	4.0	7.0	—	3,500
8	BM08B-SURS-TF	SM08B-SURS-TF	5.6	8.6	2,500	3,500
10	BM10B-SURS-TF	SM10B-SURS-TF	7.2	10.2	2,500	3,500
12	BM12B-SURS-TF	SM12B-SURS-TF	8.8	11.8	2,500	3,500
14	—	SM14B-SURS-TF	10.4	13.4	—	3,500
15	BM15B-SURS-TF	SM15B-SURS-TF	11.2	14.2	2,500	3,500
16	—	SM16B-SURS-TF	12.0	15.0	—	3,500
17	—	SM17B-SURS-TF	12.8	15.8	—	3,500
20	BM20B-SURS-TF	SM20B-SURS-TF	15.2	18.2	2,500	3,500
22	—	SM22B-SURS-TF	16.8	19.8	—	3,500

### Material and Finish

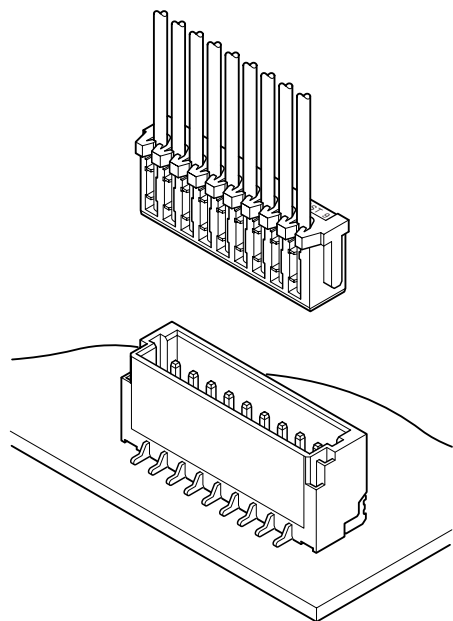
Contact: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
Wafer: PA, UL94V-0, natural  
Solder tab: Brass, copper-undercoated, tin-plated (reflow treatment)

**RoHS compliance** This product displays (LF)(SN) on a label.  
Note: The products listed above are supplied on embossed-tape.



# SR CONNECTOR

1.0mm pitch/Disconnectable Insulation displacement connectors



- Compact insulation displacement connector
- Header designed for vacuum pick and place robotics
- Twin U-slot insulation displacement section
- 3-point grip construction

## Specifications

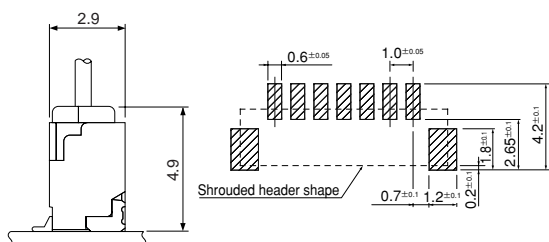
- Current rating: 0.7A DC
  - Voltage rating: 50V DC
  - Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
  - Contact resistance: Initial value/20m Ω max.  
After environmental testing/40m Ω max.
  - Insulation resistance: 100M Ω min.
  - Withstanding voltage: 500V AC/minute
  - Applicable wire: Conductor size/AWG #30  
Conductor/7 strands,  
tin-coated annealed copper  
Insulation O.D./0.54 to 0.58mm
- \* RoHS compliant products are published.  
\* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.  
\* Contact JST for details.

## Standards

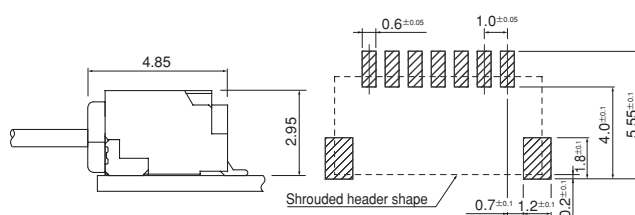
- Ⓜ Recognized E60389
- Ⓢ Certified LR20812

## PC board layout (viewed from component side) and Assembly layout

### Top entry type



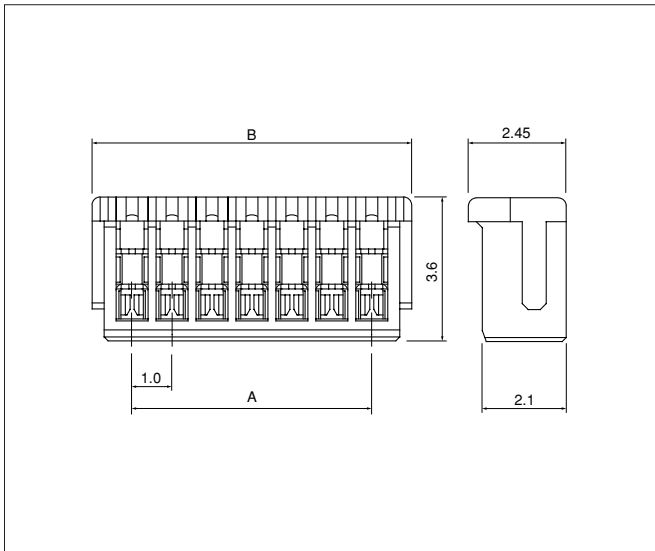
### Side entry type



Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.  
2. Dimensions above should serve as a guideline. Contact JST for details.

# SR CONNECTOR

## Receptacle



Cir- cuits	Model No.	Dimensions (mm)		Q'ty / box
		A	B	
2	<b>02SR-3S</b>	1.0	3.0	2,000
3	<b>03SR-3S</b>	2.0	4.0	2,000
4	<b>04SR-3S</b>	3.0	5.0	2,000
5	<b>05SR-3S</b>	4.0	6.0	2,000
6	<b>06SR-3S</b>	5.0	7.0	2,000
7	<b>07SR-3S</b>	6.0	8.0	2,000
8	<b>08SR-3S</b>	7.0	9.0	2,000
9	<b>09SR-3S</b>	8.0	10.0	2,000
10	<b>10SR-3S</b>	9.0	11.0	2,000
11	<b>11SR-3S</b>	10.0	12.0	2,000
12	<b>12SR-3S</b>	11.0	13.0	2,000
13	<b>13SR-3S</b>	12.0	14.0	2,000
14	<b>14SR-3S</b>	13.0	15.0	2,000

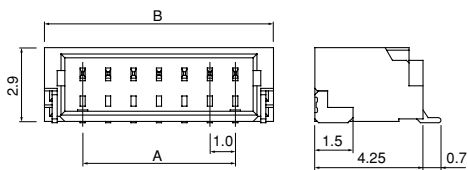
### Material and Finish

Contact: Phosphor bronze, tin-plated (reflow treatment)  
Housing: PA, UL94V-0, natural

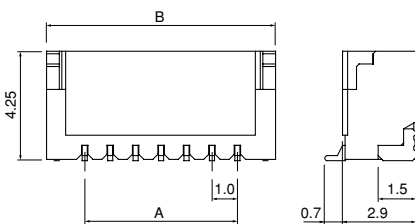
**RoHS compliance**

## Shrouded header

### Side entry type



### Top entry type



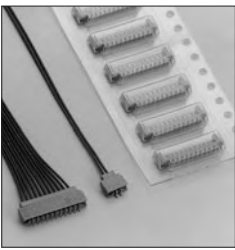
Cir- cuits	Top entry type	Side entry type	Dimensions (mm)		Q'ty / reel	
			A	B	Top entry type	Side entry type
2	<b>BM02B-SRSS-TB</b>	<b>SM02B-SRSS-TB</b>	1.0	4.0	1,500	3,000
3	<b>BM03B-SRSS-TB</b>	<b>SM03B-SRSS-TB</b>	2.0	5.0	1,500	3,000
4	<b>BM04B-SRSS-TB</b>	<b>SM04B-SRSS-TB</b>	3.0	6.0	1,500	3,000
5	<b>BM05B-SRSS-TB</b>	<b>SM05B-SRSS-TB</b>	4.0	7.0	1,500	3,000
6	<b>BM06B-SRSS-TB</b>	<b>SM06B-SRSS-TB</b>	5.0	8.0	1,500	3,000
7	<b>BM07B-SRSS-TB</b>	<b>SM07B-SRSS-TB</b>	6.0	9.0	1,500	3,000
8	<b>BM08B-SRSS-TB</b>	<b>SM08B-SRSS-TB</b>	7.0	10.0	1,500	3,000
9	<b>BM09B-SRSS-TB</b>	<b>SM09B-SRSS-TB</b>	8.0	11.0	1,500	3,000
10	<b>BM10B-SRSS-TB</b>	<b>SM10B-SRSS-TB</b>	9.0	12.0	1,500	3,000
11	<b>BM11B-SRSS-TB</b>	<b>SM11B-SRSS-TB</b>	10.0	13.0	1,500	3,000
12	<b>BM12B-SRSS-TB</b>	<b>SM12B-SRSS-TB</b>	11.0	14.0	1,500	3,000
13	<b>BM13B-SRSS-TB</b>	<b>SM13B-SRSS-TB</b>	12.0	15.0	1,500	3,000
14	<b>BM14B-SRSS-TB</b>	<b>SM14B-SRSS-TB</b>	13.0	16.0	1,500	3,000

### Material and Finish

Contact: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
Wafer: PA, UL94V-0, natural  
Solder tab: Brass, copper-undercoated, tin-plated (reflow treatment)

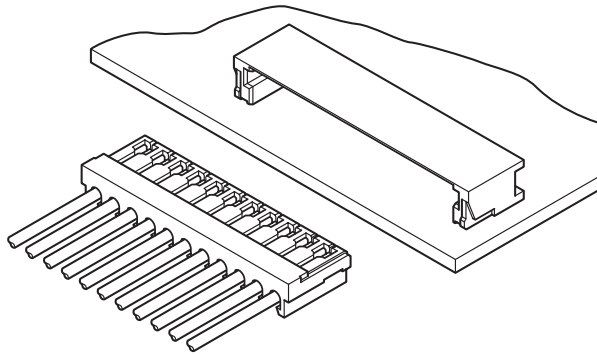
**RoHS compliance** This product displays (LF)(SN) on a label.

Note: 1. The products listed above are supplied on embossed-tape.  
2. Contact JST for the top entry type headers with suction cap.



# SSR CONNECTOR

1.0mm pitch/Disconnectable Insulation displacement connectors



- **Compact**
- **Twin U-slot insulation displacement section**
- **3-point grip construction**
- **Header designed for vacuum pick and place robotics**

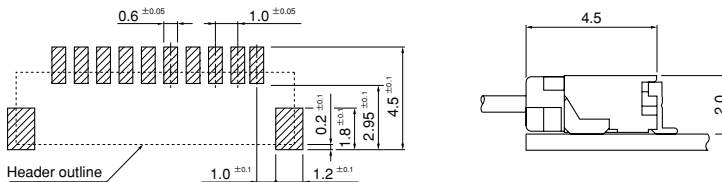
## Specifications

- Current rating: 0.5A AC, DC
  - Voltage rating: 50V AC, DC
  - Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
  - Contact resistance: Initial value/20m Ω max.  
After environmental testing/40m Ω max.
  - Insulation resistance: 100M Ω min.
  - Withstanding voltage: 500V AC/minute
  - Applicable wire: Conductor size/AWG #32  
Conductor/7 strands,  
tin-coated annealed copper  
Insulation O.D./0.52 to 0.56mm
- \* RoHS compliant products are published.  
\* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.  
\* Contact JST for details.

## Standards

- Ⓜ Recognized E60389
- Ⓢ Certified LR20812

### PC board layout (viewed from component side) and Assembly layout

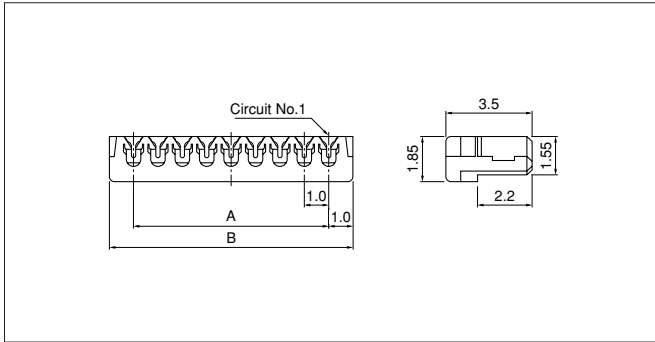


- Note: 1. Tolerances are non-cumulative:  $\pm 0.05\text{mm}$  for all centers.  
2. The dimensions above should serve as a guideline. Contact JST for details.



# SSR CONNECTOR

## Receptacle



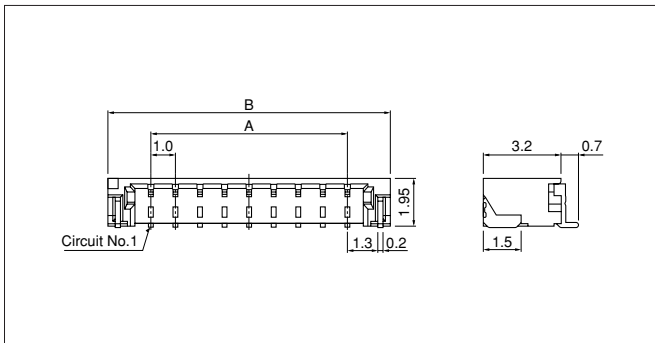
Circuits	Model No.	Dimensions (mm)		Q'ty / box
		A	B	
2	<b>02SSR-32H</b>	1.0	3.0	2,000
3	<b>03SSR-32H</b>	2.0	4.0	2,000
4	<b>04SSR-32H</b>	3.0	5.0	2,000
5	<b>05SSR-32H</b>	4.0	6.0	2,000
6	<b>06SSR-32H</b>	5.0	7.0	2,000
8	<b>08SSR-32H</b>	7.0	9.0	2,000
9	<b>09SSR-32H</b>	8.0	10.0	2,000
10	<b>10SSR-32H</b>	9.0	11.0	2,000
11	<b>11SSR-32H</b>	10.0	12.0	2,000
12	<b>12SSR-32H</b>	11.0	13.0	2,000
13	<b>13SSR-32H</b>	12.0	14.0	2,000
14	<b>14SSR-32H</b>	13.0	15.0	2,000

### Material and Finish

Contact: Phosphor bronze, tin-plated (reflow treatment)  
Housing: PA 46, UL94V-0, gray

### RoHS compliance

## Shrouded header



Circuits	Model No.	Dimensions (mm)		Q'ty / reel
		A	B	
2	<b>SM02B-SSR-H-TB</b>	1.0	4.6	4,500
3	<b>SM03B-SSR-H-TB</b>	2.0	5.6	4,500
4	<b>SM04B-SSR-H-TB</b>	3.0	6.6	4,500
5	<b>SM05B-SSR-H-TB</b>	4.0	7.6	4,500
6	<b>SM06B-SSR-H-TB</b>	5.0	8.6	4,500
8	<b>SM08B-SSR-H-TB</b>	7.0	10.6	4,500
9	<b>SM09B-SSR-H-TB</b>	8.0	11.6	4,500
10	<b>SM10B-SSR-H-TB</b>	9.0	12.6	4,500
11	<b>SM11B-SSR-H-TB</b>	10.0	13.6	4,500
12	<b>SM12B-SSR-H-TB</b>	11.0	14.6	4,500
13	<b>SM13B-SSR-H-TB</b>	12.0	15.6	4,500
14	<b>SM14B-SSR-H-TB</b>	13.0	16.6	4,500

### Material and Finish

Contact: Copper-alloy, copper-undercoated, tin-plated (reflow treatment)  
Wafer: PA, UL94V-0, gray  
Solder tab: Brass, copper-undercoated, tin-plated (reflow treatment)

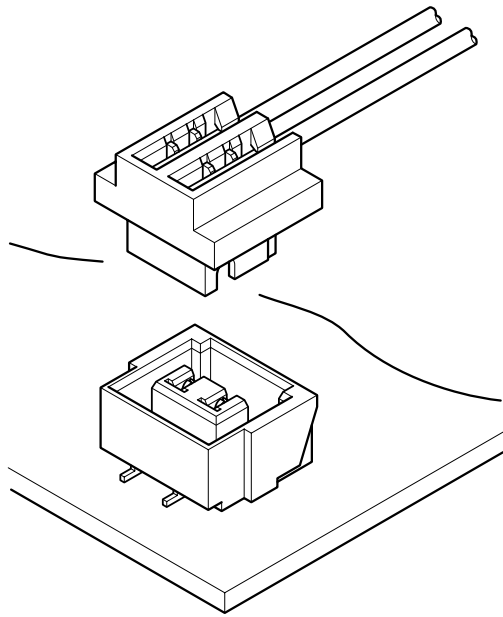
**RoHS compliance** This product displays (LF)(SN) on a label.  
Note: The products listed above are supplied on embossed-tape.



# ASR CONNECTOR



**1.0mm pitch/Disconnectable Insulation displacement connectors**



- **Compact**
- **Twin U-slot insulation displacement section**
- **3-point grip construction**
- **Header designed for vacuum pick and place robotics**

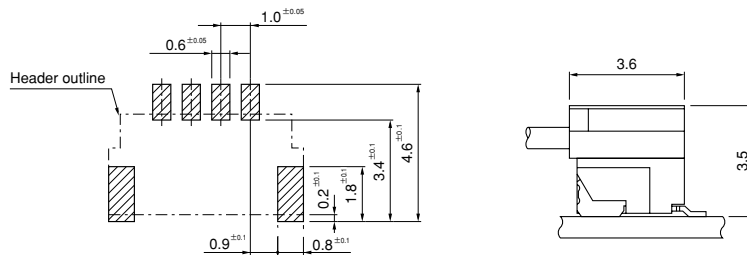
## Specifications

- Current rating: 0.7A DC
- Voltage rating: 50V DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/30m Ω max.  
After environmental testing/40m Ω max.
- Insulation resistance: 100M Ω min.
- Withstanding voltage: 500V AC/minute
- Applicable wire: Conductor size/AWG #30  
Conductor/7 strands,  
tin-coated annealed copper  
Insulation O.D./0.54 to 0.58mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

- Recognized E60389
- Certified LR20812

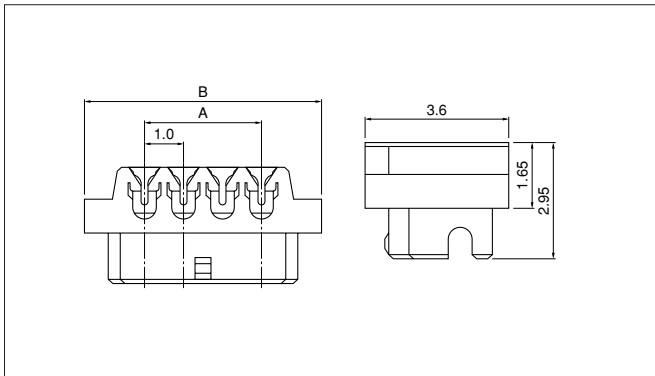
### PC board layout (viewed from component side) and Assembly layout



Note: 1. Tolerances are non-cumulative:  $\pm 0.05\text{mm}$  for all centers.  
2. The dimensions above should serve as a guideline. Contact JST for details.

# ASR CONNECTOR

## Receptacle



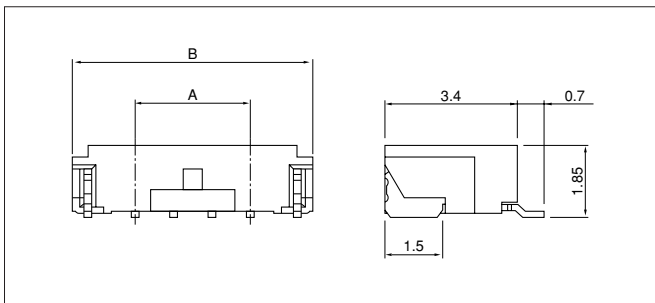
Circuits	Model No.	Dimensions (mm)		Qty / box
		A	B	
2	<b>02ASR-30S</b>	1.0	4.0	3,000
3	<b>03ASR-30S</b>	2.0	5.0	3,000
4	<b>04ASR-30S</b>	3.0	6.0	3,000

### Material and Finish

Contact: Phosphor bronze, tin-plated (reflow treatment)  
Housing: Glass-filled PA 66, UL94V-0, natural

### RoHS compliance

## Shrouded header



Circuits	Model No.	Dimensions (mm)		Qty / reel
		A	B	
2	<b>BM02B-ASRS-TF</b>	1.0	4.4	3,500
3	<b>BM03B-ASRS-TF</b>	2.0	5.4	3,500
4	<b>BM04B-ASRS-TF</b>	3.0	6.4	3,500

### Material and Finish

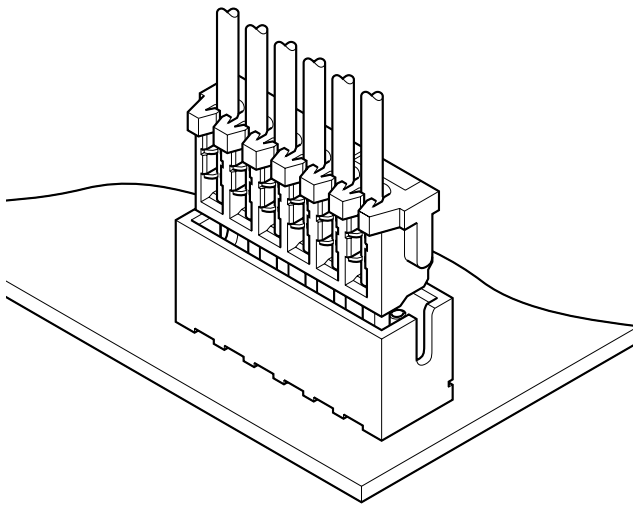
Contact: Phosphor bronze, copper-undercoated, tin-plated (reflow treatment)  
Wafer: PA 6T, UL94V-0, natural  
Solder tab: Brass, copper-undercoated, tin-plated (reflow treatment)

**RoHS compliance** This product displays (LF)(SN) on a label.  
Note: The products listed above are supplied on embossed-tape.



# ZR CONNECTOR

1.5mm pitch/Disconnectable Insulation displacement connectors



**The twin U-slots (IDC slots), the 3-point insulation grip, and the distortion resistant disconnectable construction ensure a reliable connection even during severe environmental conditions.**

- Compact
- Twin U-slot insulation displacement section
- 3-point grip construction
- Distortion resistant construction
- Compatible with the ZH crimp style connector

## Specifications

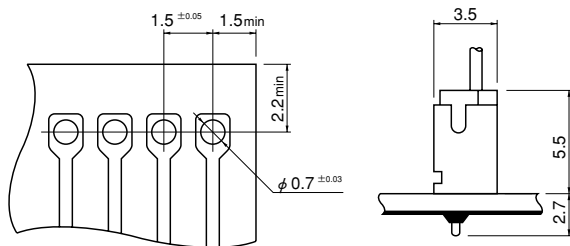
- Current rating: 0.7A AC, DC (AWG #28)
- Voltage rating: 50V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/20m Ω max.  
After environmental testing/30m Ω max.
- Insulation resistance: 500M Ω min.
- Withstanding voltage: 500V AC/minute
- Applicable wire: UL1571 (Contact JST for details regarding other UL styles.)  
AWG #30, #28  
Conductor/7 strands, tin-coated  
Insulation O.D./0.7 to 0.8mm  
(Contact JST for diameters greater than 0.8mm.)
- Applicable PC board thickness: 0.6 to 1.2mm, 1.6mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

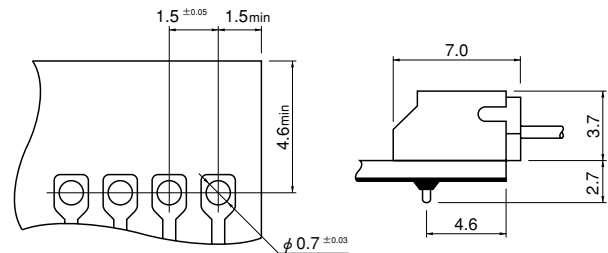
- Ⓜ Recognized E60389
- Ⓢ Certified LR20812
- Ⓜ R9351092

### Through-hole type PC board layout (viewed from soldering side) and Assembly layout

#### Top entry type



#### Side entry type



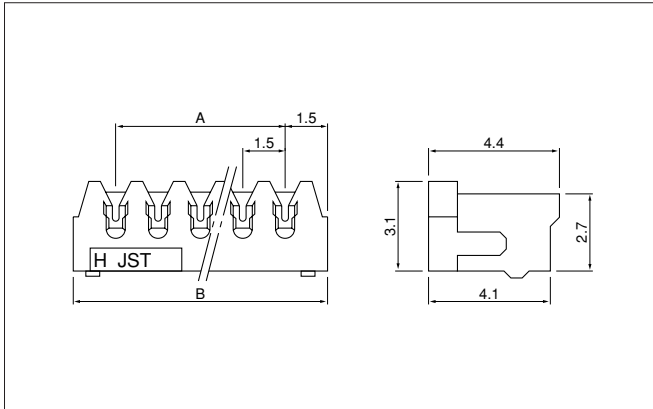
Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.

2. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.

3. As for the PC board layout for the SMT type shrouded headers, refer to that of the ZH connector.

# ZR CONNECTOR

## Receptacle



Cir- cuits	Model No.		Dimensions (mm)		Qty / box
	AWG #30(natural/gray)	AWG #28(green)	A	B	
2	<b>02ZR-3H-P</b>	<b>02ZR-8M-P</b>	1.5	4.5	2,000
3	<b>03ZR-3H-P</b>	<b>03ZR-8M-P</b>	3.0	6.0	2,000
4	<b>04ZR-3H-P</b>	<b>04ZR-8M-P</b>	4.5	7.5	2,000
5	<b>05ZR-3H-P</b>	<b>05ZR-8M-P</b>	6.0	9.0	2,000
6	<b>06ZR-3H-P</b>	<b>06ZR-8M-P</b>	7.5	10.5	2,000
7	<b>07ZR-3H-P</b>	<b>07ZR-8M-P</b>	9.0	12.0	2,000
8	<b>08ZR-3H-P</b>	<b>08ZR-8M-P</b>	10.5	13.5	2,000
9	<b>09ZR-3H-P</b>	<b>09ZR-8M-P</b>	12.0	15.0	2,000
10	<b>10ZR-3H-P</b>	<b>10ZR-8M-P</b>	13.5	16.5	2,000
11	<b>11ZR-3H-P</b>	<b>11ZR-8M-P</b>	15.0	18.0	2,000
12	<b>12ZR-3H-P</b>	<b>12ZR-8M-P</b>	16.5	19.5	2,000
13	<b>13ZR-3H-P</b>	<b>13ZR-8M-P</b>	18.0	21.0	2,000

### Material and Finish

Contact: Phosphor bronze, tin-plated (reflow treatment)  
Housing: Glass-filled PA 66, UL94V-0

### RoHS compliance

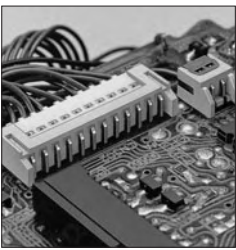
Note: Not TÜV approved.

<For reference> As the color identification,  
the following alphabet shall be put in the underlined part.  
For availability, delivery and minimum order quantity, contact JST.

ex. **02ZR-3H-P**  
standard color AWG#30: H...gray  
AWG#28: M...green  
K...black R...red E...blue

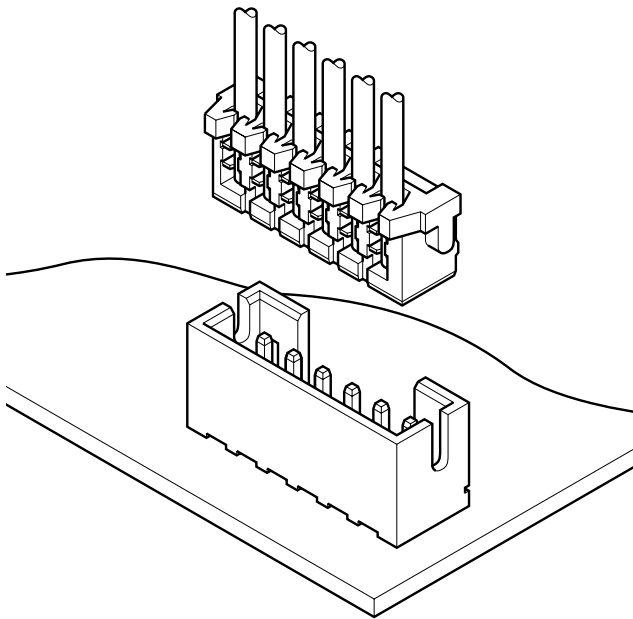
## Shrouded header

The shrouded headers are interchangeable with those of the ZH crimp style connectors.



# KR CONNECTOR

2.0mm pitch/Disconnectable Insulation displacement connectors



The KR connector features a mounting height as low as 6.9mm and a thickness as thin as 4.8mm (for top entry type). It is suitable for interconnection of a wide range of electronic equipment such as VCRs, video cameras, car stereo systems and communication equipment.

- **Folded beam double-leaf contact construction**
- **Twin U-slot insulation displacement section**
- **Strain relief**
- **Compatible with the PH crimp style connector**
- **Surface mount model (SMT)**

## Specifications

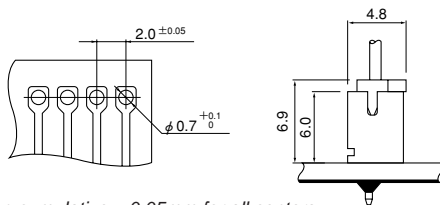
- Current rating: 1.0A AC, DC (AWG #26)
- Voltage rating: 100V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/10m Ω max.  
After environmental testing/20m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 800V AC/minute
- Applicable wire: UL1571, 1061 (Contact JST for details regarding other UL styles.)  
AWG #28 to #26  
Conductor/7 strands, tin-coated  
Insulation O.D./0.9 to 1.0mm  
(The standard applicable wire for connectors having 13 circuits or more is UL 1061.)
- Applicable panel thickness: 0.8 to 1.6mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

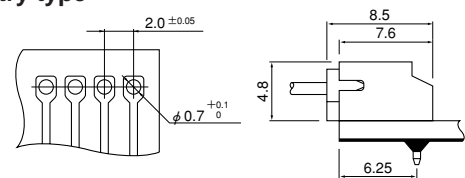
- Ⓜ Recognized E60389
- Ⓢ Certified LR20812
- ⚠ R75088

### Through-hole type PC board layout (viewed from soldering side) and Assembly layout

#### Top entry type



#### Side entry type



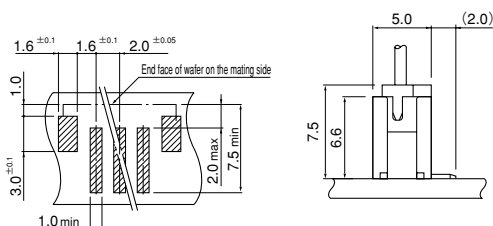
Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.

2. Hole dimensions differ according to the kind of PC board and piercing method. If PC board made of hard material are used, the hole dimensions should be larger. The hole dimensions above should serve as a guideline. Contact JST for details.

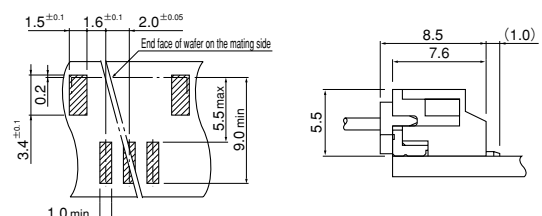
### SMT type PC board layout (viewed from component side) and Assembly layout

#### <SM4 type>

#### Top entry type



#### Side entry type

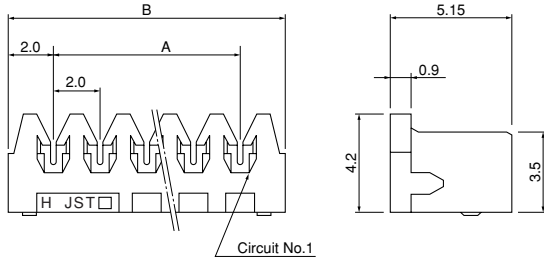


Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.

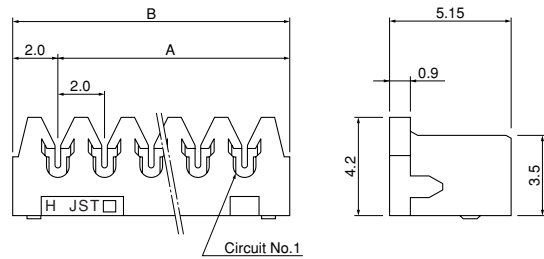
2. The dimensions above should serve as a guideline. Contact JST for details.

## Receptacle

### (2 to 12 circuits)



### (13 to 16 circuits)



Circuits	Model No.	Dimensions (mm)		Q'ty / box
	Normal type	A	B	
2	<b>02KR-6H-P</b>	2.0	6.0	2,000
3	<b>03KR-6H-P</b>	4.0	8.0	2,000
4	<b>04KR-6H-P</b>	6.0	10.0	2,000
5	<b>05KR-6H-P</b>	8.0	12.0	2,000
6	<b>06KR-6H-P</b>	10.0	14.0	2,000
7	<b>07KR-6H-P</b>	12.0	16.0	1,000
8	<b>08KR-6H-P</b>	14.0	18.0	1,000
9	<b>09KR-6H-P</b>	16.0	20.0	1,000
10	<b>10KR-6H-P</b>	18.0	22.0	1,000
11	<b>11KR-6H-P</b>	20.0	24.0	1,000
12	<b>12KR-6H-P</b>	22.0	26.0	1,000
13	<b>13KR-6H-P</b>	24.0	28.0	500
14	<b>14KR-6H-P</b>	26.0	30.0	500
15	<b>15KR-6H-P</b>	28.0	32.0	500
16	<b>16KR-6H-P</b>	30.0	34.0	500

#### Material and Finish

Contact: Phosphor bronze, tin-plated (reflow treatment)  
Housing: 2 to 12 circuits/PA 66, UL94V-0, gray  
13 to 16 circuits/Glass-filled PA 66, UL94V-0, gray

#### RoHS compliance

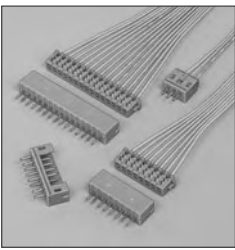
<For reference> As the color identification,  
the following alphabet shall be put in the underlined part.  
For availability, delivery and minimum order quantity, contact JST.

ex. **02KR-6H-P**

H...gray K...black E...blue R...red

## Shrouded header

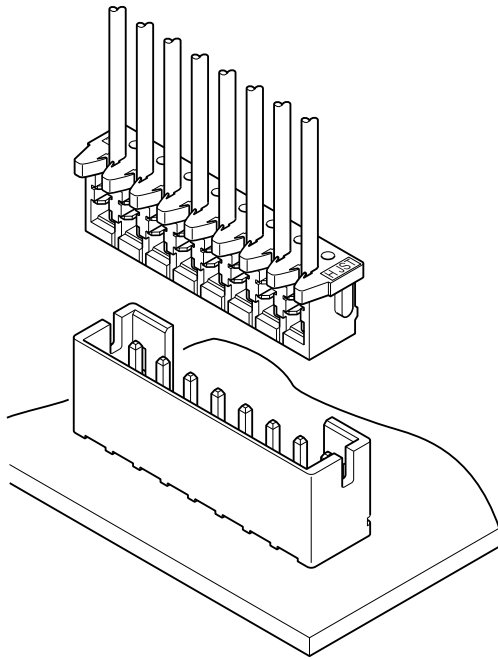
The shrouded headers are interchangeable with those of the PH crimp style connectors and CR and KRD insulation displacement connectors.



# CK CONNECTOR



**2.0mm pitch/Disconnectable Insulation displacement connectors**



**Multi-harness of CK connector (2.0mm) and CZ connector (1.5mm) combination has been realized. The in-line type IDC features low profile design with 6.9mm mounting height and 4.8mm thickness (top entry type).**

- UL10272 wire is applicable
- Folded beam double-leaf contact construction
- Twin U-slot insulation displacement section
- Strain relief

## Specifications

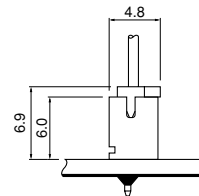
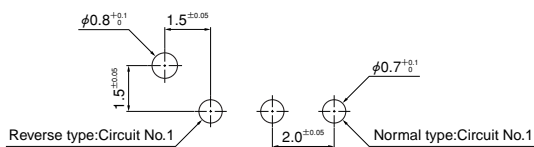
- Current rating: 2A AC, DC (AWG #26)
- Voltage rating: 100V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/10m Ω max.  
After environmental testing/20m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 800V AC/minute
- Applicable wire: UL1061, UL10272(Contact JST for details regarding other UL styles.)  
AWG #28, #26  
Conductor/tin-plated annealed copper strands  
Insulation O.D./0.75 to 1.05mm
- Applicable PC board thickness: 0.8 to 1.6mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

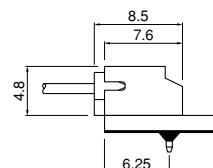
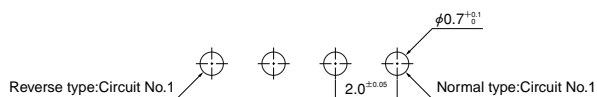
- Ⓜ Recognized E60389
- Ⓢ Certified LR20812

## PC board layout (viewed from component side) and Assembly layout

### Top entry type



### Side entry type

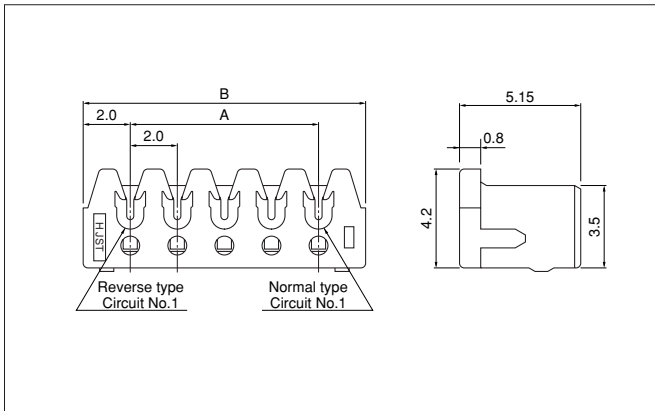


Note: 1. Tolerances are non-cumulative:  $\pm 0.05\text{mm}$  for all centers.

2. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.



## Receptacle



Circuits	Model No.		Dimensions (mm)		Q'ty / box
	Normal type	Reverse type	A	B	
2	<b>02CK-6H-P</b>	<b>02CK-6H-PC</b>	2.0	6.0	2,000
3	<b>03CK-6H-P</b>	<b>03CK-6H-PC</b>	4.0	8.0	2,000
4	<b>04CK-6H-P</b>	<b>04CK-6H-PC</b>	6.0	10.0	2,000
5	<b>05CK-6H-P</b>	<b>05CK-6H-PC</b>	8.0	12.0	2,000
6	<b>06CK-6H-P</b>	<b>06CK-6H-PC</b>	10.0	14.0	2,000
7	<b>07CK-6H-P</b>	<b>07CK-6H-PC</b>	12.0	16.0	1,000
8	<b>08CK-6H-P</b>	<b>08CK-6H-PC</b>	14.0	18.0	1,000
9	<b>09CK-6H-P</b>	<b>09CK-6H-PC</b>	16.0	20.0	1,000
10	<b>10CK-6H-P</b>	<b>10CK-6H-PC</b>	18.0	22.0	1,000
11	<b>11CK-6H-P</b>	<b>11CK-6H-PC</b>	20.0	24.0	1,000
12	<b>12CK-6H-P</b>	<b>12CK-6H-PC</b>	22.0	26.0	1,000
13	<b>13CK-6H-P</b>	<b>13CK-6H-PC</b>	24.0	28.0	500
14	<b>14CK-6H-P</b>	<b>14CK-6H-PC</b>	26.0	30.0	500
15	<b>15CK-6H-P</b>	<b>15CK-6H-PC</b>	28.0	32.0	500

### Material and Finish

Contact: Copper alloy, tin-plated (reflow treatment)  
Housing: Glass-filled PA 66

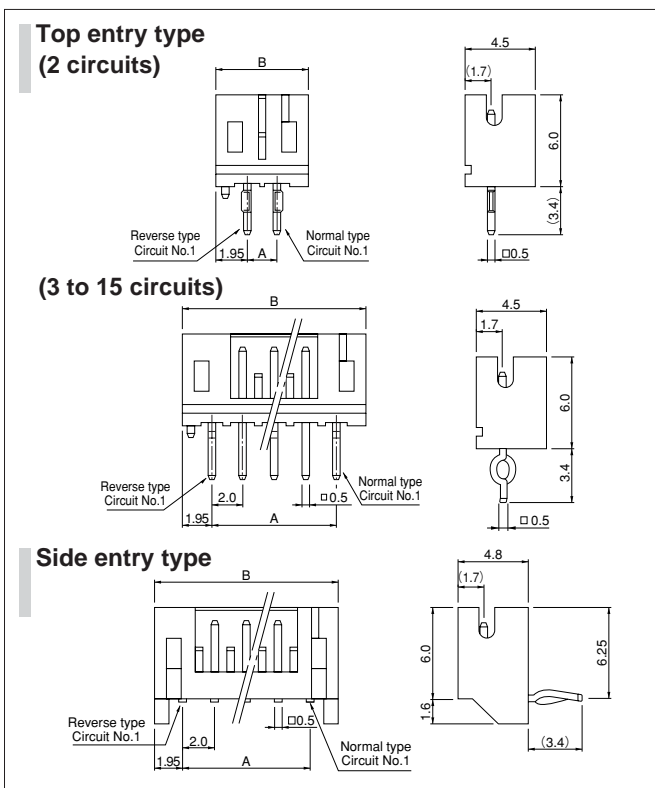
### RoHS compliance

<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. **02CK-6H-P**

H...gray Y...yellow R...red N...brown

## Single-row shrouded header (Through-hole type)



Circuits	Model No.				Dimensions (mm)		Q'ty / box	
	Normal type		Reverse type		A	B	Top entry type	Side entry type
2	<b>B2B-PH-KBL-H</b>	<b>S2B-PH-KL</b>	<b>B2B-PH-KBLC-H</b>	<b>S2B-PH-KLC-H</b>	2.0	5.9	1,000	1,000
3	<b>B3B-PH-KBL-H</b>	<b>S3B-PH-KL</b>	<b>B3B-PH-KBLC-H</b>	<b>S3B-PH-KLC-H</b>	4.0	7.9	1,000	1,000
4	<b>B4B-PH-KBL-H</b>	<b>S4B-PH-KL</b>	<b>B4B-PH-KBLC-H</b>	<b>S4B-PH-KLC-H</b>	6.0	9.9	1,000	500
5	<b>B5B-PH-KBL-H</b>	<b>S5B-PH-KL</b>	<b>B5B-PH-KBLC-H</b>	<b>S5B-PH-KLC-H</b>	8.0	11.9	1,000	500
6	<b>B6B-PH-KBL-H</b>	<b>S6B-PH-KL</b>	<b>B6B-PH-KBLC-H</b>	<b>S6B-PH-KLC-H</b>	10.0	13.9	1,000	500
7	<b>B7B-PH-KBL-H</b>	<b>S7B-PH-KL</b>	<b>B7B-PH-KBLC-H</b>	<b>S7B-PH-KLC-H</b>	12.0	15.9	500	500
8	<b>B8B-PH-KBL-H</b>	<b>S8B-PH-KL</b>	<b>B8B-PH-KBLC-H</b>	<b>S8B-PH-KLC-H</b>	14.0	17.9	500	250
9	<b>B9B-PH-KBL-H</b>	<b>S9B-PH-KL</b>	<b>B9B-PH-KBLC-H</b>	<b>S9B-PH-KLC-H</b>	16.0	19.9	500	250
10	<b>B10B-PH-KBL-H</b>	<b>S10B-PH-KL</b>	<b>B10B-PH-KBLC-H</b>	<b>S10B-PH-KLC-H</b>	18.0	21.9	500	250
11	<b>B11B-PH-KBL-H</b>	<b>S11B-PH-KL</b>	<b>B11B-PH-KBLC-H</b>	<b>S11B-PH-KLC-H</b>	20.0	23.9	500	250
12	<b>B12B-PH-KBL-H</b>	<b>S12B-PH-KL</b>	<b>B12B-PH-KBLC-H</b>	<b>S12B-PH-KLC-H</b>	22.0	25.9	500	250
13	<b>B13B-PH-KBL-H</b>	<b>S13B-PH-KL</b>	<b>B13B-PH-KBLC-H</b>	<b>S13B-PH-KLC-H</b>	24.0	27.9	250	250
14	<b>B14B-PH-KBL-H</b>	<b>S14B-PH-KL</b>	<b>B14B-PH-KBLC-H</b>	<b>S14B-PH-KLC-H</b>	26.0	29.9	250	200
15	<b>B15B-PH-KBL-H</b>	<b>S15B-PH-KL</b>	<b>B15B-PH-KBLC-H</b>	<b>S15B-PH-KLC-H</b>	28.0	31.9	250	200

### Material and Finish

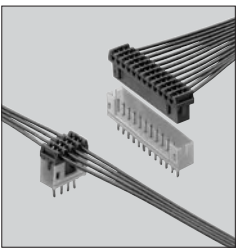
Post: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
Housing: PA 66, UL94V-0, gray

**RoHS compliance** This product displays (LF)(SN) on a label. Note: Top entry type headers without bosses are also available.

<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. **B2B-PH-KBLC-H**

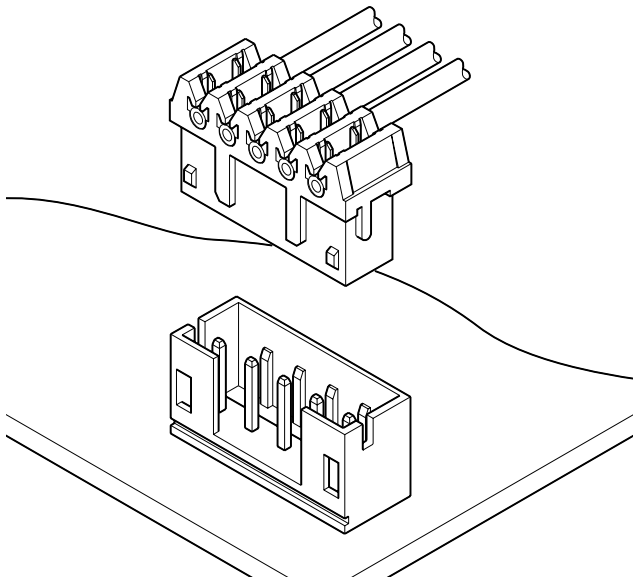
H...gray Y...yellow R...red N...brown  
(blank)...gray (normal side entry type only)



# KRD CONNECTOR



**2.0mm pitch/Disconnectable Insulation displacement connectors**



**This 2.0mm pitch insulation displacement connector is another version of the NRD connector for printed circuit boards. The KRD connector allows daisy chaining and is very useful in simplifying connection systems in electronic equipment.**

- **Daisy chain connection**
- **Twin slot insulation displacement section**
- **Distortion resistant construction**
- **Interchangeability**
- **Low profile design - a mere 9.0mm high from the PC board surface**

## Specifications

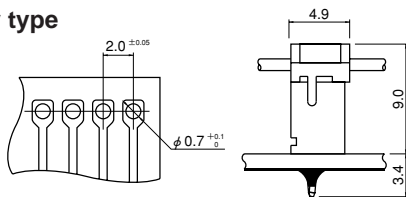
- Current rating: 1.0A AC, DC (AWG #26)
- Voltage rating: 100V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/10m Ω max.  
After environmental testing/20m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 800V AC/minute
- Applicable wire: UL1571, UL1061 (Contact JST for details regarding other UL styles.)  
AWG #28, #26  
Conductor/7 strands, tin-coated  
Insulation O.D./0.9 to 1.0mm
- Applicable PC board thickness: 0.8 to 1.6mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

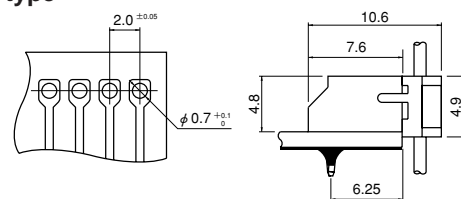
- Ⓜ Recognized E60389
- Ⓢ Certified LR20812

### Through-hole type PC board layout (viewed from soldering side) and Assembly layout

#### Top entry type



#### Side entry type



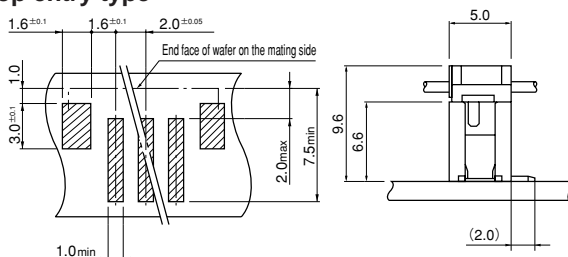
Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.

2. Hole dimensions differ according to the kind of PC boards and piercing method. If PC boards made of hard material are used, the hole dimensions should be larger. The dimensions above should serve as a guideline. Contact JST for details.

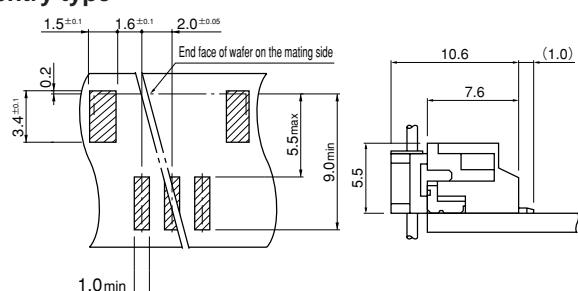
### SMT type PC board layout (viewed from component side) and Assembly layout

#### <SM4 type>

#### Top entry type



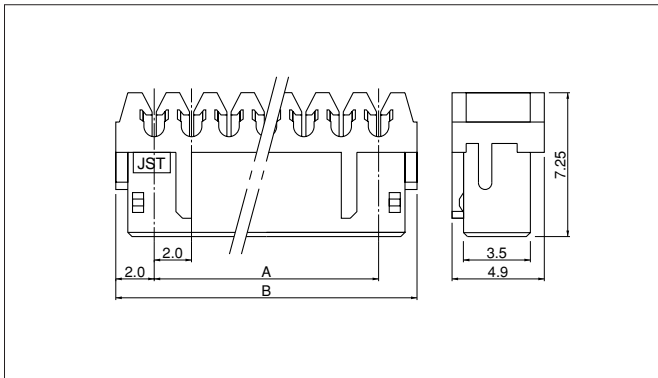
#### Side entry type



Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.

2. The dimensions above should serve as a guideline. Contact JST for details.

## Receptacle



Cir- cuits	Model No.		Dimensions (mm)		Q'ty / box
	AWG #28(green)	AWG #26(natural/white)	A	B	
2	<b>02KR-D8M-P</b>	<b>02KR-D6S-P</b>	2.0	6.0	2,000
3	<b>03KR-D8M-P</b>	<b>03KR-D6S-P</b>	4.0	8.0	2,000
4	<b>04KR-D8M-P</b>	<b>04KR-D6S-P</b>	6.0	10.0	2,000
5	<b>05KR-D8M-P</b>	<b>05KR-D6S-P</b>	8.0	12.0	1,000
6	<b>06KR-D8M-P</b>	<b>06KR-D6S-P</b>	10.0	14.0	1,000
7	<b>07KR-D8M-P</b>	<b>07KR-D6S-P</b>	12.0	16.0	1,000
8	<b>08KR-D8M-P</b>	<b>08KR-D6S-P</b>	14.0	18.0	1,000
9	<b>09KR-D8M-P</b>	<b>09KR-D6S-P</b>	16.0	20.0	500
10	<b>10KR-D8M-P</b>	<b>10KR-D6S-P</b>	18.0	22.0	500
11	<b>11KR-D8M-P</b>	<b>11KR-D6S-P</b>	20.0	24.0	500
12	<b>12KR-D8M-P</b>	<b>12KR-D6S-P</b>	22.0	26.0	500
13	<b>13KR-D8M-P</b>	<b>13KR-D6S-P</b>	24.0	28.0	500
14	<b>14KR-D8M-P</b>	<b>14KR-D6S-P</b>	26.0	30.0	500
15	<b>15KR-D8M-P</b>	<b>15KR-D6S-P</b>	28.0	32.0	500
16	<b>16KR-D8M-P</b>	<b>16KR-D6S-P</b>	30.0	34.0	500

### Material and Finish

Contact: Phosphor bronze, tin-plated (reflow treatment)  
Housing: PA 66, UL94V-0

### RoHS compliance

<For reference> As the color identification,  
the following alphabet shall be put in the underlined part.  
For availability, delivery and minimum order quantity, contact JST.

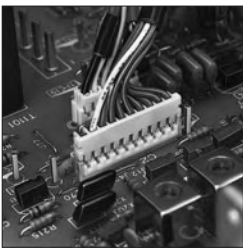
ex. **02KR-D6S-P**

S...natural (white) [standard color for AWG#26]

M...green [standard color for AWG#28]

## Shrouded header

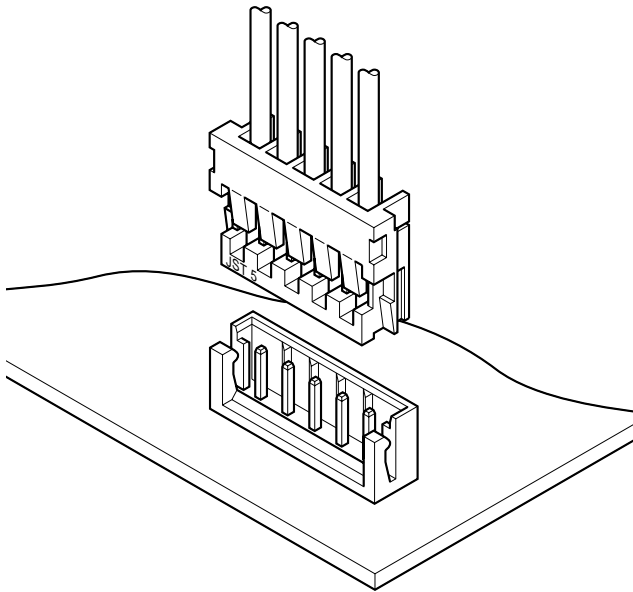
The shrouded headers are interchangeable with the PH crimp style connectors and with CR and KR insulation displacement connectors.



# HR CONNECTOR



**2.5mm pitch/Disconnectable Insulation displacement connectors**



**This 2.5mm pitch connector for printed circuit boards has a thin construction. The in-line method provides high-density capability to the end user.**

- Twin U-slot insulation displacement section
- Thin design
- High reliability
- Strain relief
- Interchangeability

## Specifications

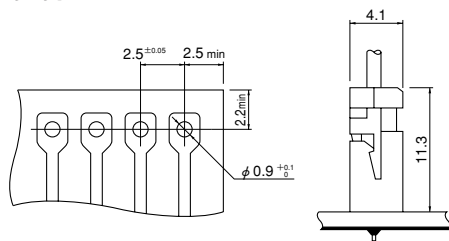
- Current rating: 2A AC, DC (AWG #24)
- Voltage rating: 250V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/10m Ω max.  
After environmental testing/20m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 1,000V AC/minute
- Applicable wire: UL1007(Contact JST for details regarding other UL styles.)  
AWG #28, #26, #24  
Conductor/7 strands, tin-coated  
Insulation O.D./1.0 to 1.5mm
- Applicable PC board thickness: 0.8 to 1.6mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

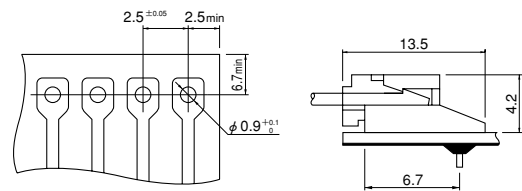
- Ⓜ Recognized E60389
- Ⓢ Certified LR20812
- ⚠ R50082349

## PC board layout (viewed from soldering side) and Assembly layout

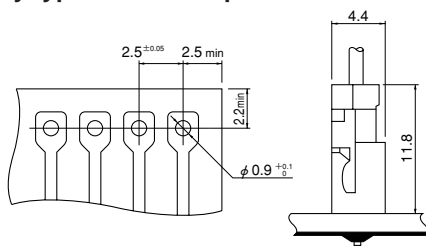
### Top entry type



### Side entry type



### Top entry type on radial-tape

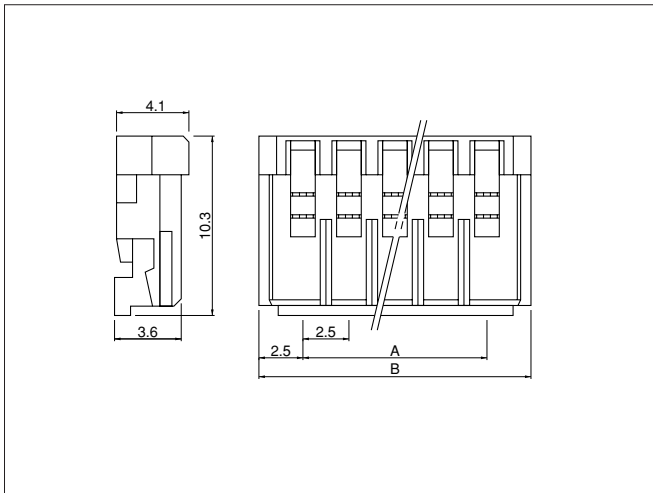


Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.

2. Hole dimensions differ according to the kind of PC board and piercing method. If PC boards made of hard material are used, the hole dimensions should be larger. The dimensions above should serve as a guideline. Contact JST for details.

# HR CONNECTOR

## Receptacle



Cir- cuits	Model No.			Dimensions (mm)		Qty / box
	AWG #28 (green)	AWG #26 (natural/white)	AWG #24 (black)	A	B	
2	<b>02HR-8M-P-N</b>	<b>02HR-6S-P-N</b>	<b>02HR-4K-P-N</b>	2.5	7.5	1,000
3	<b>03HR-8M-P-N</b>	<b>03HR-6S-P-N</b>	<b>03HR-4K-P-N</b>	5.0	10.0	1,000
4	<b>04HR-8M-P-N</b>	<b>04HR-6S-P-N</b>	<b>04HR-4K-P-N</b>	7.5	12.5	1,000
5	<b>05HR-8M-P-N</b>	<b>05HR-6S-P-N</b>	<b>05HR-4K-P-N</b>	10.0	15.0	1,000
6	<b>06HR-8M-P-N</b>	<b>06HR-6S-P-N</b>	<b>06HR-4K-P-N</b>	12.5	17.5	1,000
7	<b>07HR-8M-P-N</b>	<b>07HR-6S-P-N</b>	<b>07HR-4K-P-N</b>	15.0	20.0	500
8	<b>08HR-8M-P-N</b>	<b>08HR-6S-P-N</b>	<b>08HR-4K-P-N</b>	17.5	22.5	500
9	<b>09HR-8M-P-N</b>	<b>09HR-6S-P-N</b>	<b>09HR-4K-P-N</b>	20.0	25.0	500
10	<b>10HR-8M-P-N</b>	<b>10HR-6S-P-N</b>	<b>10HR-4K-P-N</b>	22.5	27.5	500
11	<b>11HR-8M-P-N</b>	<b>11HR-6S-P-N</b>	<b>11HR-4K-P-N</b>	25.0	30.0	500
12	<b>12HR-8M-P-N</b>	<b>12HR-6S-P-N</b>	<b>12HR-4K-P-N</b>	27.5	32.5	500
13	<b>13HR-8M-P-N</b>	<b>13HR-6S-P-N</b>	<b>13HR-4K-P-N</b>	30.0	35.0	250
15	—	<b>15HR-6S-P-N</b>	<b>15HR-4K-P-N</b>	35.0	40.0	250

### Material and Finish

Contact: copper alloy, tin-plated (reflow treatment)  
Housing: PA 66, UL94V-0

Note: 1. Not TÜV approved.  
2. 15HR-6S-P-N and 15HR-4K-P-N are not also UL/CSA approved.

<For reference> As the color identification,  
the following alphabet shall be put in the underlined part.  
For availability, delivery and minimum order quantity, contact JST.

ex. **02HR-4K-P-N**  
standard color AWG#28: M...green, AWG#26: S...natural (white)  
AWG#24: K...black  
R...red TR...tomato red Y...yellow L...lemon yellow  
N...brown E...blue O...orange

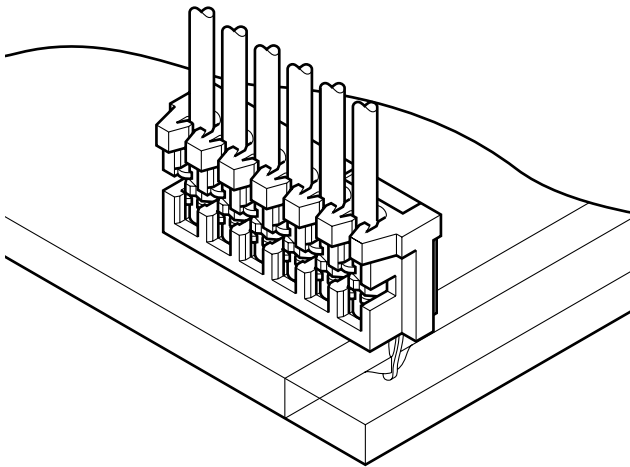
## Shrouded header

The shrouded headers are interchangeable with those of the EH and HR crimp style connectors.



# ZA CONNECTOR

1.5mm pitch/Board-in Insulation displacement connectors



*This newly designed insulation displacement board-in connector features twin slots provided at the insulation displacement section. This is the most important section of the insulation displacement connector contact, and has an insulation barrel located between the twin slots. The insulation barrel firmly grips and secures the wire during insulation displacement connection to protect the insulation displacement section from possible damage. Due to significant increases in connection reliability, insulation displacement connection has become possible with this 1.5mm pitch board-in connector.*

- Compact, direct mounting 1.5mm pitch insulation displacement board-in connector
- Twin-slot insulation displacement section
- Insulation barrel construction
- 3-point grip construction

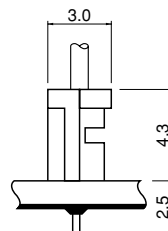
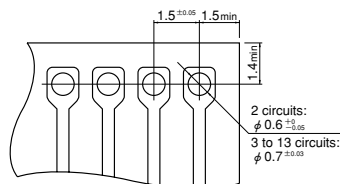
## Specifications

- Current rating: 0.7A AC, DC (AWG #28)
- Voltage rating: 50V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Insulation resistance: 500M Ω min.
- Withstanding voltage: 500V AC/minute
- Applicable wire: UL1571 (Contact JST for details regarding other UL styles.)  
AWG #30, #28  
(Contact JST if AWG #30 wire is to be used.)  
Conductor/7 strands, tin-coated  
Insulation O.D./0.7 to 0.8mm  
(Contact JST for diameters greater than 0.8mm)
- Applicable PC board thickness: 0.6 to 1.2mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

- Ⓜ Recognized E60389
- Ⓢ Certified LR20812

### PC board layout (viewed from soldering side) and Assembly layout

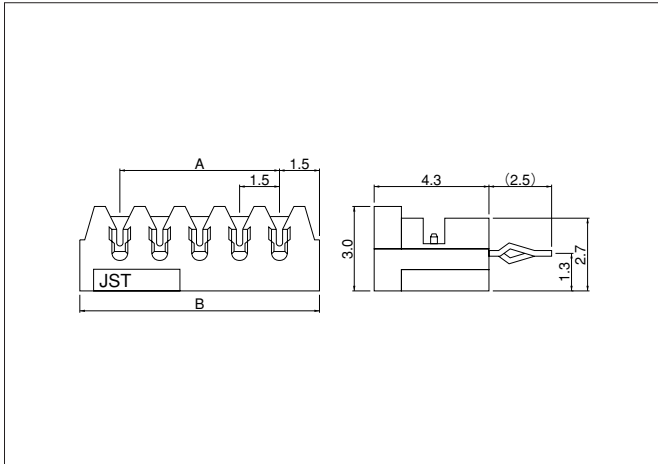


Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.  
2. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.

3. Pulling or otherwise putting a strain on the harness attached to the connector before the solder has completely cooled can dislodge the connector or cause its misalignment.
4. Do not reuse connectors that were previously soldered and then removed from a PC board.

# ZA CONNECTOR

## Connector



Cir- cuits	Model No.		Dimensions (mm)		Q'ty / box
	AWG #30(natural/gray)	AWG #28(green)	A	B	
2	<b>02ZA-3H</b>	<b>02ZA-8M</b>	1.5	4.5	2,000
3	<b>03ZA-3H</b>	<b>03ZA-8M</b>	3.0	6.0	2,000
4	<b>04ZA-3H</b>	<b>04ZA-8M</b>	4.5	7.5	2,000
5	<b>05ZA-3H</b>	<b>05ZA-8M</b>	6.0	9.0	2,000
6	<b>06ZA-3H</b>	<b>06ZA-8M</b>	7.5	10.5	2,000
7	<b>07ZA-3H</b>	<b>07ZA-8M</b>	9.0	12.0	1,000
8	<b>08ZA-3H</b>	<b>08ZA-8M</b>	10.5	13.5	1,000
9	<b>09ZA-3H</b>	<b>09ZA-8M</b>	12.0	15.0	1,000
10	<b>10ZA-3H</b>	<b>10ZA-8M</b>	13.5	16.5	1,000
11	<b>11ZA-3H</b>	<b>11ZA-8M</b>	15.0	18.0	1,000
12	<b>12ZA-3H</b>	<b>12ZA-8M</b>	16.5	19.5	1,000
13	<b>13ZA-3H</b>	<b>13ZA-8M</b>	18.0	21.0	500

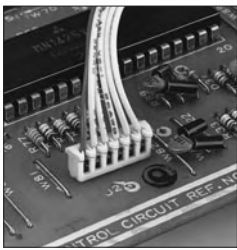
### Material and Finish

Contact: Phosphor bronze, copper-undercoated, tin-plated (reflow treatment)  
Housing: Glass-filled PA 66, UL94V-0

**RoHS compliance** This product displays (LF)(SN) on a label.  
Note: Contact JST if AWG #30 wire is to be used.

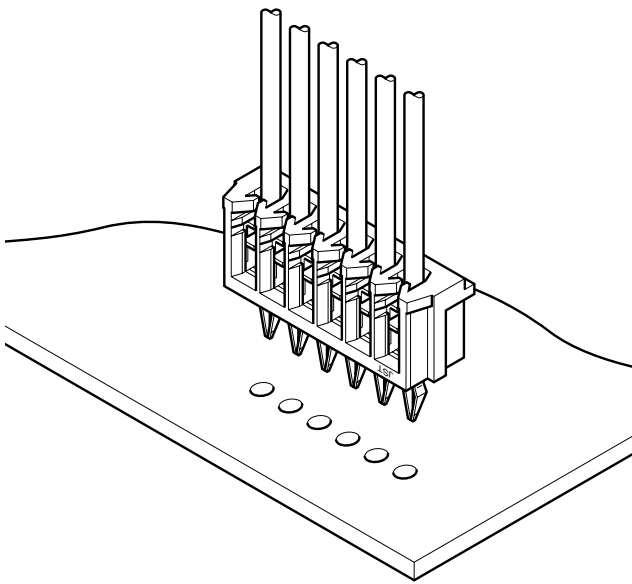
<For reference> As the color identification,  
the following alphabet shall be put in the underlined part.  
For availability, delivery and minimum order quantity, contact JST.

ex. **02ZA-3H**  
H...gray [standard color for AWG#30]  
M...green [standard color for AWG#28]



# DA CONNECTOR

2.0mm pitch/Board-in Insulation displacement connectors



**Measuring 2.0mm in pitch, 5.0mm in mounting height, and 4.0mm in thickness, this board-in connector is useful in miniaturizing the connections of small electronic products, such as VCRs, cameras, stereo systems, and car radios. This connector can be used by itself or in combination with the DR connector.**

- Compact and low profile
- Twin U-slot insulation displacement section
- Easy mounting onto printed circuit boards
- Strain relief
- Interchangeability

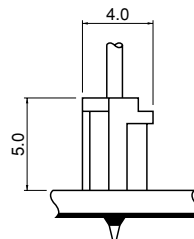
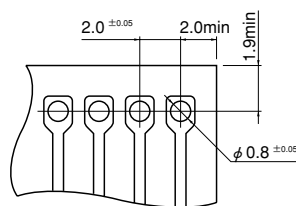
## Specifications

- Current rating: 1.0A AC, DC (AWG #26)
- Voltage rating: 100V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Insulation resistance: 1,000M  $\Omega$  min.
- Withstanding voltage: 800V AC/minute
- Applicable wire: UL1571, 1061(Contact JST for details regarding other UL styles.)  
AWG #28, #26  
Conductor/7 strands, tin-coated  
Insulation O.D./ 0.9 to 1.0mm
- Applicable PC board thickness: 1.2, 1.6mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

- Ⓜ Recognized E60389
- Ⓢ Certified LR20812

### PC board layout (viewed from soldering side) and Assembly layout



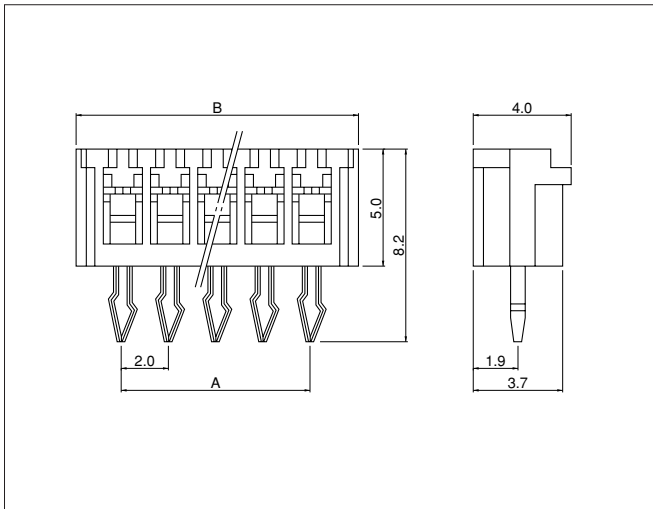
Note: 1. Tolerances are non-cumulative:  $\pm 0.05$ mm for all centers.  
2. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline.  
Contact JST for details.

3. Pulling or otherwise putting a strain on the harness attached to the connector before the solder has completely cooled can dislodge the connector or cause its misalignment.
4. Do not reuse any connectors that were previously soldered and then removed from a PC board.



# DA CONNECTOR

## Connector



Cir- cuits	Model No.		Dimensions (mm)		Qty / box
	AWG #28(green)	AWG #26(natural/white)	A	B	
2	<b>02DA-8M</b>	<b>02DA-6S</b>	2.0	5.9	2,000
3	<b>03DA-8M</b>	<b>03DA-6S</b>	4.0	7.9	2,000
4	<b>04DA-8M</b>	<b>04DA-6S</b>	6.0	9.9	1,000
5	<b>05DA-8M</b>	<b>05DA-6S</b>	8.0	11.9	1,000
6	<b>06DA-8M</b>	<b>06DA-6S</b>	10.0	13.9	1,000
7	<b>07DA-8M</b>	<b>07DA-6S</b>	12.0	15.9	1,000
8	<b>08DA-8M</b>	<b>08DA-6S</b>	14.0	17.9	1,000
9	<b>09DA-8M</b>	<b>09DA-6S</b>	16.0	19.9	500
10	<b>10DA-8M</b>	<b>10DA-6S</b>	18.0	21.9	500
11	<b>11DA-8M</b>	<b>11DA-6S</b>	20.0	23.9	500
12	<b>12DA-8M</b>	<b>12DA-6S</b>	22.0	25.9	500
13	<b>13DA-8M</b>	<b>13DA-6S</b>	24.0	27.9	500
14	<b>14DA-8M</b>	<b>14DA-6S</b>	26.0	29.9	500
15	<b>15DA-8M</b>	<b>15DA-6S</b>	28.0	31.9	250

### Material and Finish

Contact: Phosphor bronze, nickel-undercoated, tin-plated  
Housing: PA 66, UL94V-0

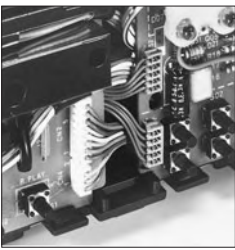
**RoHS compliance** This product displays (LF) on a label.

<For reference> As the color identification,  
the following alphabet shall be put in the underlined part.  
For availability, delivery and minimum order quantity, contact JST.

ex. **02DA-8M**

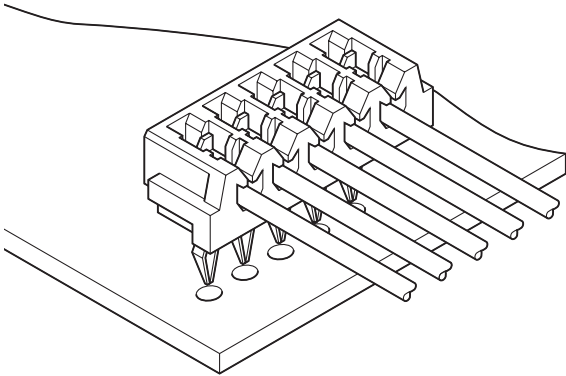
S...natural (white) [standerd color for AWG#26]

M...green [standerd color for AWG#28]



# DD/DS CONNECTOR

2.0mm pitch/Board-in Insulation displacement connectors



**The DD and DS right angle board-in insulation displacement connectors measure just 3.5mm in mounting height and 4.3mm in width.**

**Since these right angle connectors are connected to wires running parallel to the printed circuit board, electronic equipment can have a lower profile. These connectors are suited for the high density wiring of electronic products.**

- Compact and low profile
- Twin U-slot insulation displacement section
- Compliant locking solder tails
- Strain relief

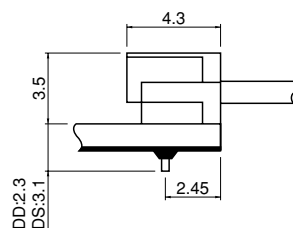
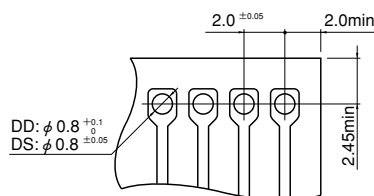
## Specifications

- Current rating: 0.7A AC, DC
  - Voltage rating: 100V AC, DC
  - Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
  - Insulation resistance: 1,000M  $\Omega$  min.
  - Withstanding voltage: 800V AC/minute
  - Applicable wire: UL1571, 1061 (Contact JST for diameters regarding other UL styles.)  
AWG #28  
Conductor/7 strands, tin-coated  
Insulation O.D./0.9mm
  - Applicable PC board thickness:  
DD connector: 0.8, 1.0mm  
DS connector: 1.2, 1.6mm
- \* RoHS compliant products are published.  
\* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.  
\* Contact JST for details.

## Standards

- Ⓜ Recognized E60389
- Ⓢ Certified LR20812

### PC board layout (viewed from soldering side) and Assembly layout

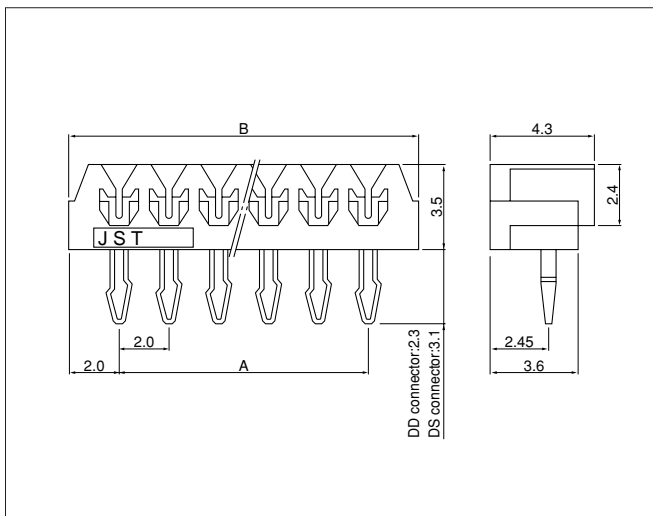


Note: 1. Tolerances are non-cumulative:  $\pm 0.05$ mm for all centers.  
2. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline.  
Contact JST for details.

3. Pulling or otherwise putting a strain on the harness attached to the connector before the solder has completely cooled can dislodge the connector or cause its misalignment.
4. Do not reuse any connectors that were previously soldered to and then removed from a PC board.

# DD/DS CONNECTOR

## Connector



Circuits	Model No.		Dimensions (mm)		Q'ty / box
	DD connector AWG #28(green)	DS connector AWG #28(blue)	A	B	
2	<b>02DD-8M</b>	<b>02DS-8E</b>	2.0	6.0	2,000
3	<b>03DD-8M</b>	<b>03DS-8E</b>	4.0	8.0	2,000
4	<b>04DD-8M</b>	<b>04DS-8E</b>	6.0	10.0	1,000
5	<b>05DD-8M</b>	<b>05DS-8E</b>	8.0	12.0	1,000
6	<b>06DD-8M</b>	<b>06DS-8E</b>	10.0	14.0	1,000
7	<b>07DD-8M</b>	<b>07DS-8E</b>	12.0	16.0	1,000
8	<b>08DD-8M</b>	<b>08DS-8E</b>	14.0	18.0	500
9	<b>09DD-8M</b>	<b>09DS-8E</b>	16.0	20.0	500
10	<b>10DD-8M</b>	<b>10DS-8E</b>	18.0	22.0	500
11	<b>11DD-8M</b>	<b>11DS-8E</b>	20.0	24.0	500
12	<b>12DD-8M</b>	<b>12DS-8E</b>	22.0	26.0	500
13	<b>13DD-8M</b>	<b>13DS-8E</b>	24.0	28.0	500
14	<b>14DD-8M</b>	<b>14DS-8E</b>	26.0	30.0	500
15	<b>15DD-8M</b>	<b>15DS-8E</b>	28.0	32.0	500

### Material and Finish

Contact: Phosphor bronze, copper-undercoated, tin-plated (reflow treatment)

Housing: 2 to 11 circuits/PA 66, UL94V-0

12 to 15 circuits/Glass-filled PA 66, UL94V-0

**RoHS compliance** This product displays (LF)(SN) on a label.

<For reference> As the color identification, the following alphabet shall be put in the underlined part.

For availability, delivery and minimum order quantity, contact JST.

ex. **02DD-8M**

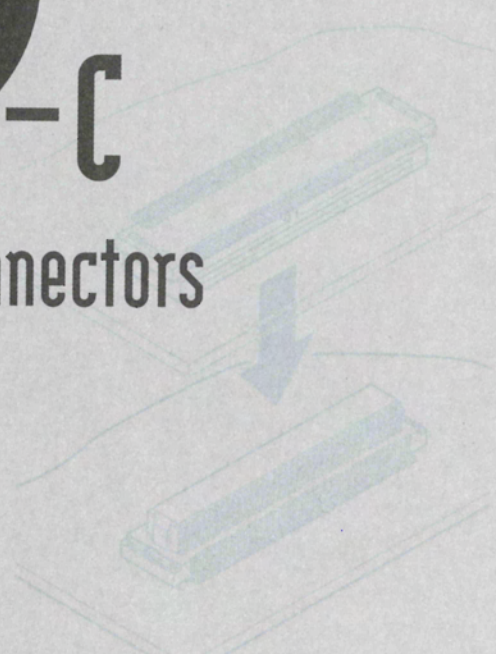
M...(DD connector) green

E...(DS connector) blue



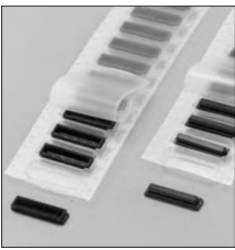
# 1-C

## Board to Board Connectors



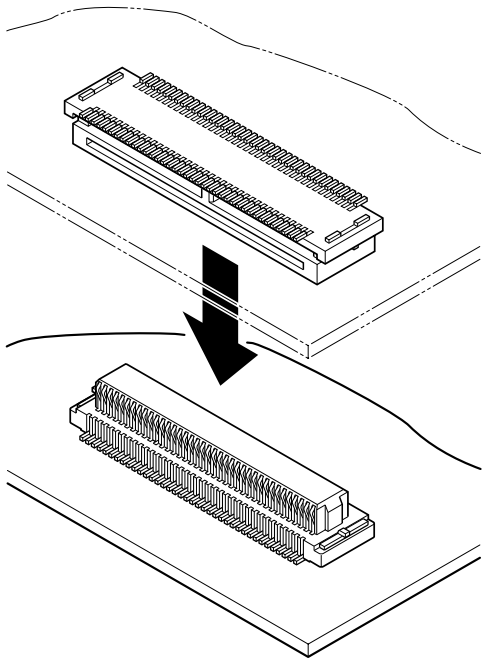
### TABLE OF CONTENTS

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# JAS CONNECTOR

0.4mm pitch/Board-to-board connectors



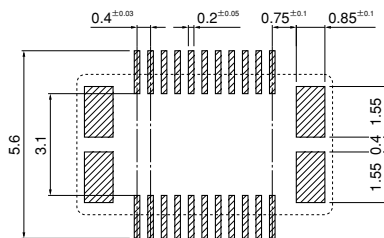
- **The plug housing is constructed of two separate parts. This allows the connector to be put under greater torsion strain than similar connectors without any damage being done to the solder joints.**
- **Both plug and receptacle have the double I type solder tabs, which reduces the stress by the distorted mating/unmating applied to the solder tails.**

## Specifications

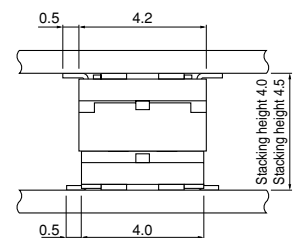
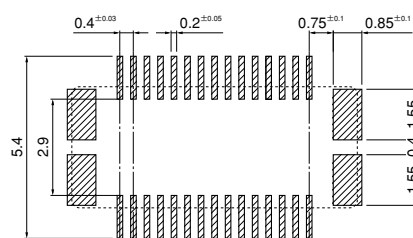
- Current rating: 0.3A AC,DC
- Voltage rating: 30V AC,DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/70m Ω max.  
After environmental testing/140m Ω max.
- Insulation resistance: 50M Ω min.
- Withstanding voltage: 100V AC/minute
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## PC board layout (viewed from component side) and Assembly layout

Plug



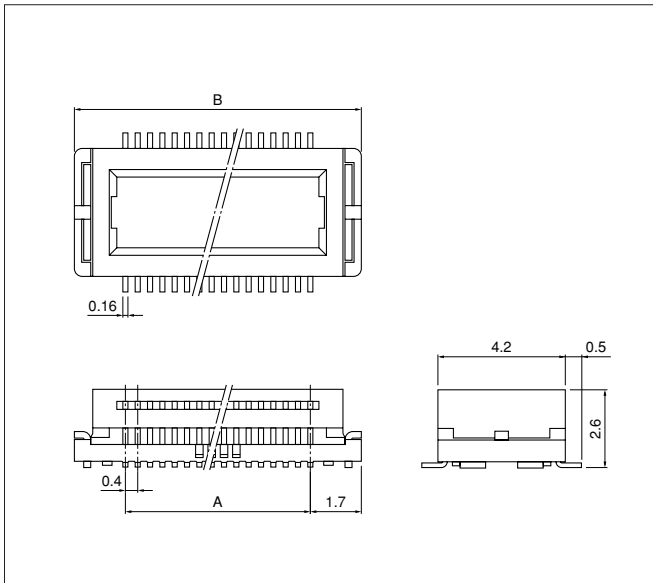
Receptacle



Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.  
2. The dimensions above should serve as a guideline. Contact JST for details.

# JAS CONNECTOR

## Plug



Circuits	Model No.	Dimensions (mm)		Q'ty / reel
		A	B	
80	<b>80P-JASKS-GE-TF</b>	15.6	19.0	2,500
100	<b>100P-JASKS-GE-TF</b>	19.6	23.0	2,500
120	<b>120P-JASKS-GE-TF2</b>	23.6	27.0	1,500

### Material and Finish

Contact: Phosphor bronze, nickel-undercoated, gold-plated

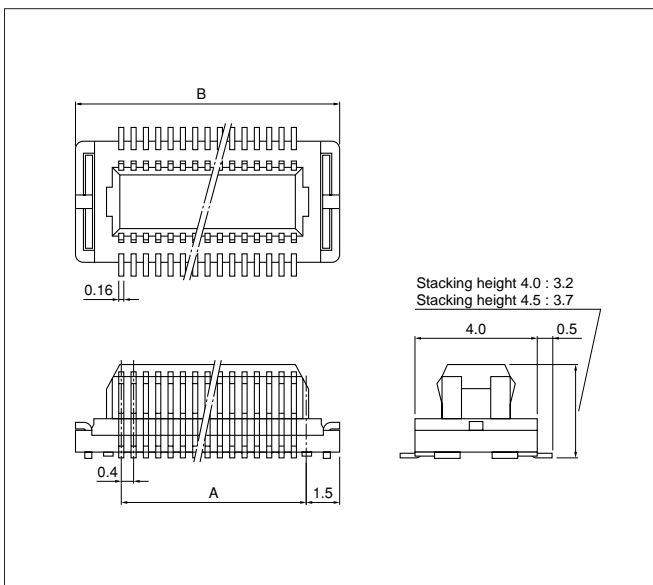
Housing: PPS, UL94V-0

Solder tab: Brass, copper-undercoated, tin-plated (reflow treatment)

**RoHS compliance** This product displays (LF)(SN) on a label.

Note: The products listed above are supplied on embossed-tape.

## Receptacle



Circuits	Model No.		Dimensions (mm)		Q'ty / reel
	Stacking height		A	B	
	4.0mm	4.5mm			
80	<b>80R-JASKS-GWAN-TF</b>	—	15.6	18.6	2,500
100	<b>100R-JASKS-GWAN-TF</b>	<b>100R4.5-JASKS-GWAN-TF</b>	19.6	22.6	2,500
120	—	<b>120R4.5-JASKS-GWAN-TF2</b>	23.6	26.6	1,500

### Material and Finish

Contact: Phosphor bronze, nickel-undercoated, gold-plated (nickel-stripe)

Housing: LCP, UL94V-0

Solder tab: Brass, copper-undercoated, tin-plated (reflow treatment)

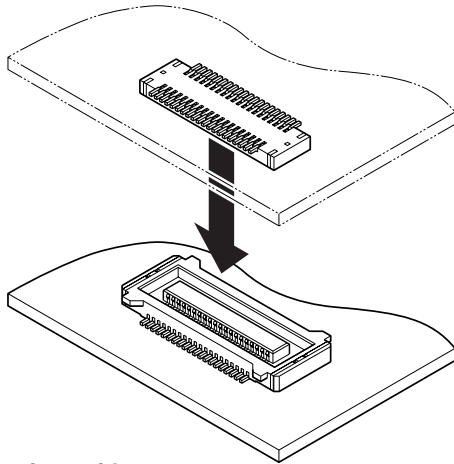
**RoHS compliance** This product displays (LF)(SN) on a label.

Note: The products listed above are supplied on embossed-tape.

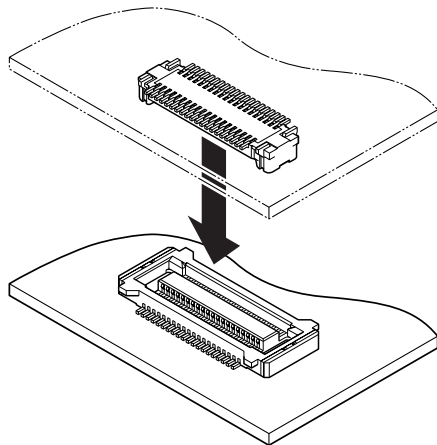


# JAV CONNECTOR

0.4mm pitch/Board-to-board connectors



With mating guide



0.4mm pitch, SMT, low profile connector with parallel connection.

- Fine pitch and extremely low profile
- Contact lock construction
- Flat surface
- Concentration contact structure with wiping action
- Mating connector inside box shaped plug and receptacle
- Solder going-up prevention

## JAV connector with mating guide

- Mating guide structure

## Specifications

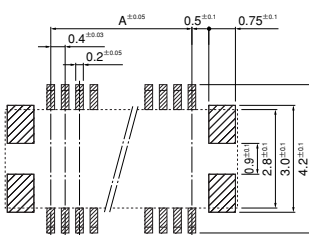
- Current rating: 0.3A AC, DC
- Voltage rating: 30V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/70m Ω max.  
After environmental testing/140m Ω max.
- Insulation resistance: 50M Ω min.
- Withstanding voltage: 100V AC/minute
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

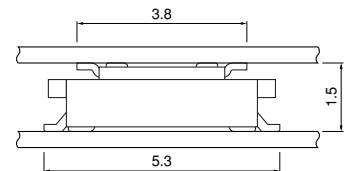
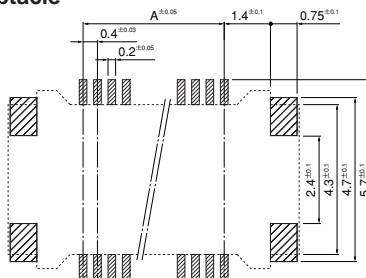
- Ⓜ Recognized E60389
- Ⓢ Certified LR20812

## PC board layout (viewed from component side) and Assembly layout

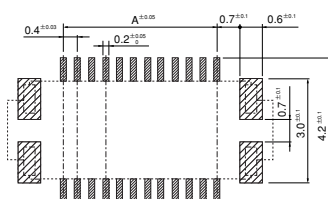
Plug



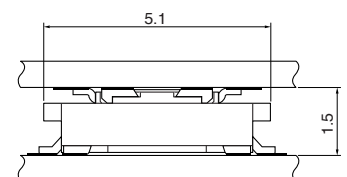
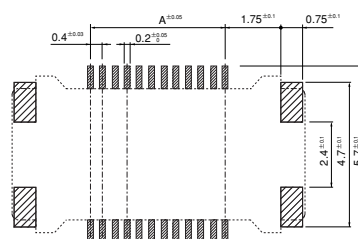
Receptacle



Plug/with mating guide



Receptacle/with mating guide

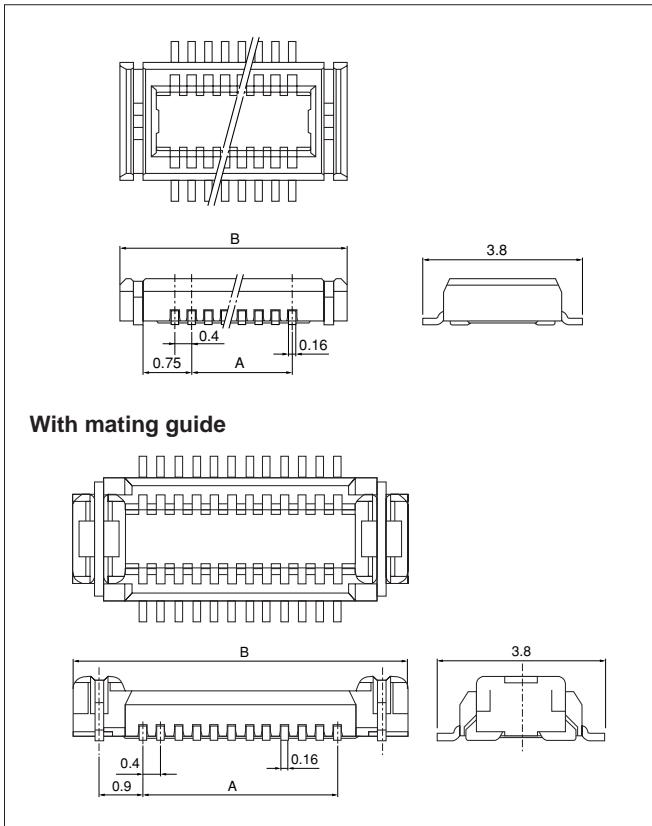


Note: 1. Tolerances are non-cumulative: ±0.03mm for all centers.  
2. The dimensions above should serve as a guideline. Contact JST for details.



# JAV CONNECTOR

## Plug



Circuits	Model No.	Dimensions (mm)		Q'ty/ reel
		A	B	
*20	<b>20PA-JAVK-GSAN-TF</b>	3.6	6.2	3,500
22	<b>22PA-JAVK-GSAN-TF</b>	4.0	6.6	3,500
26	<b>26PA-JAVK-GSAN-TF</b>	4.8	7.4	3,500
30	<b>30PA-JAVK-GSAN-TF</b>	5.6	8.2	3,500
40	<b>40PA-JAVK-GSAN-TF</b>	7.6	10.2	3,500
*70	<b>70PA-JAVK-GSAN-TF</b>	13.6	16.2	3,500

### Material and Finish

Contact: Phosphor bronze, nickel-undercoated, gold-plated (nickel-stripe)  
Housing: LCP, UL94V-0  
Solder tab: Brass, copper-undercoated, tin-plated (reflow treatment)

**RoHS compliance** This product displays (LF)(SN) on a label.  
Note: 1. The products listed above are supplied on embossed-tape.  
2. \*Marked products are not CSA approved.

### With mating guide

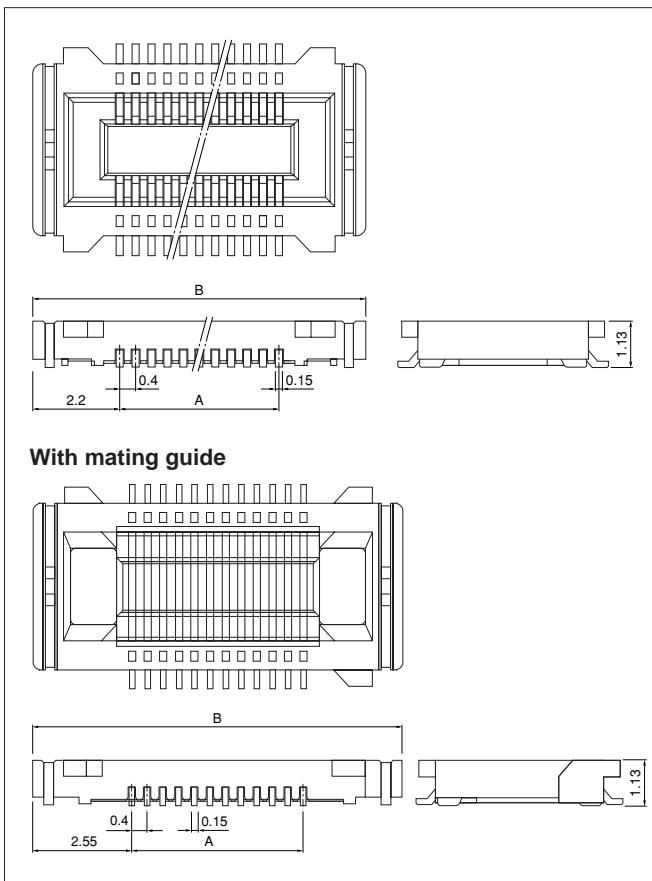
Circuits	Model No.	Dimensions (mm)		Q'ty/ reel
		A	B	
24	<b>24PA-JAVK-GSAN-1-TF</b>	4.4	7.6	3,000

### Material and Finish

Contact: Phosphor bronze, nickel-undercoated, gold-plated (nickel-stripe)  
Housing: LCP, UL94V-0  
Solder tab: Brass, copper-undercoated, tin-plated (reflow treatment)

**RoHS compliance** This product displays (LF)(SN) on a label.  
Note: The product listed above is supplied on embossed-tape.

## Receptacle



Circuits	Model No.	Dimensions (mm)		Q'ty/ reel
		A	B	
*20	<b>20R-JAVK-GSAN-TF</b>	3.6	8.0	3,500
22	<b>22R-JAVK-GSAN-TF</b>	4.0	8.4	3,500
26	<b>26R-JAVK-GSAN-TF</b>	4.8	9.2	3,500
30	<b>30R-JAVK-GSAN-TF</b>	5.6	10.0	3,500
40	<b>40R-JAVK-GSAN-TF</b>	7.6	12.0	3,500
*70	<b>70R-JAVK-GSAN-TF</b>	13.6	18.0	3,500

### Material and Finish

Contact: Phosphor bronze, nickel-undercoated, gold-plated (nickel-stripe)  
Housing: LCP, UL94V-0  
Solder tab: Brass, copper-undercoated, tin-plated (reflow treatment)

**RoHS compliance** This product displays (LF)(SN) on a label.  
Note: 1. The products listed above are supplied on embossed-tape.  
2. \*Marked products are not CSA approved.

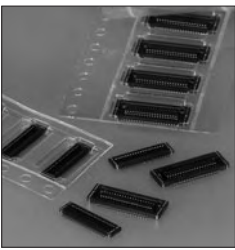
### With mating guide

Circuits	Model No.	Dimensions (mm)		Q'ty/ reel
		A	B	
24	<b>24R-JAVK-GSAN-1-TF</b>	4.4	9.5	3,500

### Material and Finish

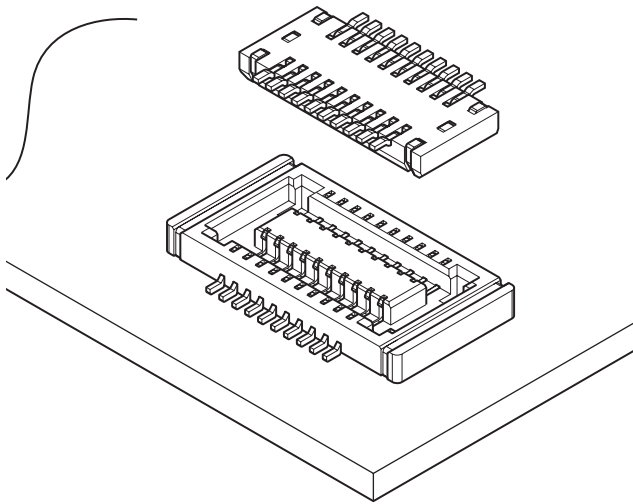
Contact: Phosphor bronze, nickel-undercoated, gold-plated (nickel-stripe)  
Housing: LCP, UL94V-0  
Solder tab: Brass, copper-undercoated, tin-plated (reflow treatment)

**RoHS compliance** This product displays (LF)(SN) on a label.  
Note: The product listed above is supplied on embossed-tape.



# JAN CONNECTOR

0.4mm pitch/Board-to-board connectors



**This JAN connector is a board-to-board connector with stacking height 1.0mm and 0.4mm pitch, which is the lowest-profile connector in the [electro mechanical component] industry.**

**In consideration of operability at user side, although it is 1.0mm low profile, when mating receptacle with plug, the connector structure, where the large amount of guiding connector can be taken, is adopted, and differentiates JAN connector with added value.**

- Locking mechanism of contact
- Wiping contact structure
- Reinforcement tabs

## Specifications

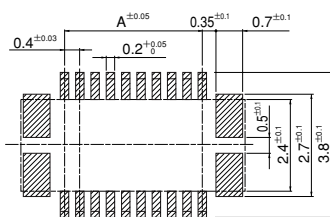
- Current rating: 0.2A AC, DC
- Voltage rating: 30V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/70m Ω max.  
After environmental testing/140m Ω max.
- Insulation resistance: 50M Ω min.
- Withstanding voltage: 100V AC/minute
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

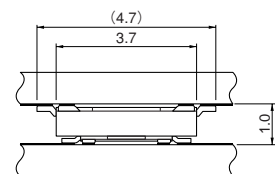
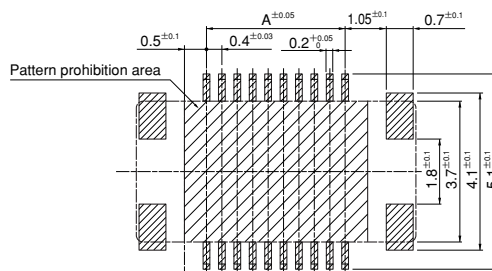
- Ⓜ Recognized E60389
- Ⓢ Certified LR20812

## PC board layout (viewed from component side) and Assembly layout

Plug



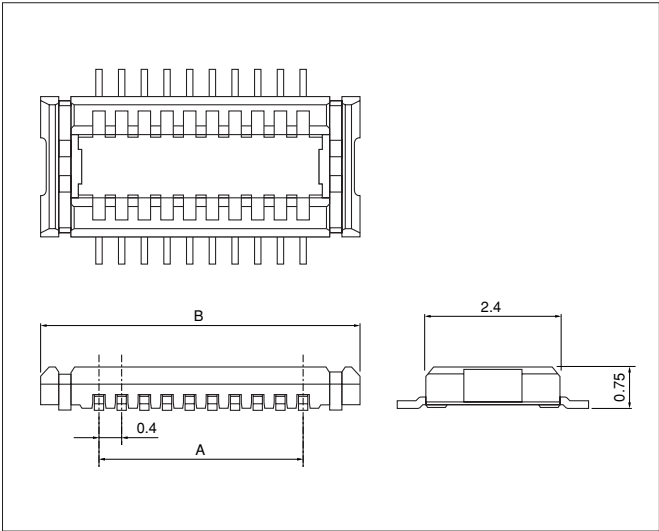
Receptacle



Note: 1. Tolerances are non-cumulative: ±0.03mm for all centers.  
2. The dimensions above should serve as a guideline. Contact JST for details.

# JAN CONNECTOR

## Plug



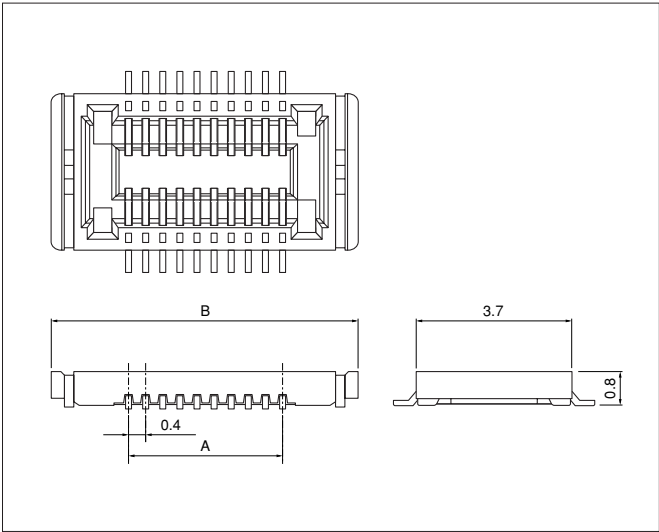
Circuits	Model No.	Dimensions (mm)		Q'ty / reel
		A	B	
20	<b>20P-JANK-GSAN-2-TF</b>	3.6	5.6	4,000
24	<b>24P-JANK-GSAN-2-TF</b>	4.4	6.4	4,000
34	<b>34P-JANK-GSAN-2-TF</b>	6.4	8.4	4,000
40	<b>40P-JANK-GSAN-2-TF</b>	7.6	9.6	4,000
60	<b>60P-JANK-GSAN-2-TF</b>	11.6	13.6	4,000

### Material and Finish

Contact: Phosphor bronze, nickel-undercoated, gold-plated (nickel-stripe)  
 Housing: LCP, UL94V-0  
 Solder tab: Brass, copper-undercoated, tin-plated (reflow treatment)

**RoHS compliance** This product displays (LF)(SN) on a label.  
 Note: The products listed above are supplied on embossed-tape.

## Receptacle



Circuits	Model No.	Dimensions (mm)		Q'ty / reel
		A	B	
20	<b>20R-JANK-GSAN-TF</b>	3.6	7.2	4,000
24	<b>24R-JANK-GSAN-TF</b>	4.4	8.0	4,000
34	<b>34R-JANK-GSAN-TF</b>	6.4	10.0	4,000
40	<b>40R-JANK-GSAN-TF</b>	7.6	11.2	4,000
60	<b>60R-JANK-GSAN-TF</b>	11.6	15.2	4,000

### Material and Finish

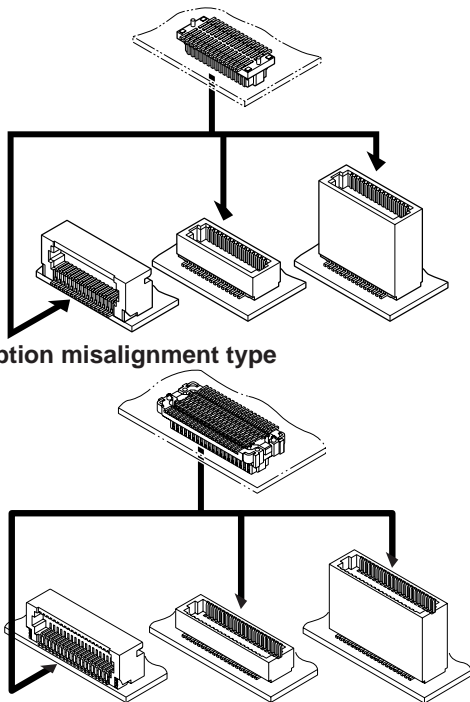
Contact: Phosphor bronze, nickel-undercoated, gold-plated (nickel-stripe)  
 Housing: LCP, UL94V-0  
 Solder tab: Brass, copper-undercoated, tin-plated (reflow treatment)

**RoHS compliance** This product displays (LF)(SN) on a label.  
 Note: The products listed above are supplied on embossed-tape.



# JMC CONNECTOR

0.5mm pitch/Board-to-board connectors



Absorption misalignment type

**This JMC connector is 0.5mm pitch SMT type board to board connector with selection of boss existence. Comparing with conventional JMC connector, more small and space saving are realized.**

- **Secure mating**
- **Distortion preventive construction**
- **Versatile number of circuit and height**
- **Absorbing misalignment when mating connector**

## Specifications

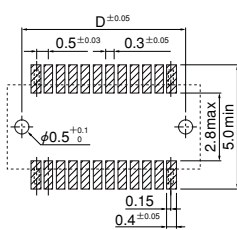
- Current rating: 0.5A AC, DC
- Voltage rating: 50V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/50m Ω max.  
After environmental testing/100m Ω max.
- Insulation resistance: 50M Ω min.
- Withstanding voltage: 100V AC/minute
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

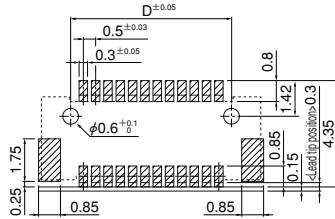
- Ⓜ Recognized E60389
- Ⓢ Certified LR20812

## PC board layout (viewed from component side) and Assembly layout

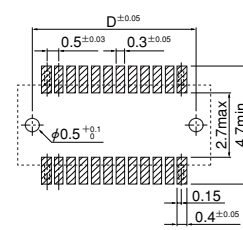
Plug: Top entry type



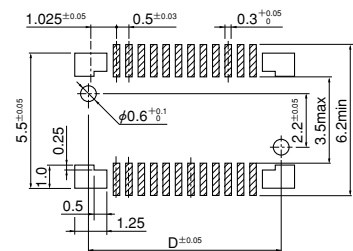
Plug: Side entry type



Receptacle



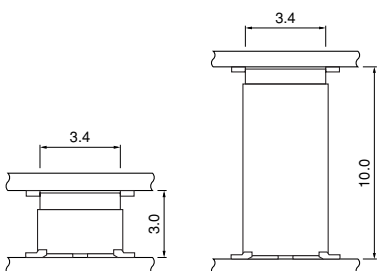
Absorption misalignment type



Note: 1. Tolerances are non-cumulative: ±0.03mm for all centers.  
2. The dimensions above should serve as a guideline. Contact JST for details.

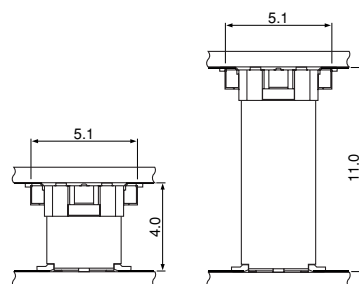
Top entry type

Stacking height: 3.0 to 10.0mm

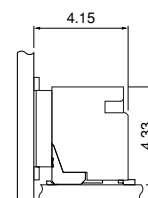


Absorption misalignment type

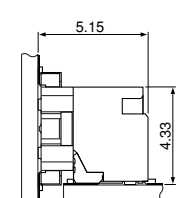
Stacking height: 4.0 to 11.0mm



Side entry type

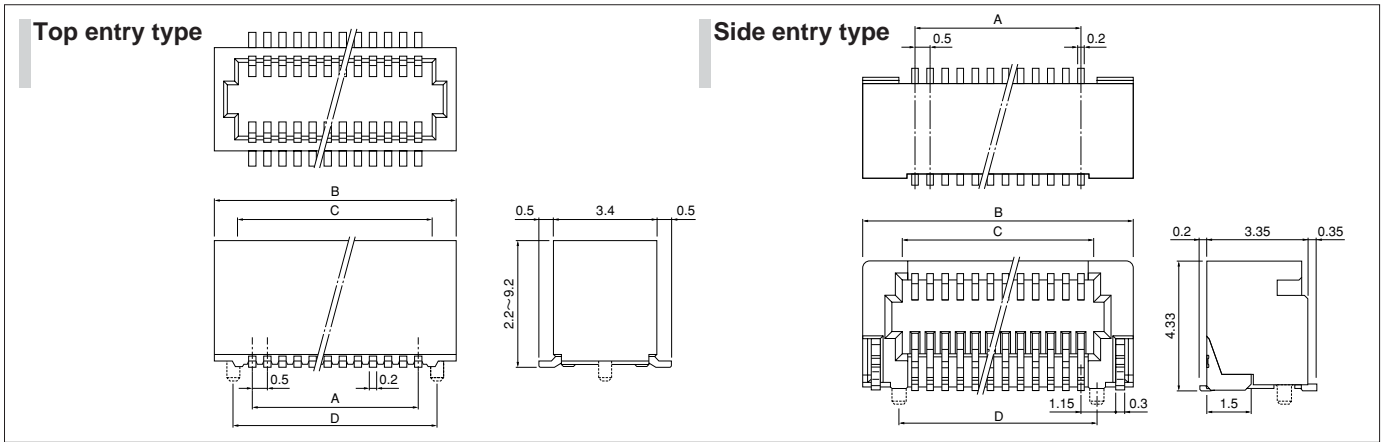


Absorption misalignment type



# JMC CONNECTOR

## Plug



### Top entry type

	Circuits	Model No. Stacking height (mm)				Dimensions (mm)			
		3.0	3.5	4.0	4.5	A	B	C	D
Without bosses	18	18P3.0-JMCS-G-TF	—	—	—	4.0	6.4	4.9	—
	20	20P3.0-JMCS-G-TF	20P3.5-JMCS-G-TF	—	20P4.5-JMCS-G-TF	4.5	6.9	5.4	—
	24	—	24P3.5-JMCS-G-TF	—	—	5.5	7.9	6.4	—
	30	30P3.0-JMCS-G-TF	30P3.5-JMCS-G-TF	30P4.0-JMCS-G-TF	—	7.0	9.4	7.9	—
	40	40P3.0-JMCS-G-TF	40P3.5-JMCS-G-TF	40P4.0-JMCS-G-TF	—	9.5	11.9	10.4	—
	50	50P3.0-JMCS-G-TF	—	—	—	12.0	14.4	12.9	—
With bosses	60	60P3.0-JMCS-G-TF	—	—	—	14.5	16.9	15.4	—
	20	20P3.0-JMCS-G-B-TF	20P3.5-JMCS-G-B-TF	—	20P4.5-JMCS-G-B-TF	4.5	6.9	5.4	5.7
	24	—	—	24P4.0-JMCS-G-B-TF	—	5.5	7.9	6.4	6.7
	30	—	30P3.5-JMCS-G-B-TF	30P4.0-JMCS-G-B-TF	—	7.0	9.4	7.9	8.2
	40	40P3.0-JMCS-G-B-TF	40P3.5-JMCS-G-B-TF	40P4.0-JMCS-G-B-TF	—	9.5	11.9	10.4	10.7
	44	44P3.0-JMCS-G-B-TF	—	—	—	10.5	12.9	11.4	11.7
	50	50P3.0-JMCS-G-B-TF	—	50P4.0-JMCS-G-B-TF	—	12.0	14.4	12.9	13.2
	60	—	—	60P4.0-JMCS-G-B-TF	—	14.5	16.9	15.4	15.7
	Q'ty / reel	2,500	2,000	2,000	1,500				

	Circuits	Model No. Stacking height (mm)				Dimensions (mm)			
		5.0	5.5	6.0	6.5	A	B	C	D
Without bosses	14	14P5.0-JMCS-G-TF	—	—	—	3.0	5.4	3.9	—
	20	20P5.0-JMCS-G-TF	20P5.5-JMCS-G-TF	20P6.0-JMCS-G-TF	—	4.5	6.9	5.4	—
	30	—	—	—	30P6.5-JMCS-G-TF	7.0	9.4	7.9	—
	40	40P5.0-JMCS-G-TF	—	—	—	9.5	11.9	10.4	—
	50	50P5.0-JMCS-G-TF	—	—	—	12.0	14.4	12.9	—
	60	—	60P5.5-JMCS-G-TF	—	—	14.5	16.9	15.4	—
With bosses	14	14P5.0-JMCS-G-B-TF	—	—	—	3.0	5.4	3.9	4.2
	20	20P5.0-JMCS-G-B-TF	20P5.5-JMCS-G-B-TF	20P6.0-JMCS-G-B-TF	—	4.5	6.9	5.4	5.7
	30	—	—	—	30P6.5-JMCS-G-B-TF	7.0	9.4	7.9	8.2
	40	40P5.0-JMCS-G-B-TF	—	40P6.0-JMCS-G-B-TF	40P6.5-JMCS-G-B-TF	9.5	11.9	10.4	10.7
	50	—	—	—	—	14.5	16.9	15.4	15.7
	60	60P5.0-JMCS-G-B-TF	—	60P6.0-JMCS-G-B-TF	—				
	Q'ty / reel	1,500	1,000	1,000	1,000				

	Circuits	Model No. Stacking height (mm)				Dimensions (mm)			
		7.0	7.5	8.0	8.5	A	B	C	D
Without bosses	20	20P7.0-JMCS-G-TF	—	—	—	4.5	6.9	5.4	—
	50	50P7.0-JMCS-G-TF	—	—	—	12.0	14.4	12.9	—
	34	—	—	—	34P8.5-JMCS-G-B-TF	8.0	10.4	8.9	9.2
With bosses	50	50P7.0-JMCS-G-B-TF	50P7.5-JMCS-G-B-TF	50P8.0-JMCS-G-B-TF	—	12.0	14.4	12.9	13.2
	64	—	—	64P8.0-JMCS-G-B-TF	—	15.5	17.9	16.4	16.7
	Q'ty / reel	1,000	600	600	500				

	Circuits	Model No. Stacking height (mm)				Dimensions (mm)			
		9.0	10.0	—	—	A	B	C	D
Without bosses	20	—	20P10.0-JMCS-G-TF	—	—	4.5	6.9	5.4	—
	30	30P9.0-JMCS-G-TF	—	—	—	7.0	9.4	7.9	—
	50	50P9.0-JMCS-G-TF	—	—	—	12.0	14.4	12.9	—
With bosses	20	—	20P10.0-JMCS-G-B-TF	—	—	4.5	6.9	5.4	5.7
	30	30P9.0-JMCS-G-B-TF	—	—	—	7.0	9.4	7.9	8.2
	40	40P9.0-JMCS-G-B-TF	40P10.0-JMCS-G-B-TF	—	—	9.5	11.9	10.4	10.7
	50	50P9.0-JMCS-G-B-TF	—	—	—	12.0	14.4	12.9	13.2
	60	60P9.0-JMCS-G-B-TF	—	—	—	14.5	16.9	15.4	15.7
	Q'ty / reel	500	500	—	—				

### RoHS compliance

Note: 1. The stacking height of absorption misalignment type is 1.0mm higher than that of standard type.

2. Nickel-stripe product: "(N)" is suffixed to the model No.

3. The products listed above are supplied on embossed-tape.

# JMC CONNECTOR

## Plug

### Side entry type

	Circuits	Model No.	Dimensions (mm)				Q'ty / reel
			A	B	C	D	
Without bosses	20	20PS-JMCS-G-1-TF	4.5	7.9	5.4	—	1,500
	24	24PS-JMCS-G-1-TF	5.5	8.9	6.4	—	1,500
	30	30PS-JMCS-G-1-TF	7.0	10.4	7.9	—	1,500
	34	34PS-JMCS-G-1-TF	8.0	11.4	8.9	—	1,500
	40	40PS-JMCS-G-1-TF	9.5	12.9	10.4	—	1,500
	50	50PS-JMCS-G-1-TF	12.0	15.4	12.9	—	1,500
With bosses	20	20PS-JMCS-G-1B-TF	4.5	7.9	5.4	5.55	1,500
	24	24PS-JMCS-G-1B-TF	5.5	8.9	6.4	6.55	1,500
	30	30PS-JMCS-G-1B-TF	7.0	10.4	7.9	8.05	1,500
	34	34PS-JMCS-G-1B-TF	8.0	11.4	8.9	9.05	1,500
	40	40PS-JMCS-G-1B-TF	9.5	12.9	10.4	10.55	1,500
	46	46PS-JMCS-G-1B-TF	11.0	14.4	11.9	12.05	1,500
	50	50PS-JMCS-G-1B-TF	12.0	15.4	12.9	13.05	1,500
	60	60PS-JMCS-G-1B-TF	14.5	17.9	15.4	15.55	1,500

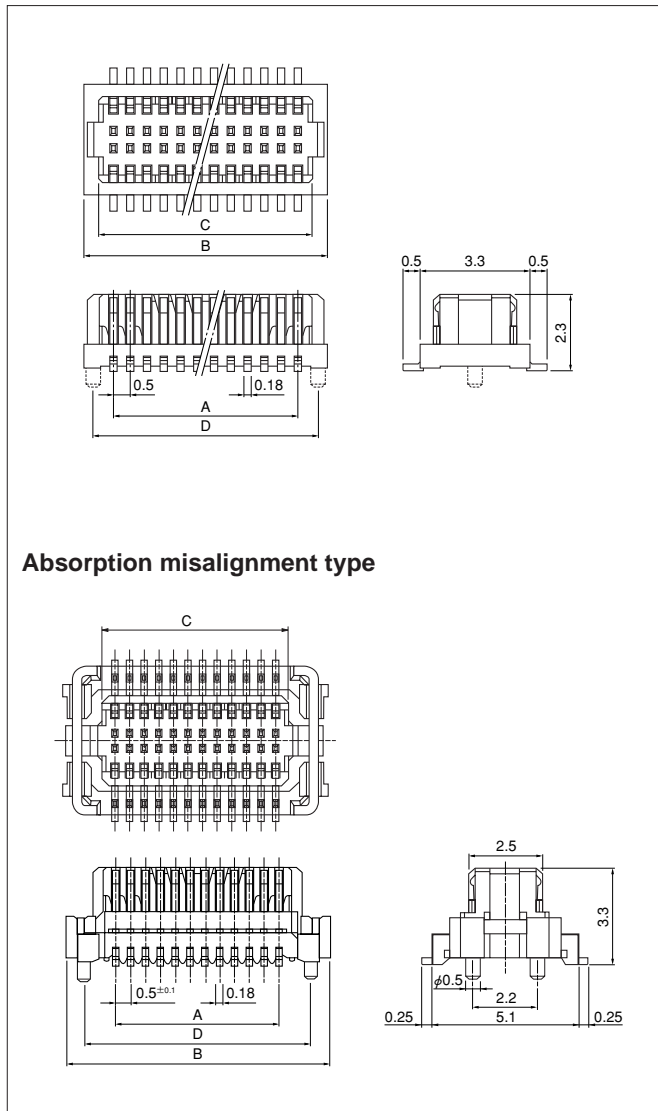
### Material and Finish

Contact: Phosphor bronze, nickel-undercoated, gold-plated  
Housing: PA 6T, UL94V-0  
Solder tab: Brass, tin-plated (reflow treatment)

**RoHS compliance** This product displays (LF)(SN) on a label.

- Note: 1. The products listed above are supplied on embossed-tape.  
2. Nickel-stripe product: "(N)" is suffixed to the model No.

## Receptacle



Circuits	Model No.		Dimensions (mm)				Q'ty / reel
	Without bosses	With bosses	A	B	C	D	
14	14R-JMCS-G-TF (S)	14R-JMCS-G-B-TF(S)	3.0	4.8	3.9	4.2	2,500
18	18R-JMCS-G-TF (S)	—	4.0	5.8	4.9	5.2	2,500
20	20R-JMCS-G-TF (S)	20R-JMCS-G-B-TF(S)	4.5	6.3	5.4	5.7	2,500
24	24R-JMCS-G-TF (S)	24R-JMCS-G-B-TF(S)	5.5	7.3	6.4	6.7	2,500
30	30R-JMCS-G-TF (S)	30R-JMCS-G-B-TF(S)	7.0	8.8	7.9	8.2	2,500
34	34R-JMCS-G-TF (S)	34R-JMCS-G-B-TF(S)	8.0	9.8	8.9	9.2	2,500
40	40R-JMCS-G-TF (S)	40R-JMCS-G-B-TF(S)	9.5	11.3	10.4	10.7	2,500
46	46R-JMCS-G-TF (S)	46R-JMCS-G-B-TF(S)	11.0	12.8	11.9	12.2	2,500
50	50R-JMCS-G-TF (S)	50R-JMCS-G-B-TF(S)	12.0	13.8	12.9	13.2	2,500
60	60R-JMCS-G-TF (S)	60R-JMCS-G-B-TF(S)	14.5	16.3	15.4	15.7	2,500

### Material and Finish

Contact: Phosphor bronze, nickel-undercoated, gold-plated  
Housing: PA 6T, UL94V-0

**RoHS compliance**

- Note: 1. The products listed above are supplied on embossed-tape.  
2. Nickel-stripe product: "(NSA)" instead of "(S)" is suffixed to model No.

### Absorption misalignment type

Circuits	Model No.		Dimensions (mm)				Q'ty / reel
	Without bosses	With bosses	A	B	C	D	
20	20RF-JMCS-G-1-TF	20RF-JMCS-G-1B-TF	4.5	8.0	5.4	6.75	1,000
30	30RF-JMCS-G-1-TF	30RF-JMCS-G-1B-TF	7.0	10.5	7.9	9.25	1,000
40	40RF-JMCS-G-1-TF	40RF-JMCS-G-1B-TF	9.5	13.0	10.4	11.75	1,000
44	—	*44RF-JMCS-G-1B-TF	10.5	14.0	11.4	12.75	1,000
50	50RF-JMCS-G-1-TF	50RF-JMCS-G-1B-TF	12.0	15.5	12.9	14.25	1,000
60	60RF-JMCS-G-1-TF	60RF-JMCS-G-1B-TF	14.5	18.0	15.4	16.75	1,000
64	—	*64RF-JMCS-G-1B-TF	15.5	19.0	16.4	17.75	1,000

### Material and Finish

Contact: Phosphor bronze, nickel-undercoated, gold-plated  
Housing: PA 6T, UL94V-0  
Solder tab: Brass, copper-undercoated, tin-plated (reflow treatment)

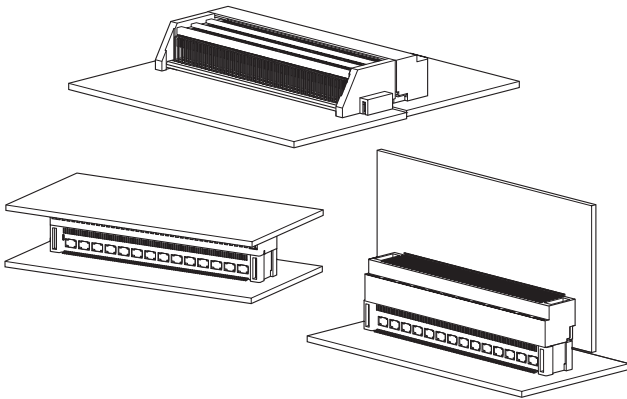
**RoHS compliance** This product displays (LF)(SN) on a label.

- Note: 1. The products listed above are supplied on embossed-tape.  
2. Nickel-stripe product: "(N)" is suffixed to model No.  
3. \*Marked products are not CSA approved.



# JU CONNECTOR

0.6mm pitch/Board-to-board connectors



*JU connector is developed upon recent market requirement, which demands higher density for digitized electronic equipment. Various mating combination can be chosen at your purpose vertically/horizontally, both plug and receptacle are available top and side entry. Box type wafer prevents from scattered flux equipped with polarized shape which guides correct mating. Longer mating stroke stabilize and secure mating and contact performance.*

- Higher density contributes
- Various combination
- Lower insertion force

## Specifications

- Current rating: 0.5A AC, DC
- Voltage rating: 50V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/80m Ω max.  
After environmental testing/100m Ω max.
- Insulation resistance: 50M Ω min.
- Withstanding voltage: 100V AC/minute
- Applicable PC board thickness: 1.6mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

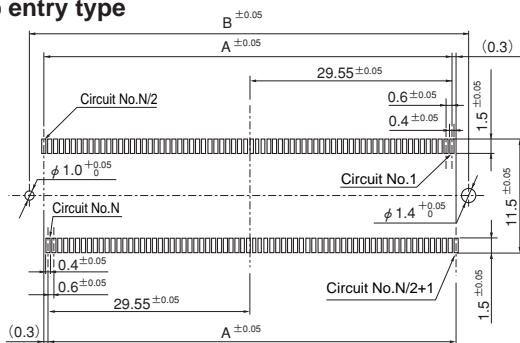
## Standards

Recognized E60389

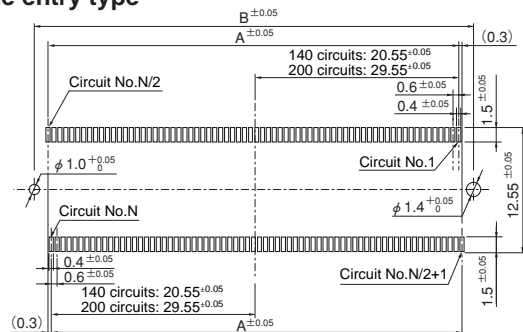
Certified LR20812

### PC board layout (viewed from component side)

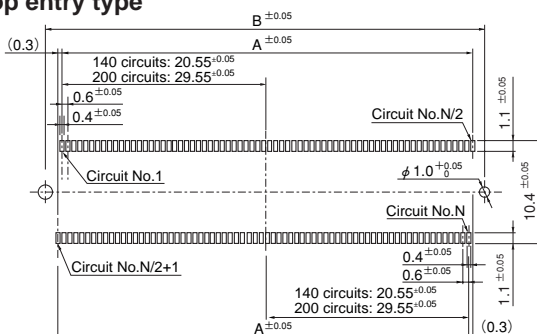
#### Plug Top entry type



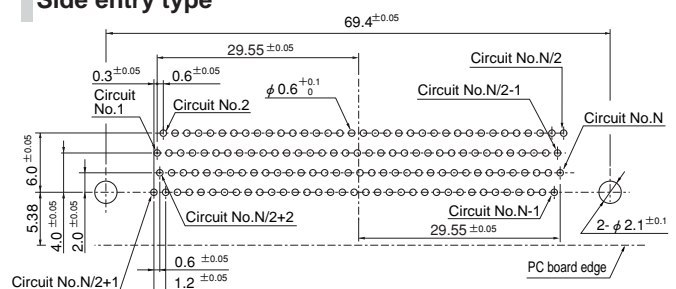
#### Plug Side entry type



#### Receptacle Top entry type



#### Receptacle Side entry type

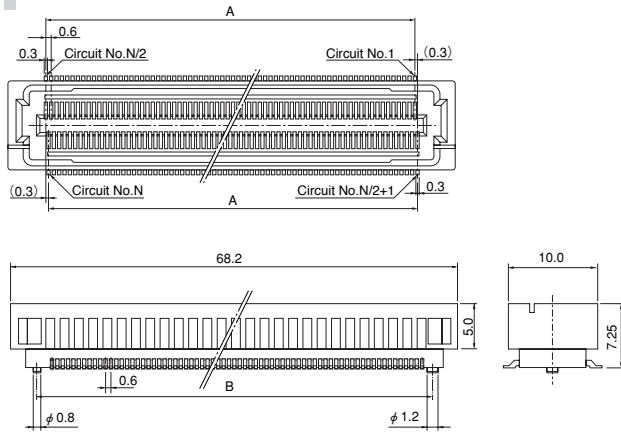


Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.  
2. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.

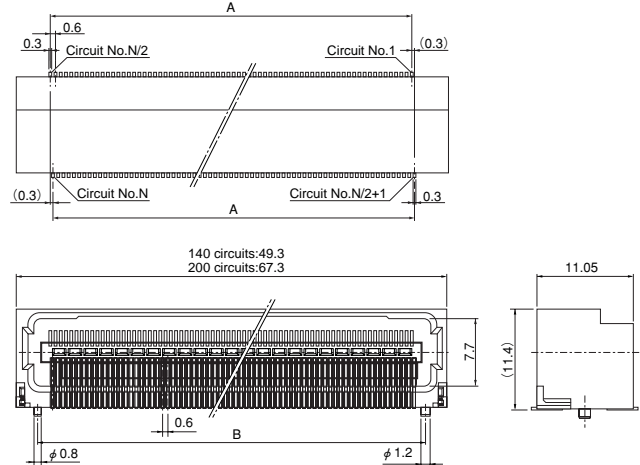
# JU CONNECTOR

## Plug

### Top entry type



### Side entry type



Cir- cuits	Model No.		Dimensions(mm)		Q'ty / box	
	Top entry type	Side entry type	A	B	Top entry type	Side entry type
140	—	<b>140PS-JUK-G-B(A)</b>	41.4	44.5	—	60
200	<b>200P-JUK-G-B</b>	<b>200PS-JUK-G-B(A)</b>	59.4	62.5	75	60

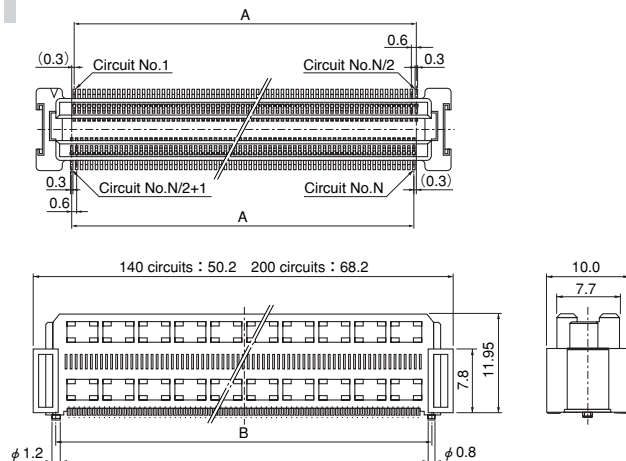
#### Material and Finish

Contact: Copper alloy, nickel-undercoated, gold-plated  
Housing: LCP, UL94V-0

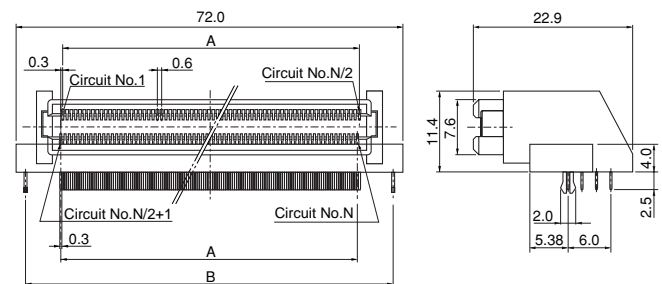
#### RoHS compliance

## Receptacle

### Top entry type



### Side entry type



### Top entry type

Cir- cuits	Model No.	Dimensions(mm)		Q'ty / box
		A	B	
140	<b>140R-JUK-G-B</b>	41.4	44.5	45
200	<b>200R-JUK-G-B</b>	59.4	62.5	45

#### Material and Finish

Contact: Copper alloy, nickel-undercoated, gold-plated  
Housing: LCP, UL94V-0

### Side entry type

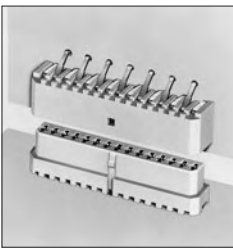
Cir- cuits	Model No.	Dimensions(mm)		Q'ty / box
		A	B	
200	<b>200RS-JUK-GB</b>	59.4	69.4	128

#### Material and Finish

Contact: Copper alloy, nickel-undercoated, Mating part; gold-plated  
Solder tail; tin/copper alloy-plated  
Housing: LCP, UL94V-0  
Locator: Synthetic resin  
Solder tab: Copper-alloy, tin-plated (reflow treatment)

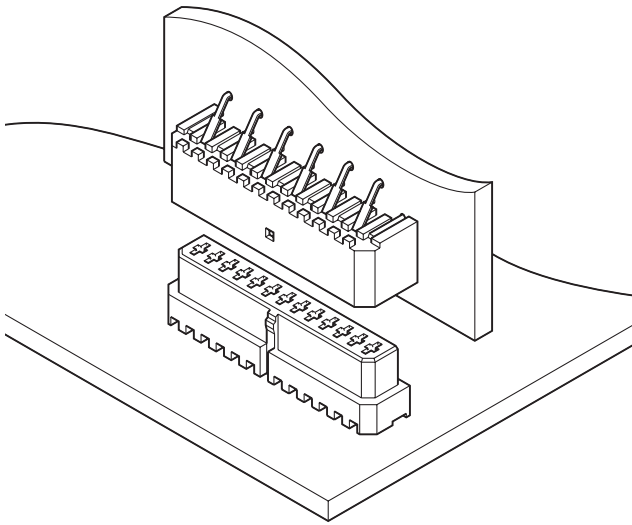
#### RoHS compliance





# JE CONNECTOR

1.25mm pitch/Board-to-board connectors



**The JE connector is a compact, board-to-board connector only 6.8mm high and 3.6mm wide. Its mating part has a 1.25mm pitch, single row construction. High contact pressure dual beam fork contacts are combined with a housing lock mechanism to ensure a reliable connection.**

- A compact design to meet today's needs
- Secure locking and reliable connection
- Box shaped housing
- Easy mounting and no flux problems

## Specifications

- Current rating: 1.0A AC, DC
- Voltage rating: 50V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/20m Ω max.  
After environmental testing/40m Ω max.
- Insulation resistance: 500M Ω min.
- Withstanding voltage: 500V AC/minute
- Applicable PC board thickness: 1.6mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

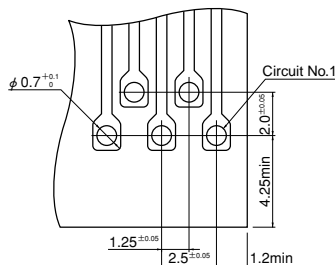
## Standards

Recognized E60389

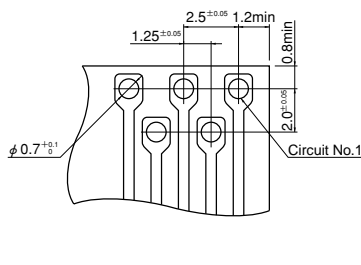
Certified LR20812

## PC board layout (viewed from soldering side) and Assembly layout

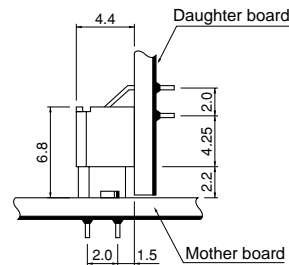
Plug



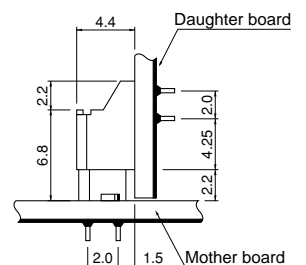
Receptacle



Without stopper



With stopper

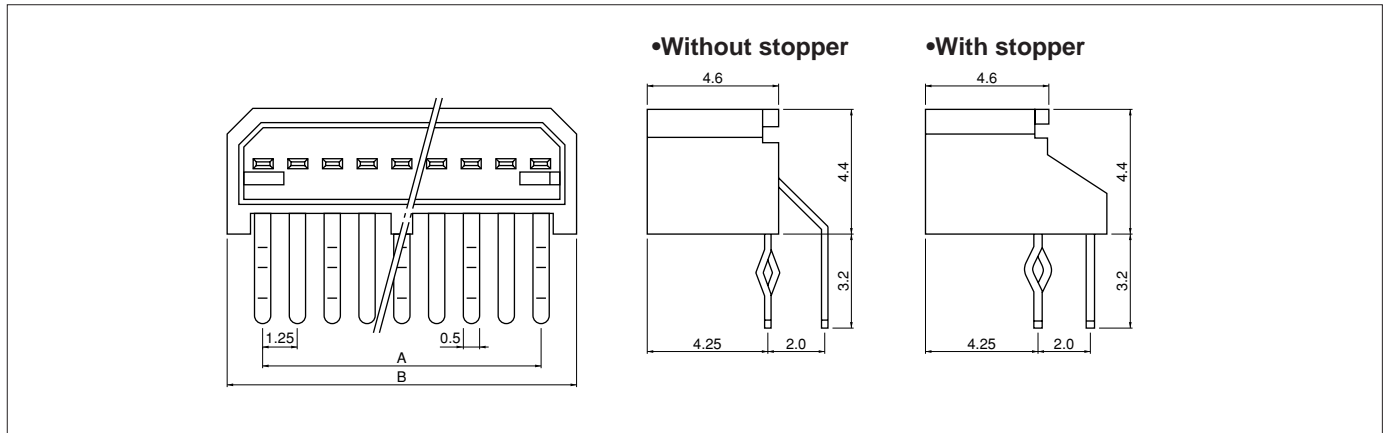


Note: 1. Tolerances are non-cumulative:  $\pm 0.05\text{mm}$  for all centers.  
2. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.

Note: The daughter board should be secured. For details of the securing method, contact JST.

# JE CONNECTOR

## Plug



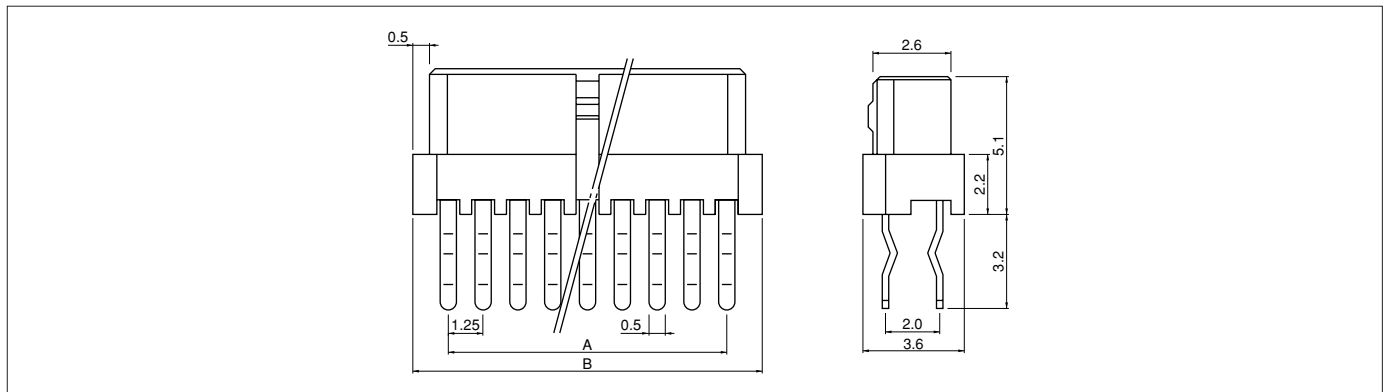
Circuits	Model No.		Dimensions (mm)		Qty / box
	Without stopper	With stopper	A	B	
5	<b>05PS-JE</b>	<b>05PSL-JE</b>	5.0	7.4	1,400
7	<b>07PS-JE</b>	<b>07PSL-JE</b>	7.5	9.9	1,050
9	<b>09PS-JE</b>	<b>09PSL-JE</b>	10.0	12.4	800
11	<b>11PS-JE</b>	<b>11PSL-JE</b>	12.5	14.9	700
13	<b>13PS-JE</b>	<b>13PSL-JE</b>	15.0	17.4	600
15	<b>15PS-JE</b>	<b>15PSL-JE</b>	17.5	19.9	500
17	<b>17PS-JE</b>	<b>17PSL-JE</b>	20.0	22.4	450
19	<b>19PS-JE</b>	<b>19PSL-JE</b>	22.5	24.9	400

### Material and Finish

Contact: Brass, tin-plated (reflow treatment)  
Housing: Glass-filled PA 66, UL94V-0

RoHS compliance

## Receptacle

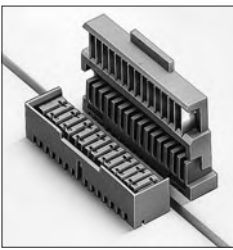


Circuits	Model No.	Dimensions (mm)		Qty / box
		A	B	
5	<b>05R-JE</b>	5.0	7.4	1,000
7	<b>07R-JE</b>	7.5	9.9	1,000
9	<b>09R-JE</b>	10.0	12.4	1,700
11	<b>11R-JE</b>	12.5	14.9	1,400
13	<b>13R-JE</b>	15.0	17.4	1,200
15	<b>15R-JE</b>	17.5	19.9	1,000
17	<b>17R-JE</b>	20.0	22.4	900
19	<b>19R-JE</b>	22.5	24.9	800

### Material and Finish

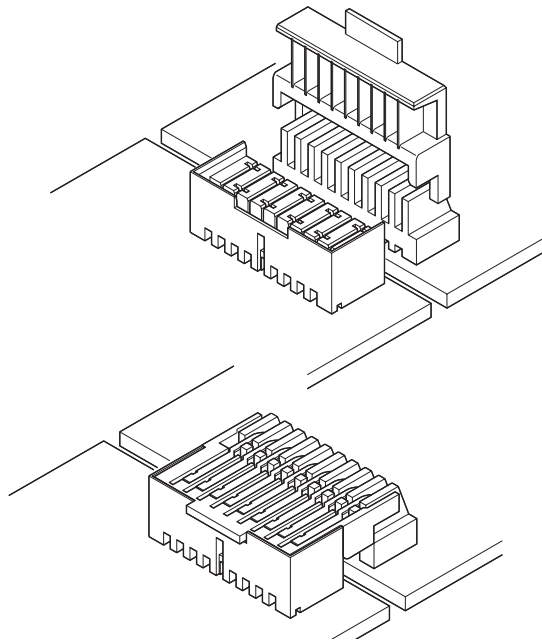
Contact: Phosphor bronze, copper-undercoated, tin-plated (reflow treatment)  
Housing: Glass-filled PA 66, UL94V-0

RoHS compliance This product displays (LF)(SN) on a label.



# 1.25FJ CONNECTOR

## 1.25mm pitch/Board-to-board connectors



**The 1.25FJ connector is a 1.25mm pitch board-to-board connector. Its plug consists of a unique flexible hinge that absorbs circuit board misalignment. Board-to-board connection requires less labor and is more reliable because the connection can be made without the use of harnesses after the printed circuit boards are installed in their enclosures.**

- **Low profile**
- **Allows connection after mounting**
- **Assures a reliable connection**

### Specifications

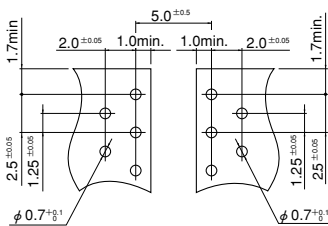
- Current rating: 0.5A(1.0A :1.25FJ-N type) AC, DC
- Voltage rating: 50V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance:
  - Short type.....Initial value/40m Ω max.  
After environmental testing/60m Ω max.
  - Long type.....Initial value/70m Ω max.  
After environmental testing/90m Ω max.
  - 1.25FJ-N type... Initial value/50m Ω max.  
After environmental testing/100m Ω max.
- Insulation resistance: 500M Ω min.
- Withstanding voltage: 500V AC/minute
- Applicable PC board thickness: 1.6mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

### Standards

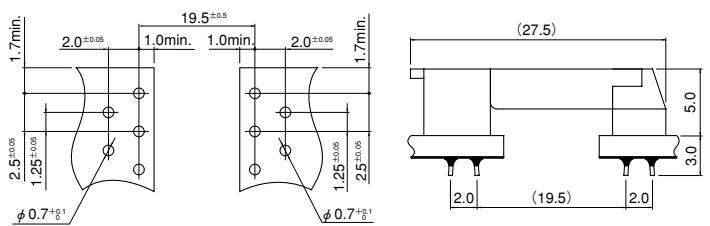
- Ⓜ Recognized E60389
- Ⓢ Certified LR20812

### PC board layout (viewed from component side) and Assembly layout

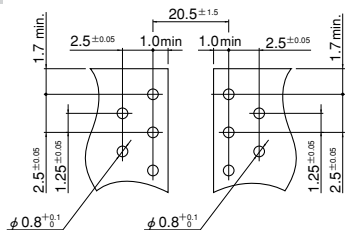
#### Short type



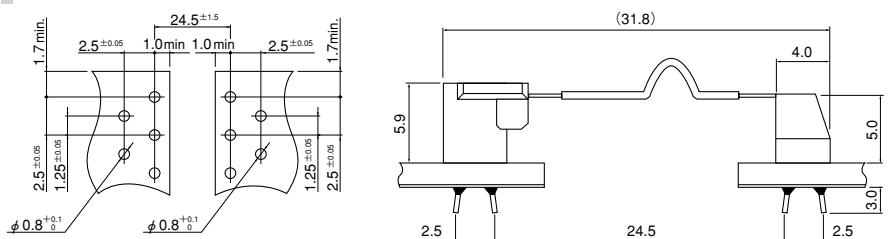
#### Long type



#### 1.25FJ-N type(250)



#### 1.25FJ-N type(280)



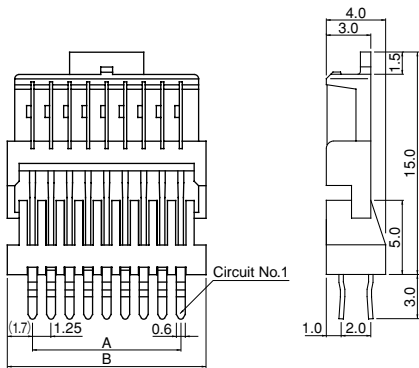
Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.

2. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.

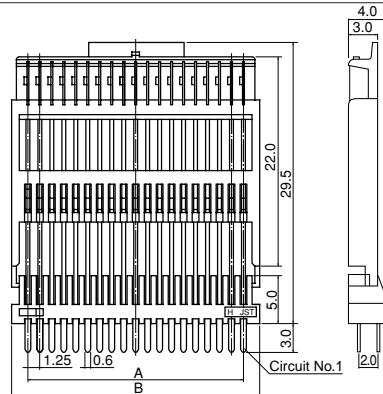
# 1.25FJ CONNECTOR

## Plug

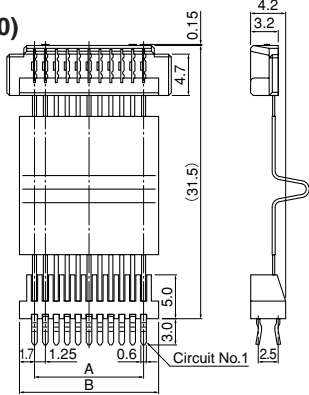
### Short type



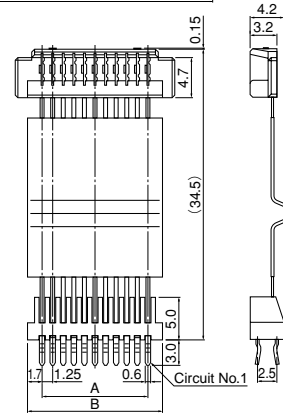
### Long type



### 1.25FJ-N type (250)



### 1.25FJ-N type (280)



Circuits	Model No.				Dimensions (mm)		Qty / box			
	Short type	Long type	1.25FJ-N type		A	B	Short type	Long type	1.25FJ-N type	
			250 type	280 type					250 type	280 type
7	—	—	<b>07P250K-1.25FJNA</b>	<b>07P280K-1.25FJN</b>	7.5	10.9	—	—	400	400
9	<b>09P-1.25FJ</b>	—	—	—	10.0	13.4	120	—	—	—
11	<b>11P-1.25FJ</b>	—	<b>11P250K-1.25FJNA</b>	<b>11P280K-1.25FJN</b>	12.5	15.9	120	—	280	280
13	<b>13P-1.25FJ</b>	—	<b>13P250K-1.25FJNA</b>	<b>13P280K-1.25FJN</b>	15.0	18.4	120	—	280	280
15	<b>15P-1.25FJ</b>	—	—	—	17.5	20.9	120	—	—	—
19	<b>19P-1.25FJ</b>	<b>19P215S-1.25FJ</b>	<b>19P250K-1.25FJNA</b>	<b>19P280K-1.25FJN</b>	22.5	25.9	120	280	200	200
21	<b>21P-1.25FJ</b>	—	—	—	25.0	28.4	120	—	—	—

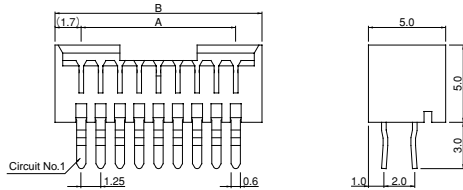
#### Material and Finish

Contact: Short type & Long type / Phosphor bronze, tin-plated (reflow treatment)  
1.25FJ-N type / Copper-alloy, tin-plated (reflow treatment)  
Housing: Glass-filled PA 66, UL94V-0

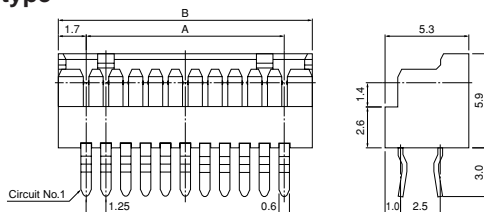
#### RoHS compliance

## Receptacle

### Short type & Long type



### 1.25FJ-N type

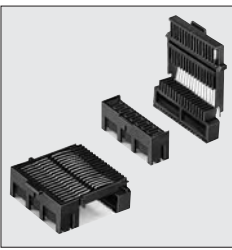


Circuits	Model No.		Dimensions (mm)		Qty / box	
	Short type & Long type	1.25FJ-N type	A	B	Short type & Long type	1.25FJ-N type
7	—	<b>07RK-1.25FJN</b>	7.5	10.9	—	1,710
9	<b>09R-1.25FJ</b>	—	10.0	13.4	500	—
11	<b>11R-1.25FJ</b>	<b>11RK-1.25FJN</b>	12.5	15.9	500	1,170
13	<b>13R-1.25FJ</b>	<b>13RK-1.25FJN</b>	15.0	18.4	500	990
15	<b>15R-1.25FJ</b>	—	17.5	20.9	500	—
19	<b>19R-1.25FJ</b>	<b>19RK-1.25FJN</b>	22.5	25.9	250	720
21	<b>21R-1.25FJ</b>	—	25.0	28.4	200	—

#### Material and Finish

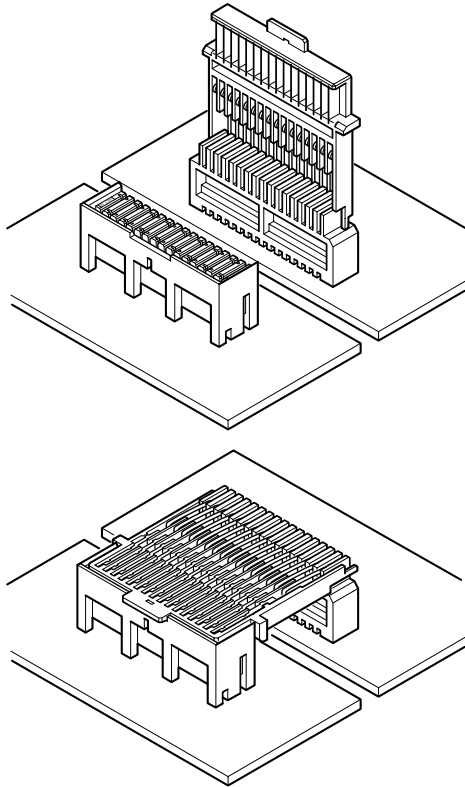
Contact: Phosphor bronze, copper-undercoated, tin-plated (reflow treatment)  
Housing: Glass-filled PA 66, UL94V-0

**RoHS compliance** This product displays (LF)(SN) on a label.



# 1.5FJ CONNECTOR

1.5mm pitch/Board-to-board connectors



**The 1.5FJ connector is a 1.5mm pitch board-to-board connector. Its plug consists of a unique flexible hinge that absorbs circuit board misalignment. Board-to-board connection requires less labor and is more reliable because the connection can be made without the use of harnesses after the printed circuit boards are installed in their enclosures.**

- Flexible connection absorbs circuit board misalignment
- Provides a low profile mount and allows connection after mounting
- Assures a reliable connection

## Specifications

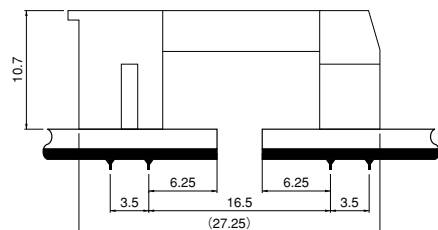
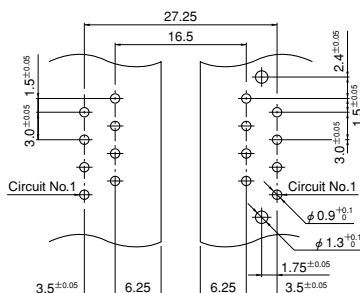
- Current rating: 0.5A AC, DC
- Voltage rating: 50V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/80m Ω max.  
After environmental testing/100m Ω max.
- Insulation resistance: 500M Ω min.
- Withstanding voltage: 500V AC/minute
- Applicable PC board thickness: 1.6mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

Ⓜ Recognized E60389

Ⓢ Certified LR20812

## PC board layout (viewed from component side) and Assembly layout

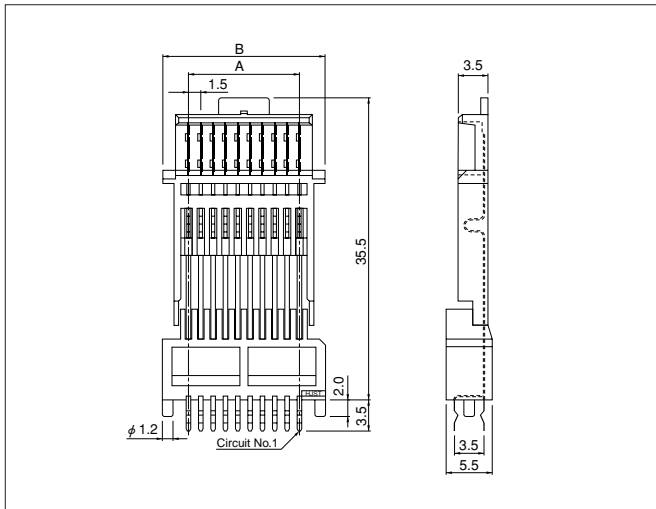


Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.

2. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.

# 1.5FJ CONNECTOR

## Plug



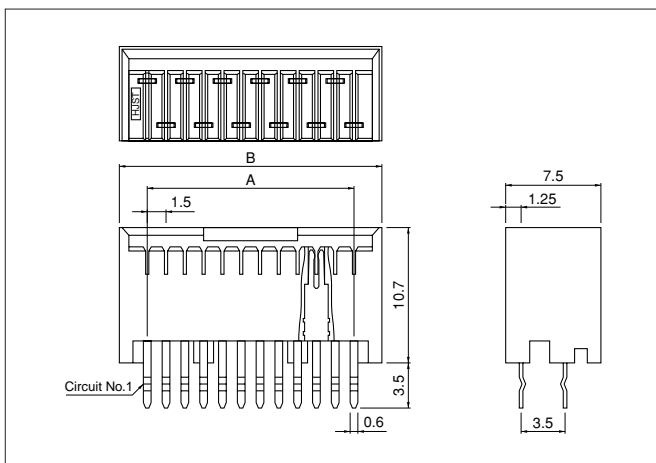
Circuits	Model No.	Dimensions (mm)		Qty / box
		A	B	
8	<b>08P-1.5FJ</b>	10.5	16.5	245
16	<b>16P-1.5FJ</b>	22.5	28.5	140

### Material and Finish

Contact: Phosphor bronze, tin-plated (reflow treatment)  
Housing: Glass-filled PBT, UL94V-0, black

**RoHS compliance**

## Receptacle



Circuits	Model No.	Dimensions (mm)		Qty / box
		A	B	
8	<b>08R-1.5FJ</b>	10.5	15.0	440
16	<b>16R-1.5FJ</b>	22.5	27.0	220

### Material and Finish

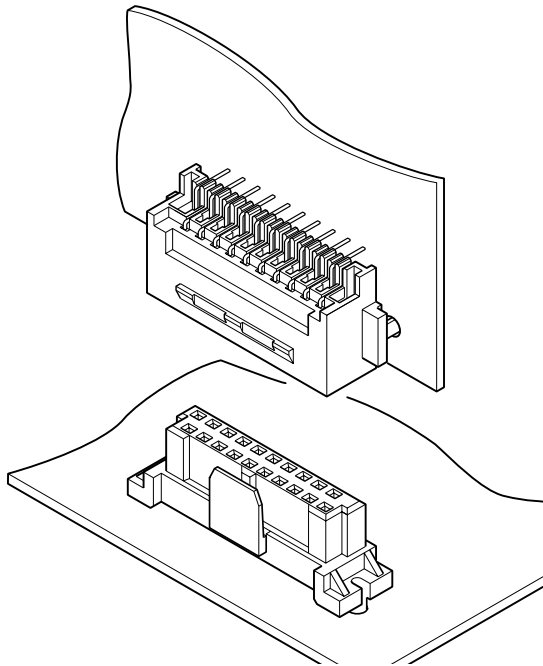
Contact: Phosphor bronze, copper-undercoated, tin-plated (reflow treatment)  
Housing: Glass-filled PBT, UL94V-0, black

**RoHS compliance** This product displays (LF)(SN) on a label.



# JDV CONNECTOR

1.5mm pitch/Hinge type Board-to-board Connectors



**The JDV connector is designed for board-to-board connection with locking device, and highly resistant to equipment vibration and shock.**

- Two type Locking device
- Staggered Solder Tails
- Positioning boss (projection)

## Specifications

- Current rating: 1.0A AC, DC
- Voltage rating: 50V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/30m Ω max.  
After environmental testing/50m Ω max.
- Insulation resistance: 800M Ω min.
- Withstanding voltage: 300V AC/minute
- Applicable PC board thickness: 1.6mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

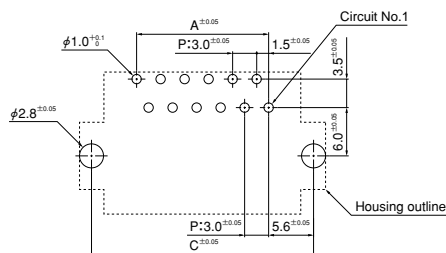
## Standards

Recognized E60389

Certified LR20812

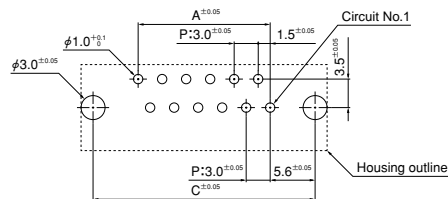
### PC board layout (viewed from component side) and Assembly layout

#### Plug

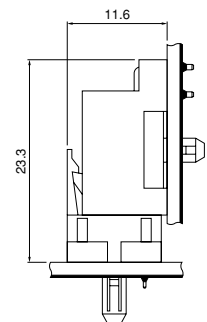
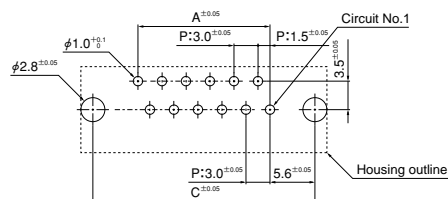


#### Receptacle

##### Resin hook type



##### Metal hook type



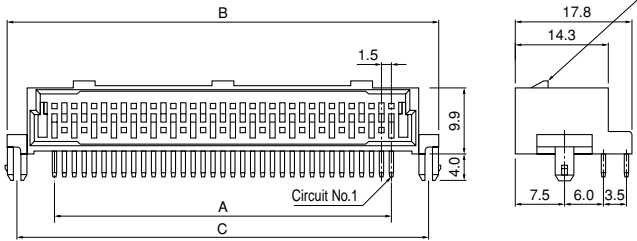
Note: 1. Tolerances are non-cumulative:  $\pm 0.05\text{mm}$  for all centers.

2. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.

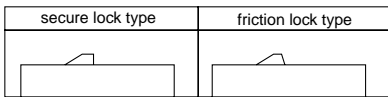
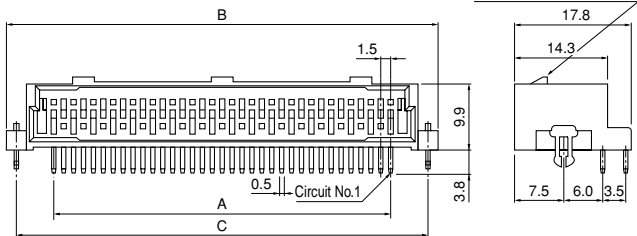
# JDV CONNECTOR

## Plug

### Retention lock type Resin hook type



### Metal hook type



Enlarged views of lock shape are as follows.

Enlarged views of lock shape are as follows.

### Resin hook type

Circuits	Model No.		Dimensions (mm)			Qty / box
	secure lock type	friction lock type	A	B	C	
15	JDV-PS15LB-10-1	—	21.0	35.5	32.2	400
20	JDV-PS20LB-10-1	JDV-PS20FLB-10-1	28.5	43.0	39.7	320
25	JDV-PS25LB-10-1	JDV-PS25FLB-10-1	36.0	50.5	47.2	280
30	JDV-PS30LB-10-1	JDV-PS30FLB-10-1	43.5	58.0	54.7	240
35	JDV-PS35LB-10-1	JDV-PS35FLB-10-1	51.0	65.5	62.2	200
40	JDV-PS40LB-10-1	JDV-PS40FLB-10-1	58.5	73.0	69.7	160
50	JDV-PS50LB-10-1	JDV-PS50FLB-10-1	73.5	88.0	84.7	160

### Material and Finish

Contact: Brass, nickel-undercoated, Mating part; gold-plated  
Solder tail; tin-plated (reflow treatment)  
Housing: Glass-filled PBT, UL94V-0

**RoHS compliance** This product displays (LF)(SN) on a label.

### Metal hook type

Circuits	Model No.		Dimensions (mm)			Qty / box
	secure lock type	friction lock type	A	B	C	
20	JDV-PS20LB-10A	—	28.5	43.0	39.7	320
25	JDV-PS25LB-10A	—	36.0	50.5	47.2	280
30	JDV-PS30LB-10A	JDV-PS30FLB-10A	43.5	58.0	54.7	240
35	JDV-PS35LB-10A	JDV-PS35FLB-10A	51.0	65.5	62.2	200
40	JDV-PS40LB-10A	—	58.5	73.0	69.7	160
50	JDV-PS50LB-10A	JDV-PS50FLB-10A	73.5	88.0	84.7	160
65	—	JDV-PS65FLB-10A	96.0	110.5	107.2	120

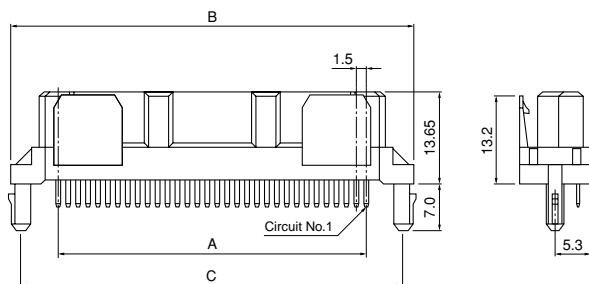
### Material and Finish

Contact: Brass, nickel-undercoated, Mating part; gold-plated  
Solder tail; tin-plated (reflow treatment)  
Housing: Glass-filled PBT, UL94V-0  
Reinforcing pin: Brass, copper-undercoated, tin-plated (reflow treatment)

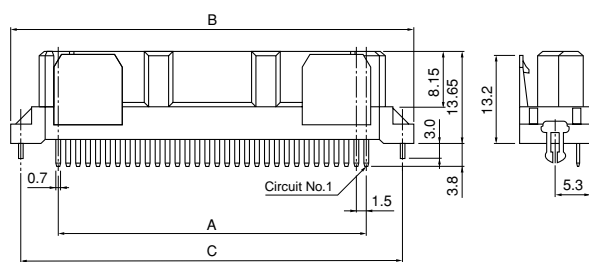
**RoHS compliance** This product displays (LF)(SN) on a label.

## Receptacle

### Retention lock type Resin hook type



### Metal hook type



### Resin hook type

Circuits	Model No.	Dimensions (mm)			Qty / box
		A	B	C	
15	JDV-R15LB-10-1	21.0	35.5	32.2	500
20	JDV-R20LB-10-1	28.5	43.0	39.7	400
25	JDV-R25LB-10-1	36.0	50.5	47.2	350
30	JDV-R30LB-10-1	43.5	58.0	54.7	300
35	JDV-R35LB-10-1	51.0	65.5	62.2	250
40	JDV-R40LB-10-1	58.5	73.0	69.7	200
50	JDV-R50LB-10-1	73.5	88.0	84.7	200

### Material and Finish

Contact: Phosphor bronze, nickel-undercoated,  
Mating part; gold-plated  
Solder tail; tin-plated (reflow treatment)  
Housing: Glass-filled PBT, UL94V-0

**RoHS compliance** This product displays (LF)(SN) on a label.

### Metal hook type

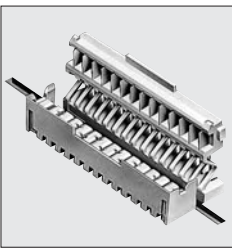
Circuits	Model No.	Dimensions (mm)			Qty / box
		A	B	C	
20	JDV-R20LB-10A	28.5	43.0	39.7	400
25	JDV-R25LB-10A	36.0	50.5	47.2	350
30	JDV-R30LB-10A	43.5	58.0	54.7	300
35	JDV-R35LB-10A	51.0	65.5	62.2	250
40	JDV-R40LB-10A	58.5	73.0	69.7	200
50	JDV-R50LB-10A	73.5	88.0	84.7	200
65	JDV-R65LB-10A	96.0	110.5	107.2	150

### Material and Finish

Contact: Phosphor bronze, nickel-undercoated,  
Mating part; gold-plated  
Solder tail; tin-plated (reflow treatment)  
Housing: Glass-filled PBT, UL94V-0  
Reinforcing pin: Brass, copper-undercoated, tin-plated (reflow treatment)

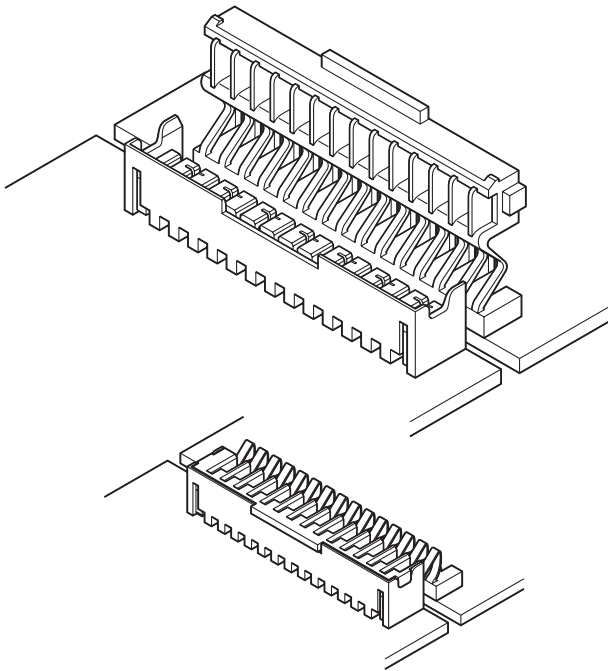
**RoHS compliance** This product displays (LF)(SN) on a label.





# FJ CONNECTOR

2.0mm pitch/Board-to-board connectors



**The FJ board-to-board connector absorbs lateral and longitudinal alignment errors thanks to an innovative new design that provides flexible connection between closely spaced circuit boards. Added advantages are simplified and less stringent packaging specifications for board-to-board connections and a higher quality end product.**

- **Flexible connection absorbs circuit board misalignment**
- **Provides a low profile mount and allows connection after mounting**
- **Assures a reliable connection**

## Specifications

- Current rating: 1.0A AC, DC
- Voltage rating: 50V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/40m Ω max.  
After environmental testing/80m Ω max.
- Insulation resistance: 500M Ω min.
- Withstanding voltage: 500V AC/minute
- Applicable PC board thickness: 1.6mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

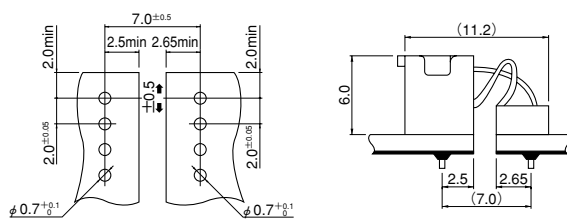
Recognized E60389

Certified LR20812

## PC board layout (viewed from component side) and Assembly layout

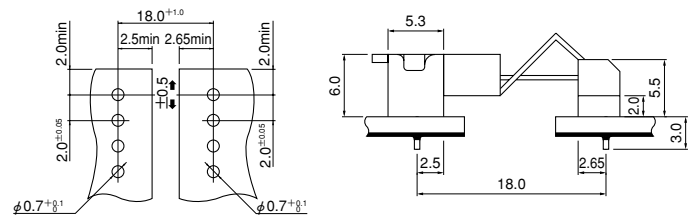
### Short type

Receptacle side      Plug side



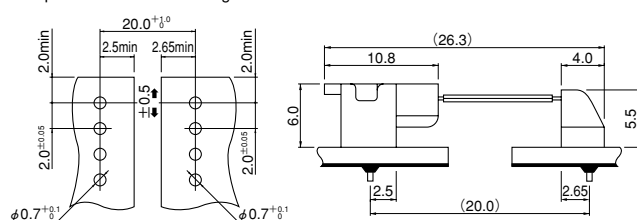
### FJ-V type

Receptacle side      Plug side



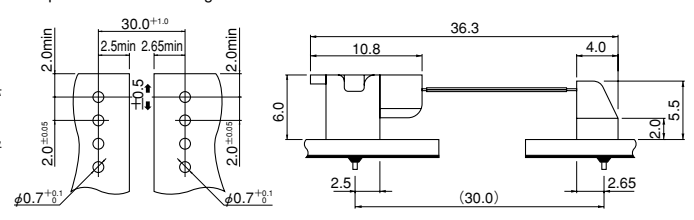
### FJ-L type

Receptacle side      Plug side



### FJ-K type

Receptacle side      Plug side

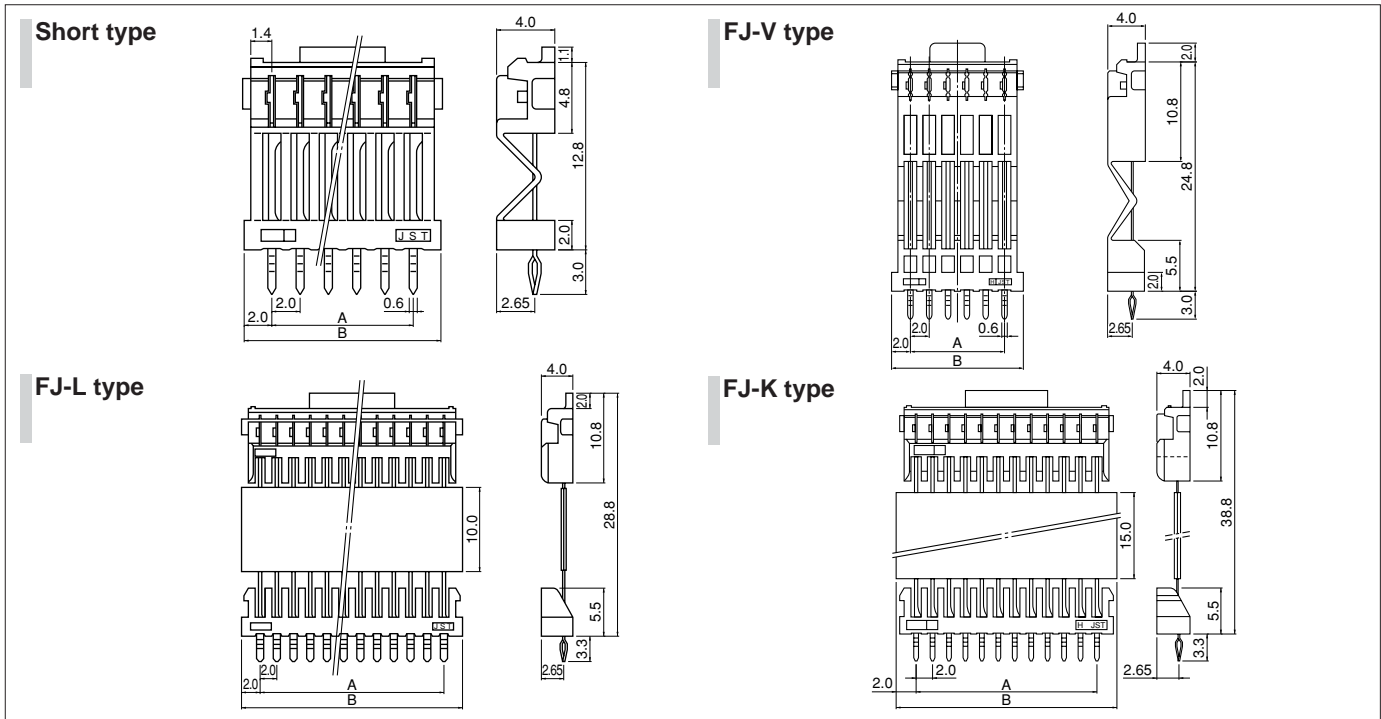


Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.

2. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.

# FJ CONNECTOR

## Plug



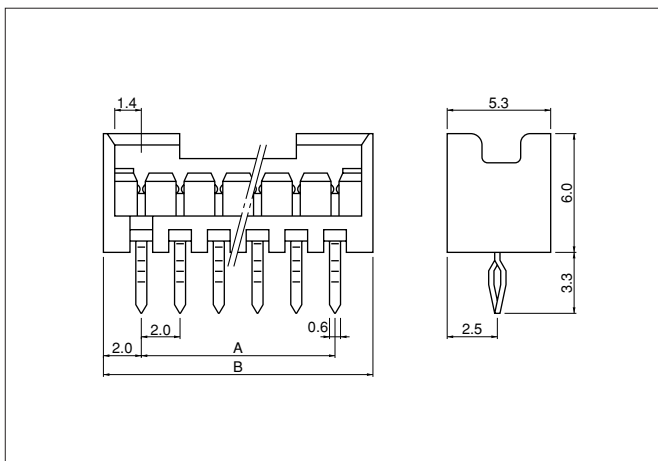
Circuits	Model No.				Dimensions (mm)		Q'ty / box			
	Short type	FJ-V type	FJ-L type	FJ-K type	A	B	Short type	FJ-V type	FJ-L type	FJ-K type
4	<b>04P-FJ</b>	—	—	—	6.0	10.0	500	—	—	—
5	—	—	<b>05PL-FJ</b>	<b>05PK-FJ</b>	8.0	12.0	—	—	250	150
6	<b>06P-FJ</b>	—	<b>06PL-FJ</b>	<b>06PK-FJ</b>	10.0	14.0	250	—	200	150
7	<b>07P-FJ</b>	—	<b>07PL-FJ</b>	<b>07PK-FJ</b>	12.0	16.0	250	—	200	100
8	<b>08P-FJ</b>	—	<b>08PL-FJ</b>	<b>08PK-FJ</b>	14.0	18.0	200	—	200	100
9	<b>09P-FJ</b>	—	—	—	16.0	20.0	200	—	—	—
10	<b>10P-FJ</b>	—	<b>10PL-FJ</b>	<b>10PK-FJ</b>	18.0	22.0	200	—	100	100
11	<b>11P-FJ</b>	<b>11PV-FJ</b>	—	—	20.0	24.0	200	168	—	—
12	<b>12P-FJ</b>	—	<b>12PL-FJ</b>	<b>12PK-FJ</b>	22.0	26.0	100	—	100	50
13	—	<b>13PV-FJ</b>	—	—	24.0	28.0	—	168	—	—
14	<b>14P-FJ</b>	—	<b>14PL-FJ</b>	<b>14PK-FJ</b>	26.0	30.0	100	—	100	50
15	—	<b>15PV-FJ</b>	—	—	28.0	32.0	—	168	—	—

### Material and Finish

Contact: Phosphor bronze, tin-plated (reflow treatment)  
Housing: PA 66, UL94V-0, white  
Insulation tape: Acetate, UL510FR (FJ-L type)  
Polyester, UL94V-0 (FJ-K type)

RoHS compliance

## Receptacle

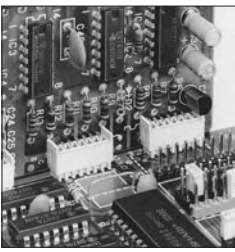


Circuits	Model No.	Dimensions (mm)		Q'ty / box
		A	B	
4	<b>04R-FJ</b>	6.0	10.0	500
5	<b>05R-FJ</b>	8.0	12.0	500
6	<b>06R-FJ</b>	10.0	14.0	500
7	<b>07R-FJ</b>	12.0	16.0	500
8	<b>08R-FJ</b>	14.0	18.0	250
9	<b>09R-FJ</b>	16.0	20.0	250
10	<b>10R-FJ</b>	18.0	22.0	250
11	<b>11R-FJ</b>	20.0	24.0	250
12	<b>12R-FJ</b>	22.0	26.0	200
13	<b>13R-FJ</b>	24.0	28.0	200
14	<b>14R-FJ</b>	26.0	30.0	200
15	<b>15R-FJ</b>	28.0	32.0	200

### Material and Finish

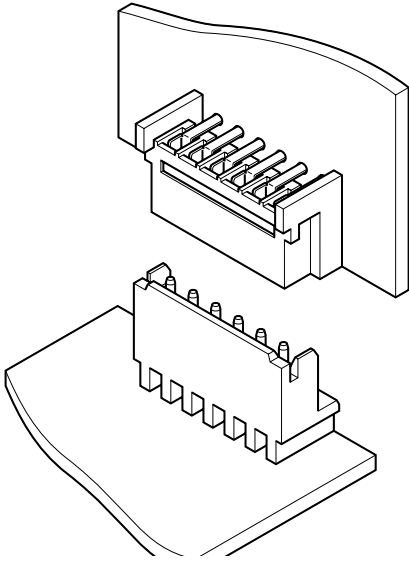
Contact: Phosphor bronze, copper-undercoated, tin-plated (reflow treatment)  
Housing: PA 66, UL94V-0, white

RoHS compliance This product displays (LF)(SN) on a label.



# MQ CONNECTOR

## 2.0mm pitch/Board-to-board connectors



**Measuring 2.0mm in pitch, 9.2mm in mounting height and 5.5mm in thickness, this board-to-board connector makes high-density mounting of components in electronic products possible. It is ideal for small electronic products, such as portable VCRs and video cameras, which require high-density mounting and high reliability.**

- **Back-up support spring construction**
- **Easy insertion**
- **Board retention feature**

### Specifications

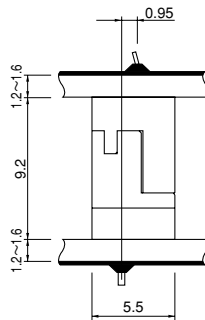
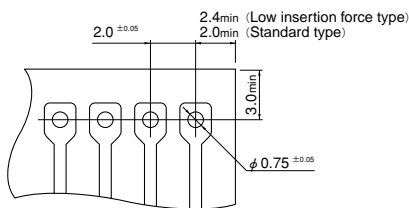
- Current rating: 1.0A AC, DC
- Voltage rating: 250V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/10m Ω max.  
After environmental testing/20m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 800V AC/minute
- Applicable PC board thickness: 1.2 to 1.6mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

### Standards

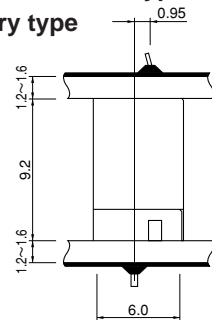
- Ⓜ Recognized E60389
- Ⓢ Certified LR20812
- Ⓜ R9351042

### PC board layout (viewed from soldering side) and Assembly layout

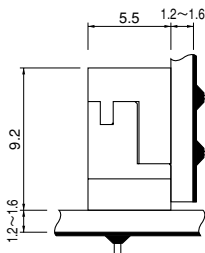
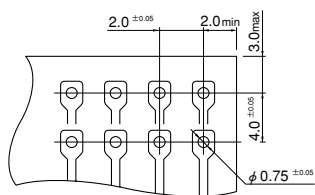
#### Top entry type



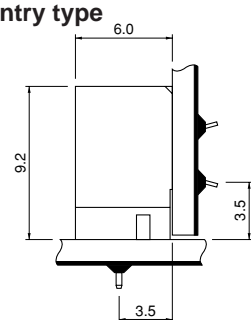
#### Low insertion force type Top entry type



#### Side entry type



#### Low insertion force type Side entry type



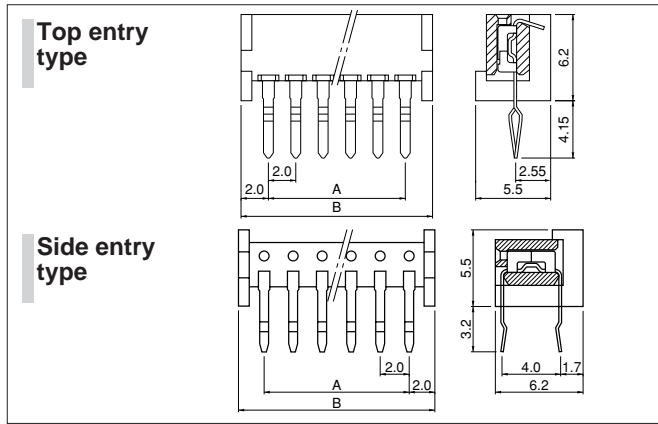
Note: 1. The PC board layout of the header is identical to that of the top entry receptacle.

2. Tolerances are non-cumulative: ±0.05mm for all centers.

3. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.

# MQ CONNECTOR

## Receptacle



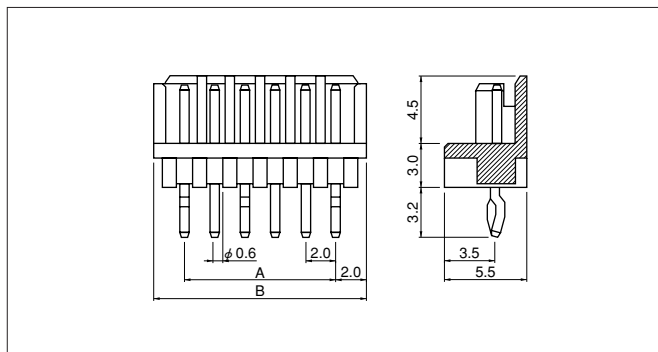
Circuits	Model No.		Dimensions (mm)		Qty / box	
	Top entry type	Side entry type	A	B	Top entry type	Side entry type
5	05MQ-BT	05MQ-ST	8.0	12.0	500	500
6	06MQ-BT	06MQ-ST	10.0	14.0	500	500
7	07MQ-BT	07MQ-ST	12.0	16.0	500	500
8	08MQ-BT	08MQ-ST	14.0	18.0	500	250
9	09MQ-BT	09MQ-ST	16.0	20.0	500	250
10	10MQ-BT	10MQ-ST	18.0	22.0	250	250
12	12MQ-BT	12MQ-ST	22.0	26.0	250	250

### Material and Finish

Contact: Phosphor bronze, tin-plated (reflow treatment)  
Housing: PA 66, UL94V-0, natural

RoHS compliance

## Shrouded header



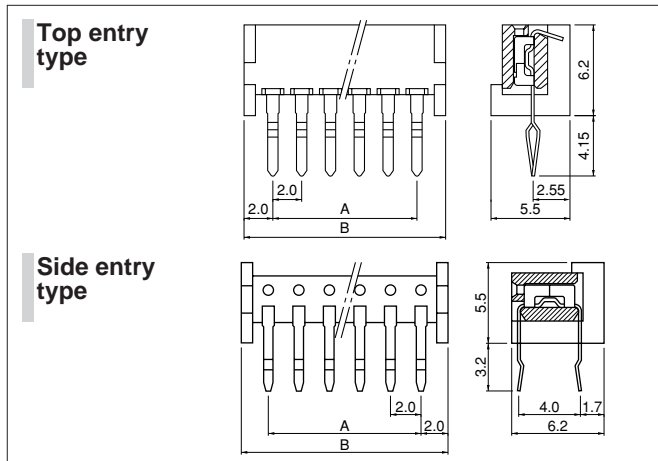
Circuits	Model No.	Dimensions (mm)		Qty/box
		A	B	
5	B5P-MQ	8.0	12.0	500
6	B6P-MQ	10.0	14.0	500
7	B7P-MQ	12.0	16.0	500
8	B8P-MQ	14.0	18.0	500
9	B9P-MQ	16.0	20.0	500
10	B10P-MQ	18.0	22.0	250
12	B12P-MQ	22.0	26.0	200

### Material and Finish

Pin: Brass, copper-undercoated, tin-plated (reflow treatment)  
Wafer: PA 66, UL94V-0, natural

RoHS compliance This product displays (LF)(SN) on a label.

## Low insertion force type Receptacle



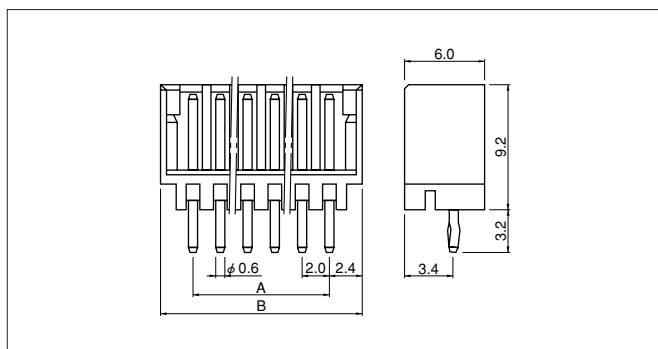
Circuits	Model No.		Dimensions (mm)		Qty/box	
	Top entry type	Side entry type	A	B	Top entry type	Side entry type
4	04MQ-BT-L	04MQ-ST-L	6.0	10.0	500	500
5	05MQ-BT-L	05MQ-ST-L	8.0	12.0	500	500
6	06MQ-BT-L	06MQ-ST-L	10.0	14.0	500	500
7	07MQ-BT-L	07MQ-ST-L	12.0	16.0	500	500
8	08MQ-BT-L	08MQ-ST-L	14.0	18.0	500	250
9	09MQ-BT-L	09MQ-ST-L	16.0	20.0	500	250
10	10MQ-BT-L	10MQ-ST-L	18.0	22.0	250	250
12	12MQ-BT-L	12MQ-ST-L	22.0	26.0	250	250

### Material and Finish

Contact: Phosphor bronze, tin-plated (reflow treatment)  
Housing: PA 66, UL94V-0, natural

RoHS compliance

## Low insertion force type Shrouded header



Circuits	Model No.	Dimensions (mm)		Qty/box
		A	B	
4	B4P-MQ-C	6.0	10.8	500
5	B5P-MQ-C	8.0	12.8	500
6	B6P-MQ-C	10.0	14.8	500
7	B7P-MQ-C	12.0	16.8	250
8	B8P-MQ-C	14.0	18.8	250
9	B9P-MQ-C	16.0	20.8	250
10	B10P-MQ-C	18.0	22.8	250
12	B12P-MQ-C	22.0	26.8	200

### Material and Finish

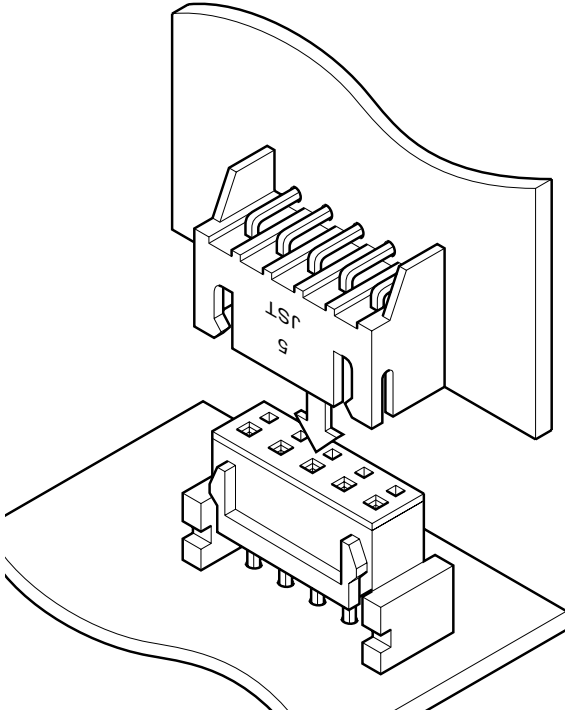
Pin: Brass, copper-undercoated, tin-plated (reflow treatment)  
Wafer: PA 66, UL94V-0

RoHS compliance This product displays (LF)(SN) on a label.



# JQ CONNECTOR

## 2.5mm pitch/Board-to-board connectors



**This 2.5mm pitch connector is used to interconnect printed circuit boards. It easily resists distortion during mating, thus ensuring reliable contact, even under adverse conditions.**

- High contact pressure
- Box-shaped shroud
- Secure locking on printed circuit boards
- Vertical, horizontal and parallel mounting
- Interchangeability

### Specifications

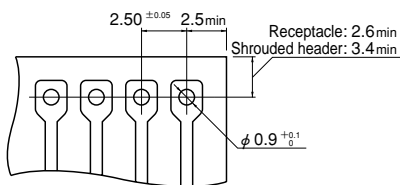
- Current rating: 3A AC, DC
- Voltage rating: 250V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/10m Ω max.  
After environmental testing/20m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 1,000V AC/minute
- Applicable PC board thickness: 1.6mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

### Standards

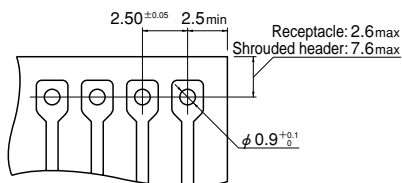
- Ⓜ Recognized E60389
- Ⓢ Certified LR20812
- ⚠ R75085

### PC board layout (viewed from soldering side) and Assembly layout

#### Top entry type



#### Side entry type



Combinations		Receptacle	
		Top entry type	Side entry type
Shrouded header	Top entry type B (JB-XH-A)		—
	Side entry type S (JB-XH-A-1)		

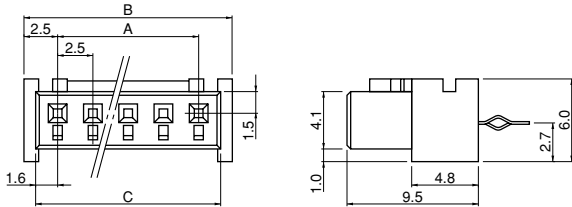
Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.

2. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.

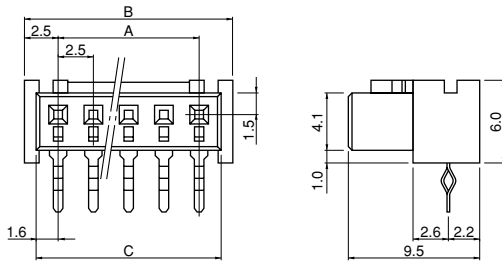
# JQ CONNECTOR

## Receptacle

### Top entry type



### Side entry type



Circuits	Model No.		Dimensions (mm)			Q'ty / box	
	Top entry type	Side entry type	A	B	C	Top entry type	Side entry type
3	03JQ-BT	03JQ-ST	5.0	10.0	8.2	500	500
4	04JQ-BT	04JQ-ST	7.5	12.5	10.7	500	500
5	05JQ-BT	05JQ-ST	10.0	15.0	13.2	500	500
6	06JQ-BT	06JQ-ST	12.5	17.5	15.7	500	500
7	07JQ-BT	07JQ-ST	15.0	20.0	18.2	250	250
8	08JQ-BT	08JQ-ST	17.5	22.5	20.7	200	250
9	09JQ-BT	09JQ-ST	20.0	25.0	23.2	200	250
10	10JQ-BT	10JQ-ST	22.5	27.5	25.7	250	250
11	11JQ-BT	11JQ-ST	25.0	30.0	28.2	250	250
12	12JQ-BT	12JQ-ST	27.5	32.5	30.7	200	200
13	13JQ-BT	13JQ-ST	30.0	35.0	33.2	200	200
15	15JQ-BT	15JQ-ST	35.0	40.0	38.2	100	100

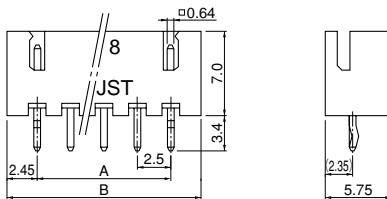
#### Material and Finish

Contact: Phosphor bronze, tin-plated (reflow treatment)  
Housing: PA 66, UL94V-0, natural

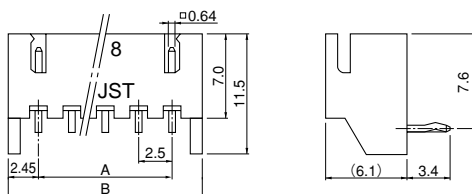
#### RoHS compliance

## Shrouded header

### Top entry type



### Side entry type



Circuits	Model No.		Dimensions (mm)		Q'ty / box	
	Top entry type	Side entry type	A	B	Top entry type	Side entry type
3	B3B-XH-A	S3B-XH-A-1	5.0	9.9	1,000	1,000
4	B4B-XH-A	S4B-XH-A-1	7.5	12.4	500	500
5	B5B-XH-A	S5B-XH-A-1	10.0	14.9	500	500
6	B6B-XH-A	S6B-XH-A-1	12.5	17.4	500	500
7	B7B-XH-A	S7B-XH-A-1	15.0	19.9	500	250
8	B8B-XH-A	S8B-XH-A-1	17.5	22.4	500	250
9	B9B-XH-A	S9B-XH-A-1	20.0	24.9	500	250
10	B10B-XH-A	S10B-XH-A-1	22.5	27.4	250	250
11	B11B-XH-A	S11B-XH-A-1	25.0	29.9	250	250
12	B12B-XH-A	S12B-XH-A-1	27.5	32.4	250	200
13	B13B-XH-A	S13B-XH-A-1	30.0	34.9	250	200
14	B14B-XH-A	S14B-XH-A-1	32.5	37.4	250	200
15	B15B-XH-A	S15B-XH-A-1	35.0	39.9	250	200

#### Material and Finish

Post: Brass, copper-undercoated, tin-plated (reflow treatment)  
Wafer: PA 66, UL94V-0, natural (white)

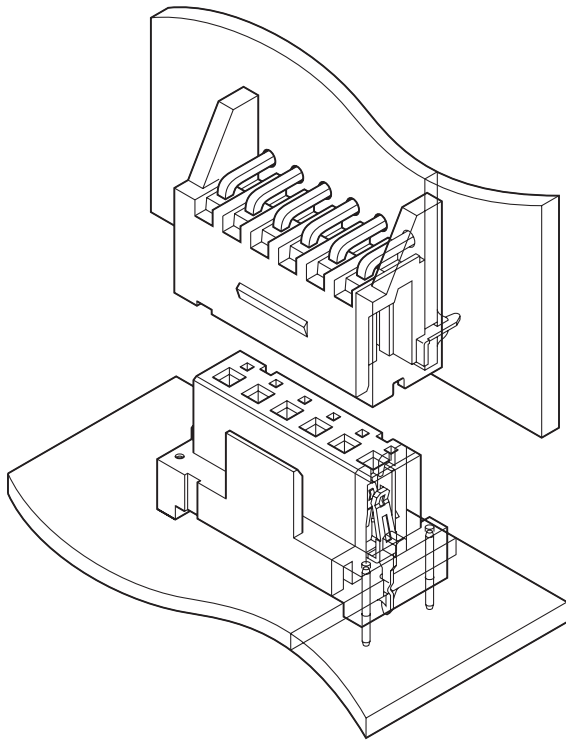
#### RoHS compliance

This product displays (LF)(SN) on a label.



# JL CONNECTOR

2.5mm pitch/Board-to-board connectors



**The JL connector is designed for board-to-board connection in electronic equipment requiring high-density mounting and unitization. This connector is highly resistant to equipment vibration and shock.**

- **High contact pressure**
- **Housing lock assures good connection even after severe shock & vibration**
- **Reinforcing pins increase PCB mounting durability**
- **Polarized, fully shrouded header aligns the connector halves before their pins make contact**

## Specifications

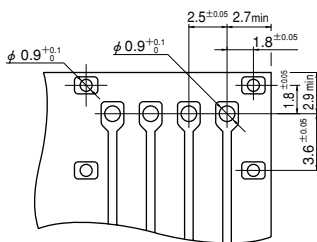
- Current rating: 3A AC, DC
- Voltage rating: 250V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/10m Ω max.  
After environmental testing/20m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 1,000V AC/minute
- Applicable PC board thickness: 1.6mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

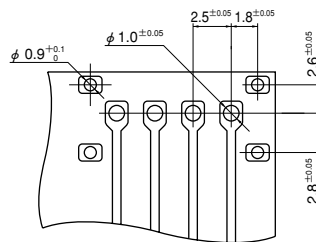
- Ⓜ Recognized E60389
- Ⓢ Certified LR20812

### PC board layout (viewed from soldering side) and Assembly layout

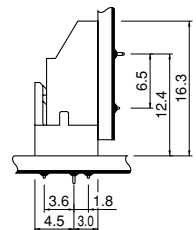
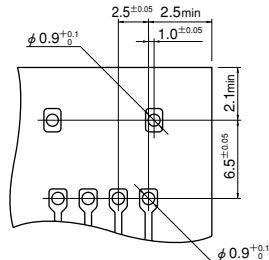
Receptacle



Receptacle on radial-tape



Shrouded header

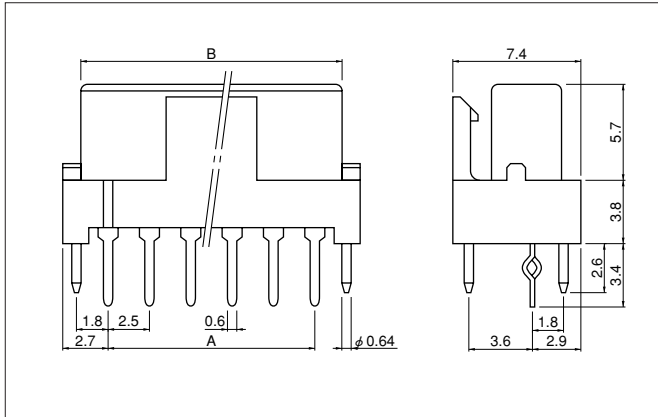


Note: 1. Tolerances are non-cumulative:  $\pm 0.05\text{mm}$  for all centers.

2. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.

# JL CONNECTOR

## Receptacle



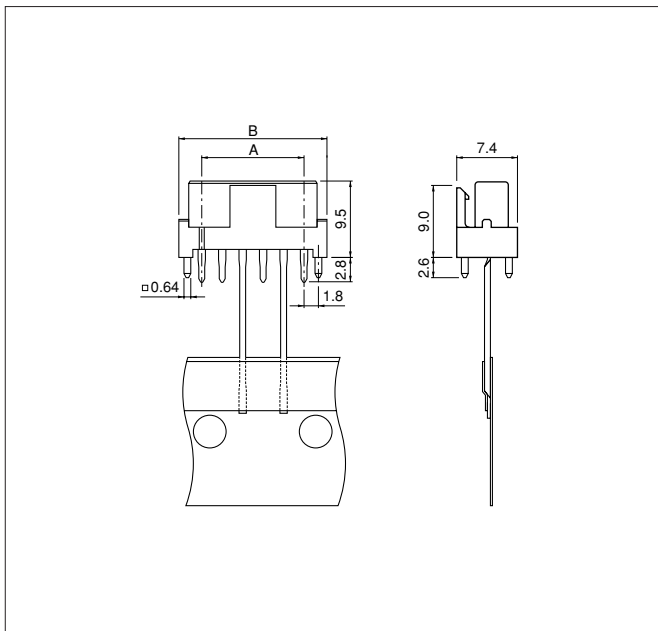
Circuits	Model No.	Dimensions (mm)		Q'ty/box
		A	B	
3	<b>03JL-BT-E</b>	5.0	8.2	250
4	<b>04JL-BT-E</b>	7.5	10.7	200
5	<b>05JL-BT-E</b>	10.0	13.2	200
6	<b>06JL-BT-E</b>	12.5	15.7	200
7	<b>07JL-BT-E</b>	15.0	18.2	200
8	<b>08JL-BT-E</b>	17.5	20.7	100
9	<b>09JL-BT-E</b>	20.0	23.2	100
10	<b>10JL-BT-E</b>	22.5	25.7	100
11	<b>11JL-BT-E</b>	25.0	28.2	100
12	<b>12JL-BT-E</b>	27.5	30.7	100
13	<b>13JL-BT-E</b>	30.0	33.2	100
15	<b>15JL-BT-E</b>	35.0	38.2	50

### Material and Finish

Contact: Phosphor bronze, tin-plated (reflow treatment)  
 Housing: PA 66, UL94V-0, blue  
 Reinforcing pins: Brass, copper-undercoated, tin-plated (reflow treatment)

**RoHS compliance** This product displays (LF)(SN) on a label.

## Receptacle on radial-tape



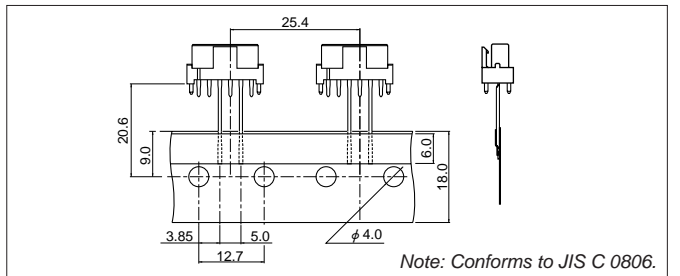
Circuits	Model No.	Dimensions (mm)		Q'ty/box
		A	B	
5	<b>05JL-BT-M-T</b>	10.0	15.4	400
6	<b>06JL-BT-M-T</b>	12.5	17.9	400
7	<b>07JL-BT-M-T</b>	15.0	20.4	400
8	<b>08JL-BT-M-T</b>	17.5	22.9	400

### Material and Finish

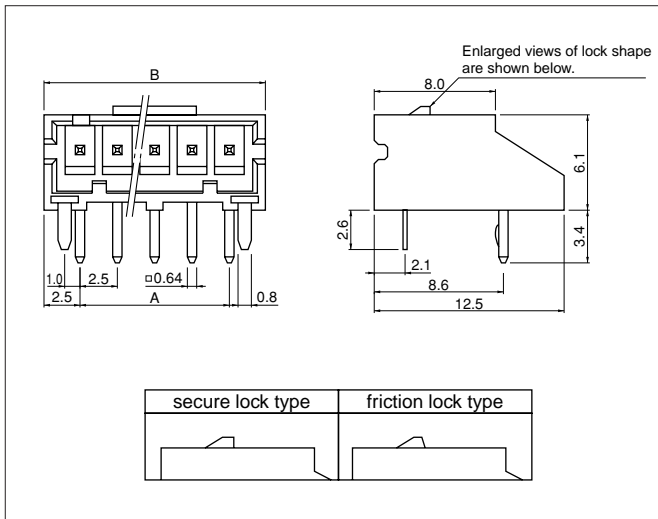
Contact: Phosphor bronze, tin-plated (reflow treatment)  
 Housing: PA 66, UL94V-0  
 Reinforcing pins: Brass, copper-undercoated, tin-plated (reflow treatment)

**RoHS compliance** This product displays (LF)(SN) on a label.

## Taping Specifications



## Shrouded header



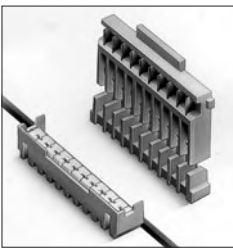
Circuits	Model No.		Dimensions (mm)		Q'ty/box
	secure lock type	friction lock type	A	B	
3	<b>S3B-JL-R</b>	<b>S3B-JL-F-E</b>	5.0	10.0	250
4	<b>S4B-JL-R</b>	<b>S4B-JL-F-E</b>	7.5	12.5	200
5	<b>S5B-JL-R</b>	<b>S5B-JL-F-E</b>	10.0	15.0	200
6	<b>S6B-JL-R</b>	<b>S6B-JL-F-E</b>	12.5	17.5	200
7	<b>S7B-JL-R</b>	<b>S7B-JL-F-E</b>	15.0	20.0	200
8	<b>S8B-JL-R</b>	<b>S8B-JL-F-E</b>	17.5	22.5	100
9	<b>S9B-JL-R</b>	<b>S9B-JL-F-E</b>	20.0	25.0	100
10	<b>S10B-JL-R</b>	<b>S10B-JL-F-E</b>	22.5	27.5	100
11	<b>S11B-JL-R</b>	<b>S11B-JL-F-E</b>	25.0	30.0	100
12	<b>S12B-JL-R</b>	<b>S12B-JL-F-E</b>	27.5	32.5	100
13	<b>S13B-JL-R</b>	<b>S13B-JL-F-E</b>	30.0	35.0	100
15	<b>S15B-JL-R</b>	<b>S15B-JL-F-E</b>	35.0	40.0	100

### Material and Finish

Post: Brass, copper-undercoated, tin-plated (reflow treatment)  
 Wafer: PA 66, UL94V-0, red (secure lock type), blue (friction lock type)  
 Reinforcing pins: Brass, tin-plated (reflow treatment)

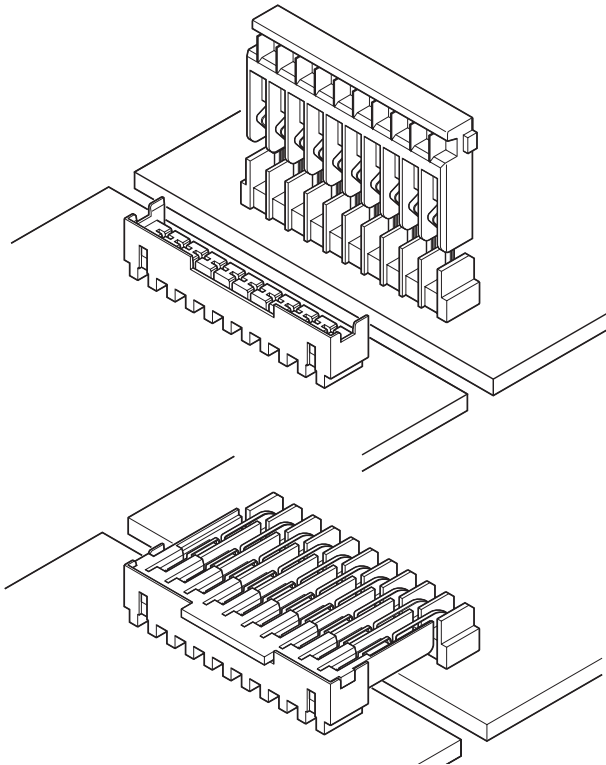
**RoHS compliance** This product displays (LF)(SN) on a label.





# 2.5FJ CONNECTOR

2.5mm pitch/Board-to-board connectors



**The 2.5FJ connector is a 2.5mm pitch board-to-board connector. The connector halves can be mated after the installation of the printed circuit boards in their enclosure.**

- Flexible connection absorbs circuit board misalignment
- Provides a low profile mount and allows connection after mounting
- Assures a reliable connection

## Specifications

- Current rating: 1.0A AC, DC
- Voltage rating: 50V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/60m Ω max.  
After environmental testing/80m Ω max.
- Insulation resistance: 500M Ω min.
- Withstanding voltage: 500V AC/minute
- Applicable PC board thickness: 1.6mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

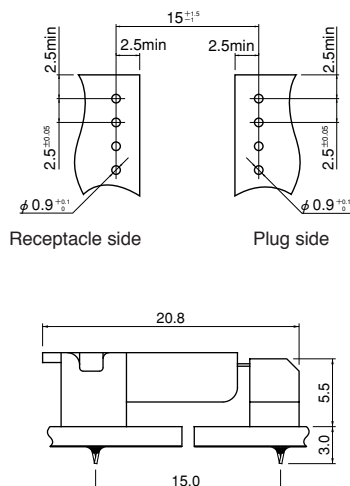
## Standards

Recognized E60389

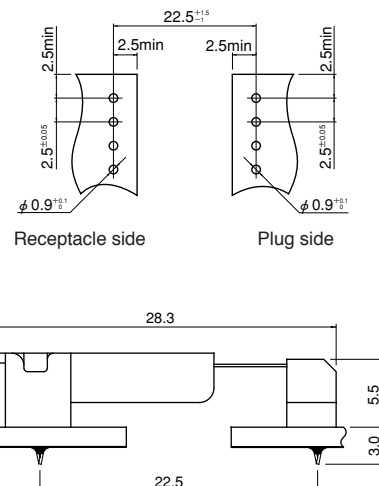
Certified LR20812

## PC board layout (viewed from component side) and Assembly layout

### Short type



### Long type



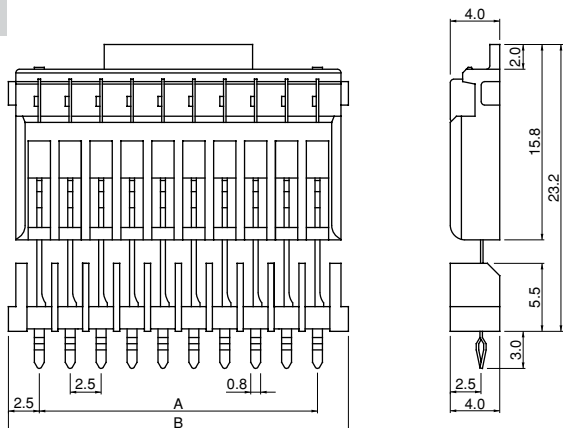
Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.

2. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.

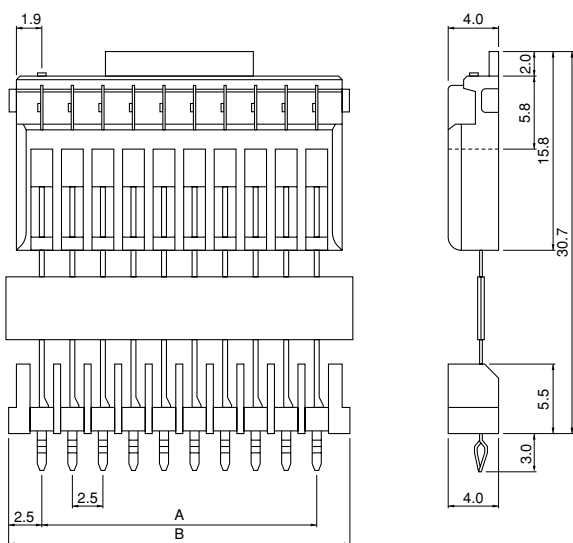
# 2.5FJ CONNECTOR

## Plug

### Short type



### Long type



Circuits	Model No.		Dimensions (mm)		Qty / box	
	Short type	Long type	A	B	Short type	Long type
5	<b>05TM-2.5FJ</b>	—	10.0	15.0	200	—
10	<b>10TM-2.5FJ</b>	<b>10PN-2.5FJ</b>	22.5	27.5	100	100

### Material and Finish

Contact: Phosphor bronze, tin-plated (reflow treatment)

Housing: PA 66, UL94V-0,

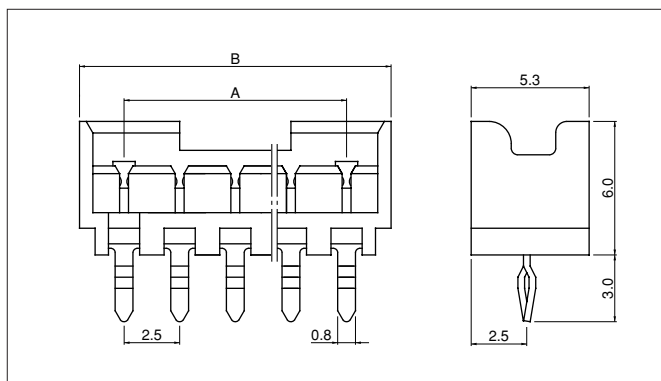
Short type —white (natural)

Long type —white (natural)

### RoHS compliance

Note: 10PN-2.5FJ is not UL/CSA approved.

## Receptacle



Circuits	Model No.	Dimensions (mm)		Qty/box
		A	B	
5	<b>05R-2.5FJ</b>	10.0	15.0	200
10	<b>10R-2.5FJ</b>	22.5	27.5	200

### Material and Finish

Contact: Phosphor bronze, copper-undercoated, tin-plated (reflow treatment)

Housing: PA 66, UL94V-0

**RoHS compliance** This product displays (LF)(SN) on a label.

# 1-D

## Card Edge Connectors

### TABLE OF CONTENTS

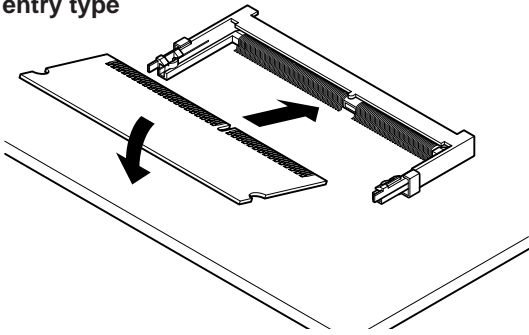
• 0.8mm pitch	DM-144P CONNECTOR .....	172
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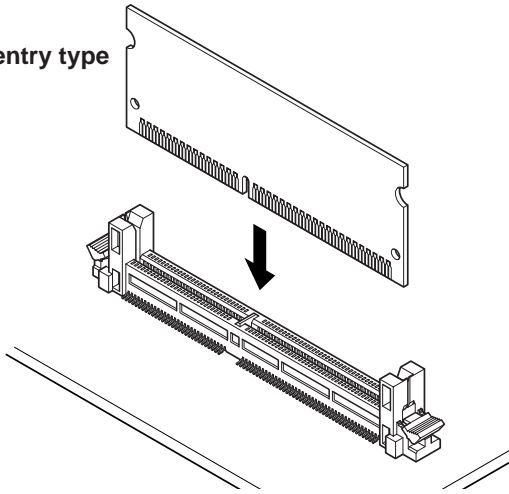
# DM-144P CONNECTOR

0.8mm pitch/Socket for S.O.DIMM

## Side entry type



## Top entry type



Sockets for the 8Byte S.O.DIMM which is standardized by the JEDEC.

- Extremely small space for mounting on the board

## Specifications

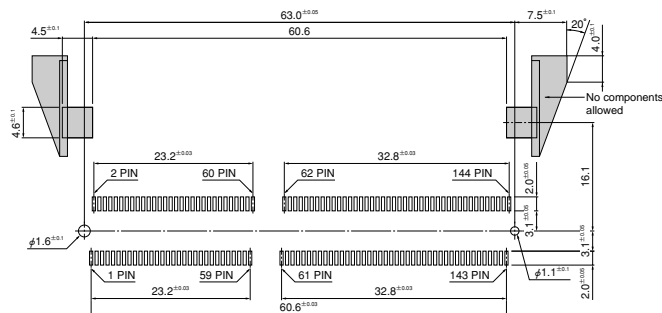
- Current rating: 0.5A AC, DC
- Voltage rating: 250V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/30m Ω max.  
After environmental testing/50m Ω max.
- Insulation resistance: 250M Ω min.
- Withstanding voltage: 250V AC/minute
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

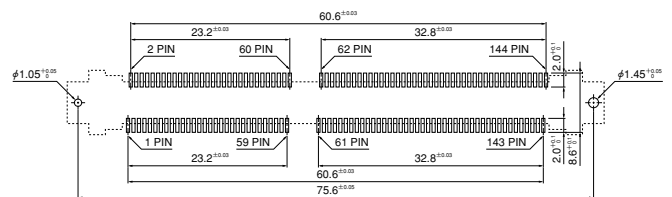
Recognized E60389

## PC board layout (viewed from component side)

### Side entry type



### Top entry type

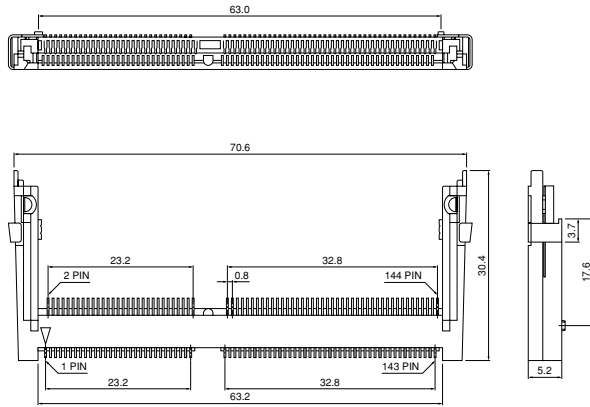


Note: 1. Tolerances are non-cumulative:  $\pm 0.03\text{mm}$  for all centers.  
2. The dimensions above should serve as a guideline. Contact JST for details.

# DM-144P CONNECTOR

## Connector

### Side entry type



Model No.

**DM-3B1-N1210**

Q'ty / box

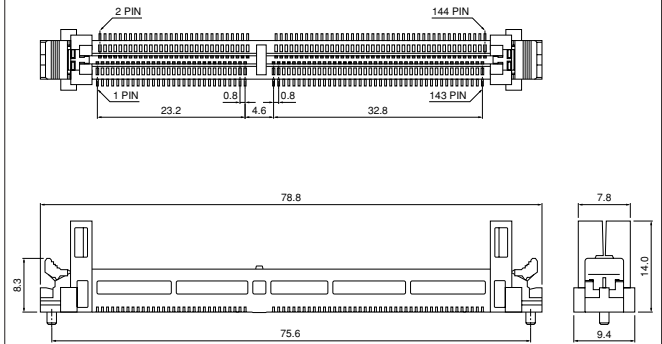
320

#### Material and Finish

Contact: Copper alloy, nickel-undercoated, Mating part; gold-plated  
Solder tail; tin-plated (reflow treatment)  
Housing: Heat resisting resin, UL94V-0  
Solder tab: Copper alloy, copper-undercoated, tin-plated (reflow treatment)

**RoHS compliance** This product displays (LF)(SN) on a label.

### Top entry type



Model No.

**DM-3D4-B3200**

Q'ty / box

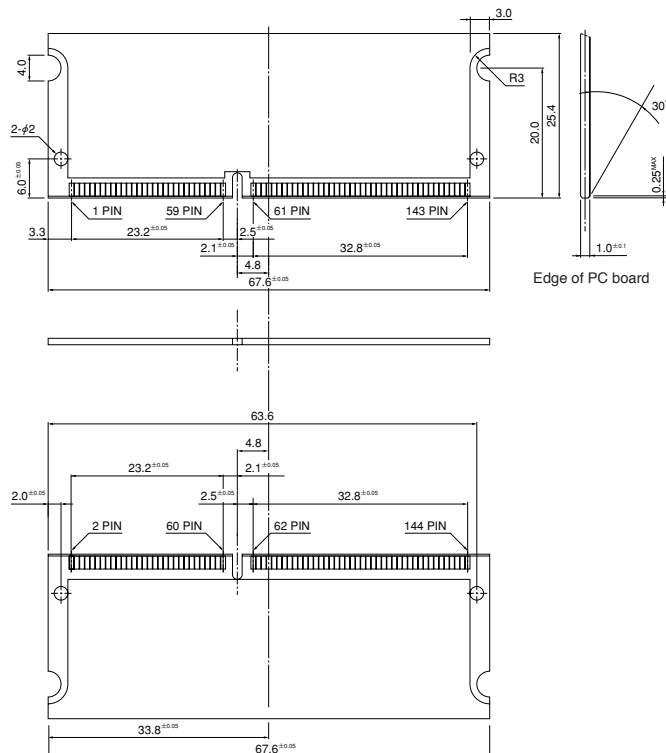
224

#### Material and Finish

Contact: Copper alloy, nickel-undercoated, gold-plated  
Housing: Heat resisting resin, UL94V-0  
Ejector: Heat resisting resin, UL94V-0

**RoHS compliance**

## Applicable PC board layout (for reference)







# FFC/FPC Connectors

## TABLE OF CONTENTS

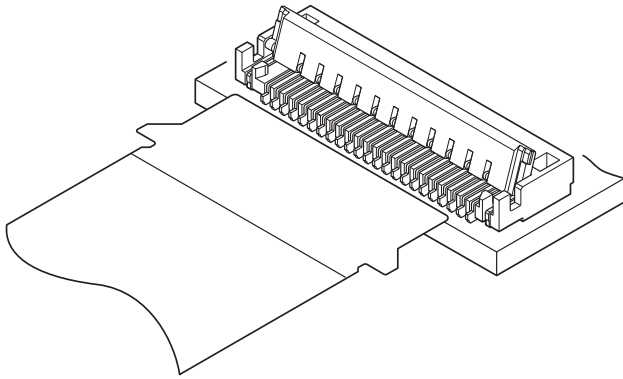
• 0.2mm pitch • 0.3mm pitch	FVW CONNECTOR.....	176	
	FX CONNECTOR.....	178	
	FXS CONNECTOR.....	180	
	FXL CONNECTOR.....	182	
	FXW CONNECTOR.....	184	
	FXM CONNECTOR.....	186	
	FXY CONNECTOR.....	188	
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	FXV CONNECTOR.....	192	
	FXZ CONNECTOR.....	194	
	FXZT CONNECTOR.....	196	
	• 0.5mm pitch	FLH CONNECTOR.....	198
		FLZ CONNECTOR.....	200
		FLZT CONNECTOR.....	202
FHX CONNECTOR.....		204	
FHZ CONNECTOR.....		206	
FHSY CONNECTOR.....		208	
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FH CONNECTOR.....		212	
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	FY CONNECTOR.....	220	
	FLT CONNECTOR.....	222	
	FMN CONNECTOR.....	224	
	FMZ CONNECTOR.....	227	
	FE CONNECTOR.....	229	
	FDZ CONNECTOR.....	231	



# FVW CONNECTOR



0.2mm pitch/Connectors for FPC



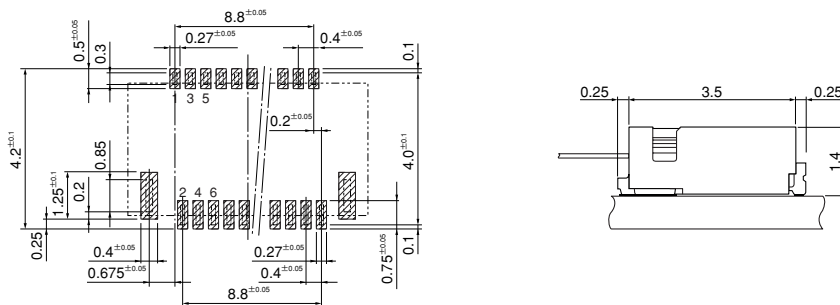
**In addition to achieving space saving and low profile features demanded by the market, this connector also realizes smaller pitch (0.2mm pitch) up to an extreme situation and adopts double-sided FPC.**

- Adoption of ZIF structure
- Self-lock mechanism enables the cover to close by one-touch operation
- Double-sided FPC
- FPC with protrusions

## Specifications

- Current rating: 0.3A AC, DC
- Voltage rating: 50V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/50m Ω max.  
After environmental testing/50m Ω max.  
(variation from initial value)
- Insulation resistance: 50M Ω min.
- Withstanding voltage: 200V AC/minute
- \* RoHS compliant products are published.
- \* Contact JST for thickness of applicable Double-sided FPC.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## PC board layout (viewed from component side) and Assembly layout

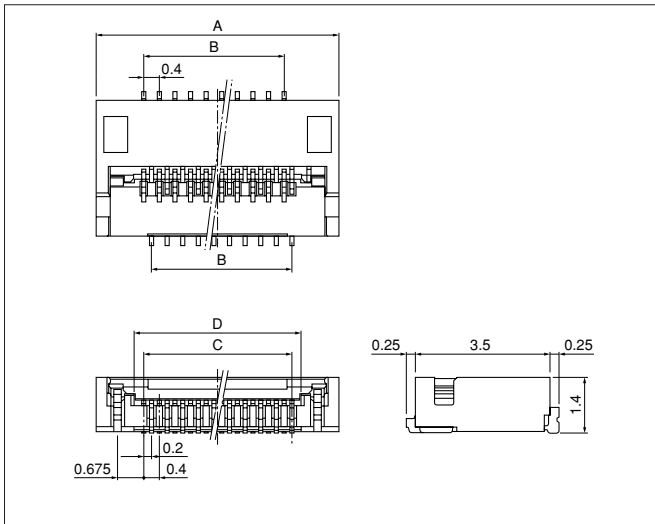


Note: 1. Tolerances are non-cumulative:  $\pm 0.05\text{mm}$  for all centers.  
2. The dimensions above should serve as a guideline. Contact JST for details.



# FWW CONNECTOR

## Connector



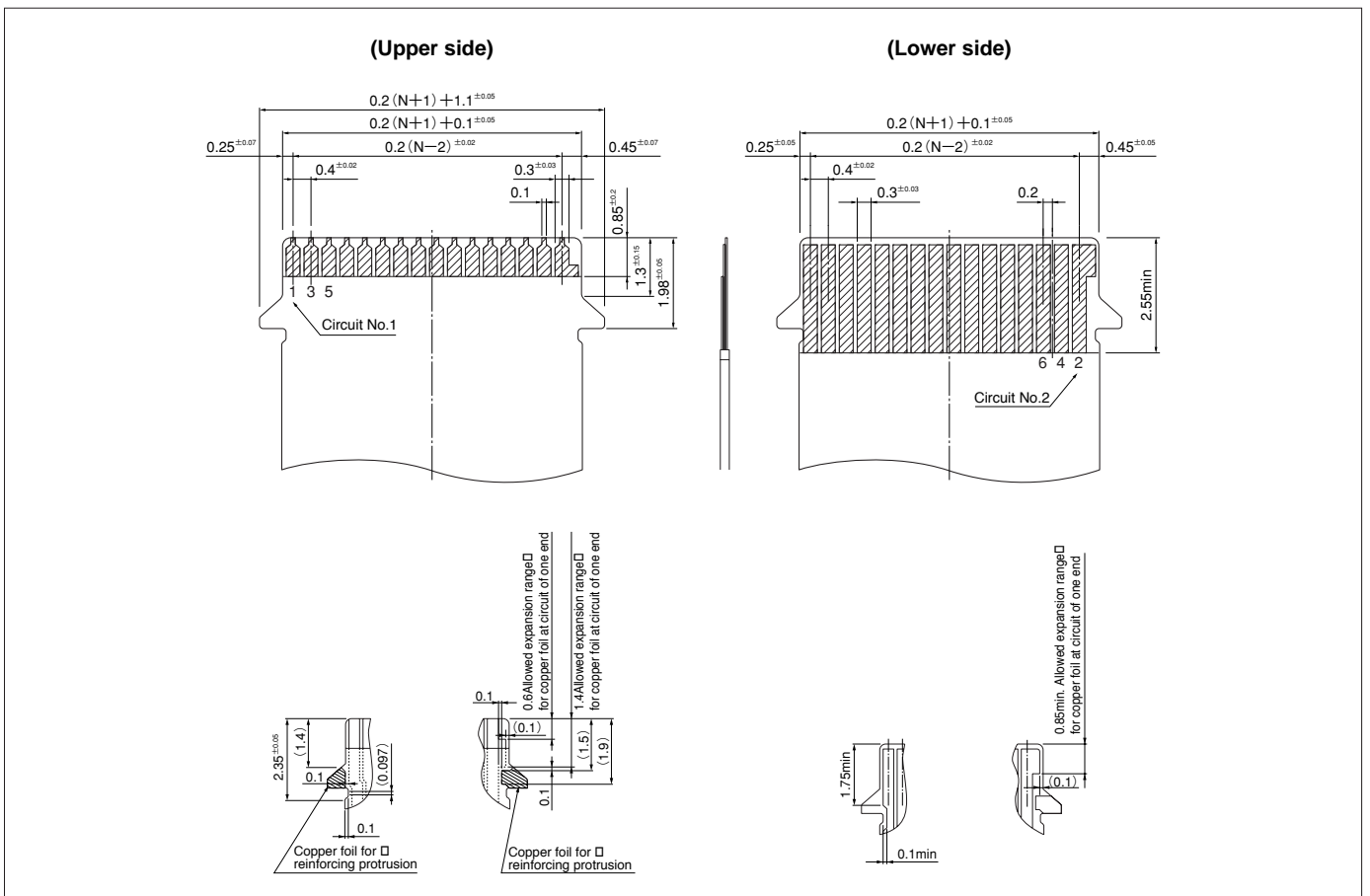
Circuits	Model No.	Dimensions (mm)				Q'ty / reel
		A	B	C	D	
46	<b>46FVW-SM1-GAN-TF</b>	11.45	8.8	9.0	9.5	2,500

### Material and Finish

Contact: Copper alloy, nickel-undercoated, gold-plated (nickel-stripe)  
 Housing: LCP, UL94V-0  
 Solder tab: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
 Cover: PPS, UL94V-0

**RoHS compliance** This product displays (LF)(SN) on a label.  
 This products listed above are supplied on embossed-tape.

## Lead section dimensions of FPC

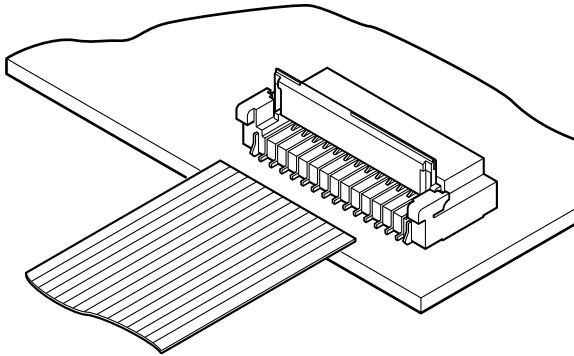


Note: N --- Number of circuits



# FX CONNECTOR

0.3mm pitch/Connectors for FPC



**Non-ZIF type connector for FPC's, with only 2.25mm height when mounted on the PC board. Temporary retention mechanism and flip-lock device provide good operational efficiency.**

- Good for high density mounting
- Heat resisting design suitable for surface mounting
- Easy mounting operation
- Embossed taping for automatic mounting

## Specifications

- Current rating: 0.2A AC, DC
- Voltage rating: 50V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/50m Ω max.  
After environmental testing/50m Ω max.  
(variation from initial value)
- Insulation resistance: 50M Ω min.
- Withstanding voltage: 200V AC/minute
- Applicable FPC: Conductor pitch/0.3mm  
<0.6mm pitch staggered>  
Conductor width/0.3mm  
Mating part thickness/0.2±0.03mm

Note: FPC to be actually used should be checked for applicability.

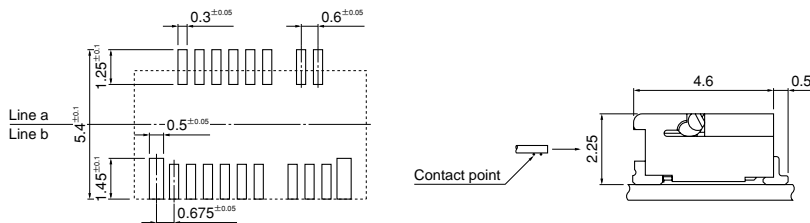
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

Recognized E60389

Certified LR20812

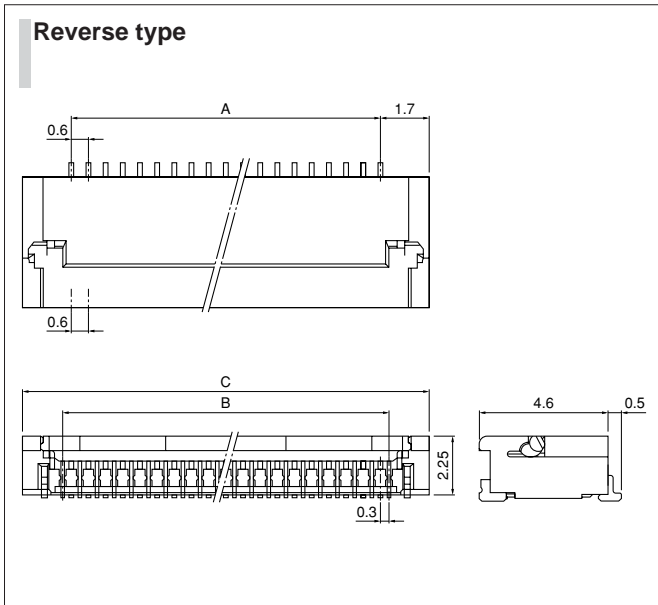
### PC board layout (viewed from component side) and Assembly layout



- Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.  
2. The dimensions above should serve as a guideline. Contact JST for details.

## Connector

### Reverse type



Circuits	Model No.	Dimensions (mm)			Q'ty / reel
		A	B	C	
15	<b>15FX-RSM1-S-TB</b>	3.6	4.2	7.0	3,000
21	<b>21FX-RSM1-S-TB</b>	5.4	6.0	8.8	3,000
23	<b>23FX-RSM1-S-TB</b>	6.0	6.6	9.4	3,000
25	<b>25FX-RSM1-S-TB</b>	6.6	7.2	10.0	3,000
27	<b>27FX-RSM1-S-TB</b>	7.2	7.8	10.6	3,000
33	<b>33FX-RSM1-S-TB</b>	9.0	9.6	12.4	3,000
39	<b>39FX-RSM1-S-TB</b>	10.8	11.4	14.2	3,000
45	<b>45FX-RSM1-S-TB(12)</b>	12.6	13.2	16.0	2,500
51	<b>51FX-RSM1-S-TB</b>	14.4	15.0	17.8	3,000
57	<b>57FX-RSM1-S-TB</b>	16.2	16.8	19.6	3,000

### Material and Finish

Contact: Copper alloy, copper-undercoated, tin-plated (reflow treatment)

Housing: LCP, UL94V-0

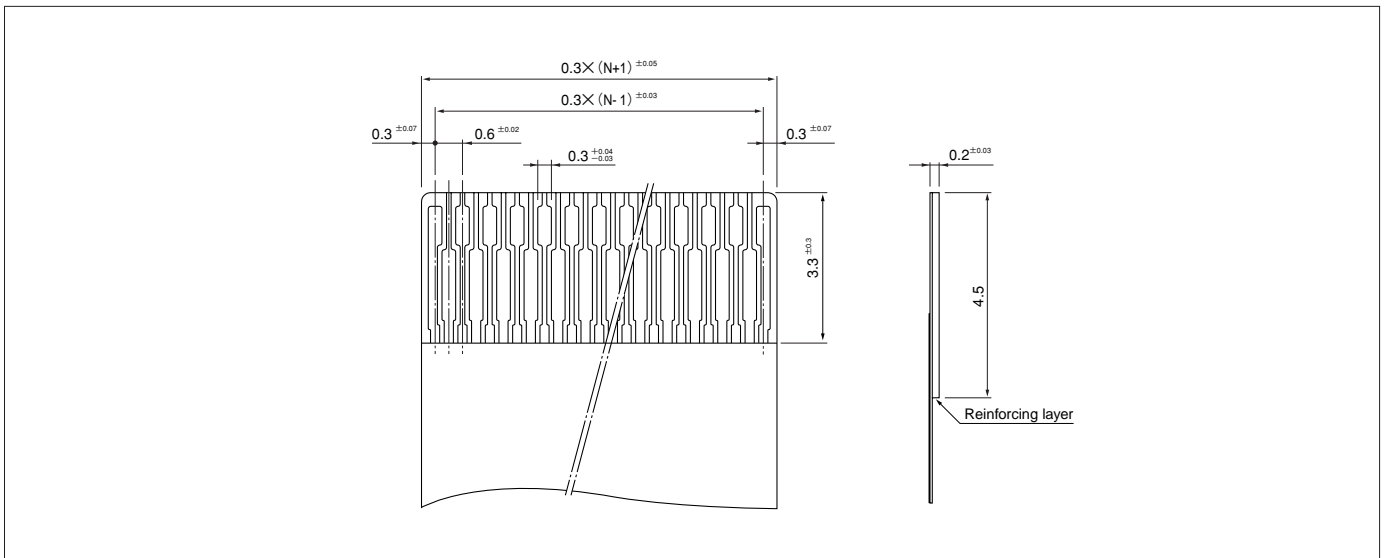
Solder tab: Copper alloy, copper-undercoated, tin-plated (reflow treatment)

Cover: Heat-resisting polyamide, UL94V-0

**RoHS compliance** This product displays (LF)(SN) on a label.

Note: Contact JST for gold-plated products.

## Lead section dimensions of FPC

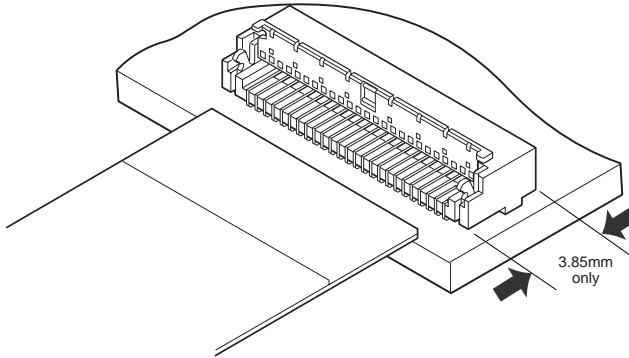


Note: N---Number of circuits



# FXS CONNECTOR

0.3mm pitch/Connectors for FPC



**Space saving flip lock type connector, with 1.8mm height and 3.85mm depth.**

- Space saving design
- Rotating cover structure
- Locking structure

## Specifications

- Current rating: 0.2A AC, DC
- Voltage rating: 50V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/50m Ω max.  
After environmental testing/50m Ω max.  
(variation from initial value)
- Insulation resistance: 500M Ω min.
- Withstanding voltage: 200V AC/minute
- Applicable FPC: Conductor pitch/0.3mm  
<0.6mm pitch staggered>  
Conductor width/0.3mm  
Mating part thickness/0.2±0.03mm

Note: FPC to be actually used should be checked for applicability.

\* RoHS compliant products are published.

\* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.

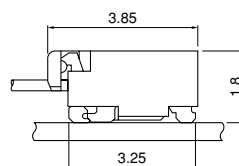
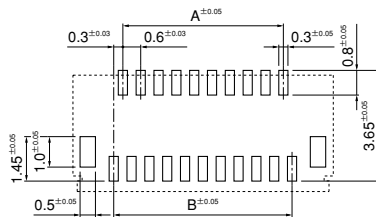
\* Contact JST for details.

## Standards

Ⓜ Recognized E60389

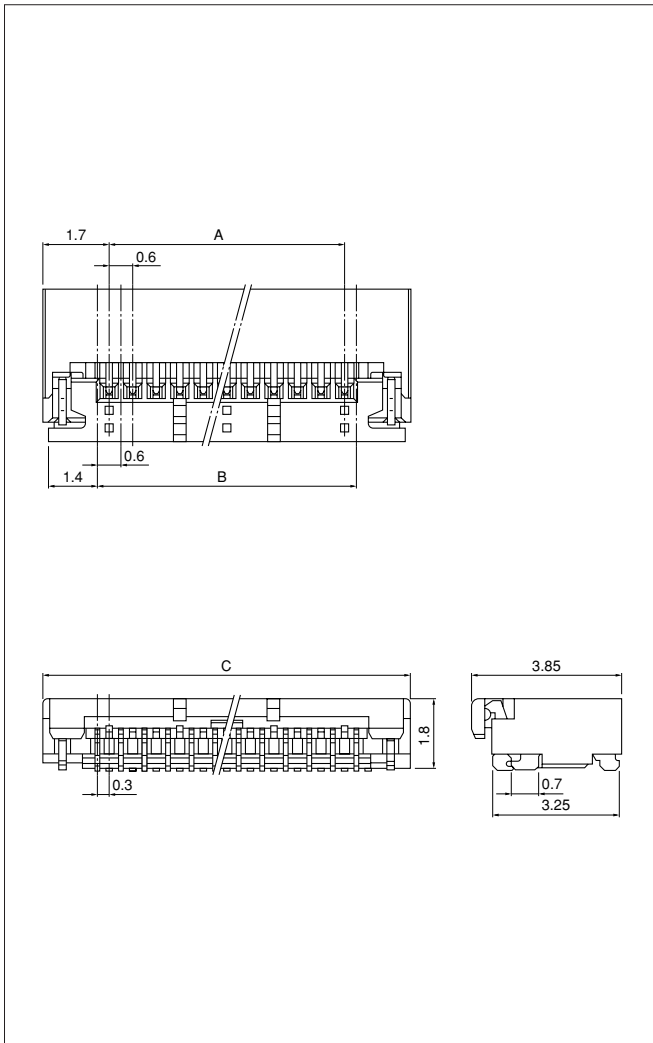
Ⓢ Certified LR20812

## PC board layout (viewed from component side) and Assembly layout



- Note: 1. Tolerances are non-cumulative: ±0.03mm for all centers.  
2. The dimensions above should serve as a guideline. Contact JST for details.

## Connector



### Gold-plated

Circuits	Model No.	Dimensions (mm)			Q'ty / reel
		A	B	C	
15	15FXS-RSM1-G-TF (B)	3.6	4.2	7.0	2,500
19	19FXS-RSM1-G-TF (B)	4.8	5.4	8.2	2,500
21	21FXS-RSM1-G-TF (B)	5.4	6.0	8.8	2,500
25	25FXS-RSM1-G-TF (B)	6.6	7.2	10.0	2,500
33	33FXS-RSM1-G-TF (B)	9.0	9.6	12.4	2,500
45	45FXS-RSM1-G-TF (B)	12.6	13.2	16.0	2,500
51	51FXS-RSM1-G-TF (B)	14.4	15.0	17.8	2,500

### Material and Finish

Contact: Copper alloy, nickel-undercoated, gold-plated  
Housing: Heat resisting resin, UL94V-0  
Solder tab: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
Cover: Heat resisting resin, UL94V-0  
Reinforcing pin: KOVAR  
Rotary pin: KOVAR

**RoHS compliance** This product displays (LF)(SN) on a label.

### Tin-plated

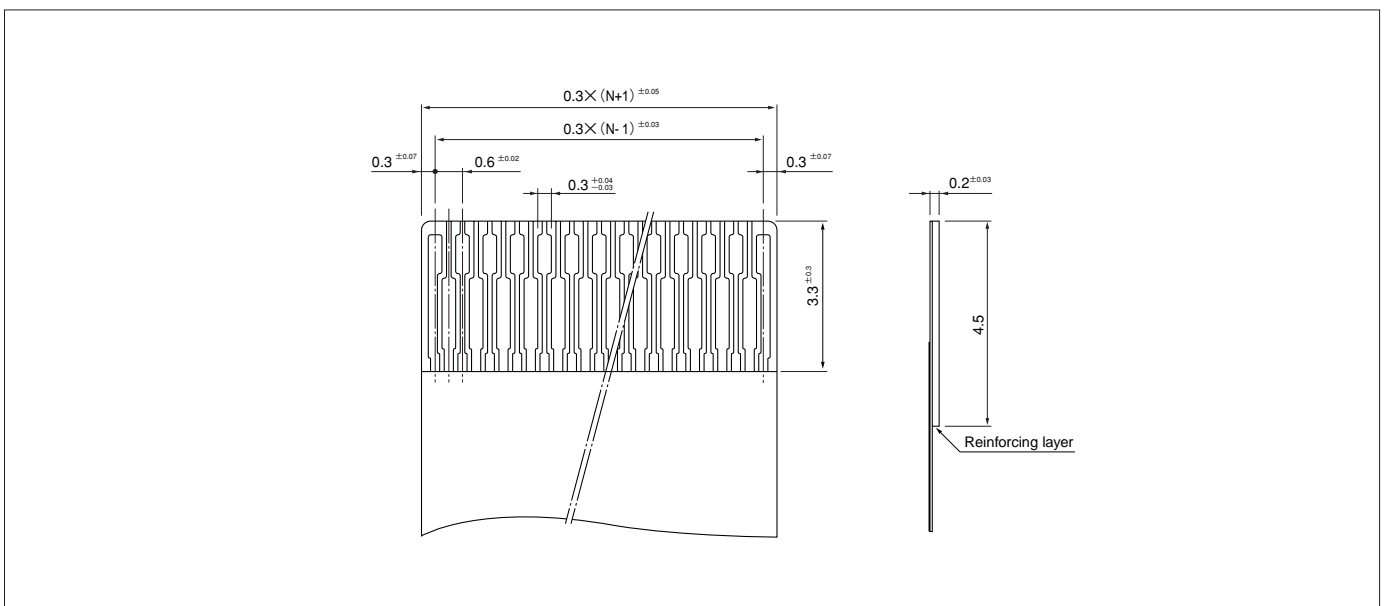
Circuits	Model No.	Dimensions (mm)			Q'ty / reel
		A	B	C	
15	15FXS-RSM1-TF (B)	3.6	4.2	7.0	2,500
19	19FXS-RSM1-TF (B)	4.8	5.4	8.2	2,500
21	21FXS-RSM1-TF (B)	5.4	6.0	8.8	2,500
25	25FXS-RSM1-TF (B)	6.6	7.2	10.0	2,500
33	33FXS-RSM1-TF (B)	9.0	9.6	12.4	2,500
45	45FXS-RSM1-TF (B)	12.6	13.2	16.0	2,500
51	51FXS-RSM1-TF (B)	14.4	15.0	17.8	2,500

### Material and Finish

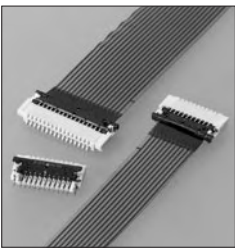
Contact: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
Housing: Heat resisting resin, UL94V-0  
Solder tab: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
Cover: Heat resisting resin, UL94V-0  
Reinforcing pin: KOVAR  
Rotary pin: KOVAR

**RoHS compliance** This product displays (LF)(SN) on a label.

## Lead section dimensions of FPC

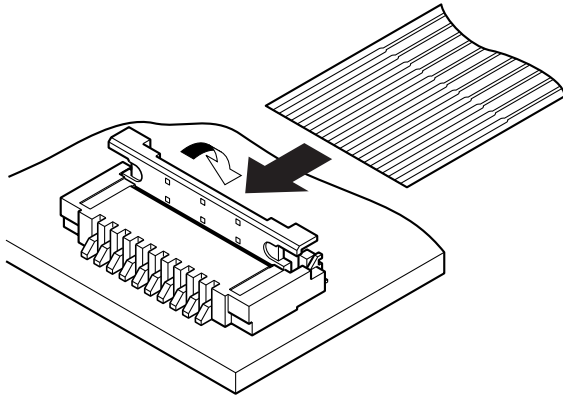


Note: N---Number of circuits



# FXL CONNECTOR

0.3mm pitch/Connectors for FPC



**0.3mm pitch non-ZIF flip lock type connector with 1.3mm low profile.**

- 1.3mm height, low profile
- Optimum heat resistant material for surface mount

## Specifications

- Current rating: 0.2A AC, DC
- Voltage rating: 50V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/50m Ω max.  
After environmental testing/50m Ω max.  
(variation from initial value)
- Insulation resistance: 50M Ω min.
- Withstanding voltage: 200V AC/minute
- Applicable FPC: Conductor pitch/0.3mm  
<0.6mm pitch staggered>  
Conductor width/0.3mm  
Mating part thickness/0.2±0.03mm

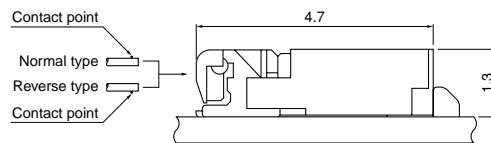
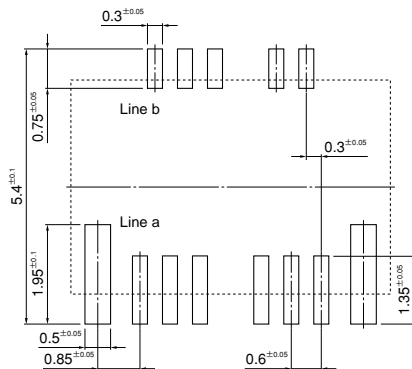
Note: FPC to be actually used should be checked for applicability.

- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

Recognized E60389

### PC board layout (viewed from component side) and Assembly layout

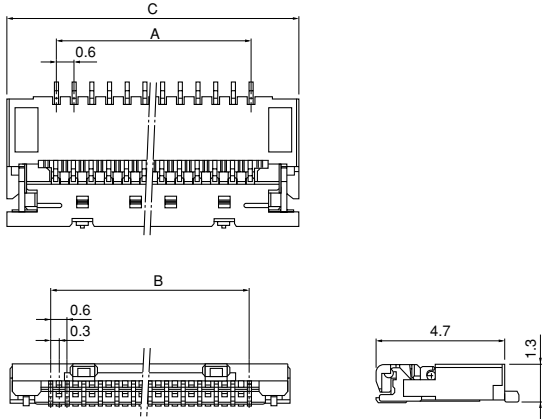


Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.  
2. The dimensions above should serve as a guideline. Contact JST for details.

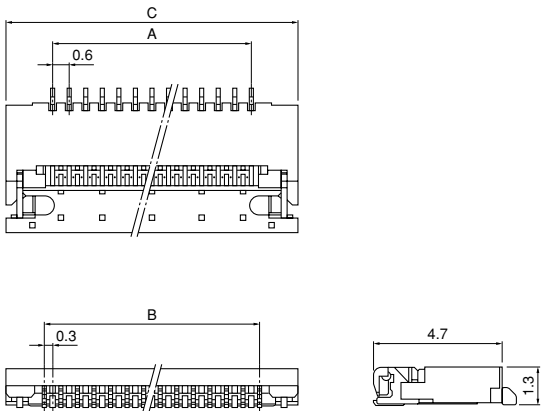
# FXL CONNECTOR

## Connector

### Normal type



### Reverse type



Circuits	Model No.	Dimensions (mm)			Q'ty / reel
		A	B	C	
19	19FXL-SM1-S-H-TB	4.8	5.4	8.2	3,000
33	33FXL-SM1-S-H-TB	9.0	9.6	12.4	3,000

#### Material and Finish

Contact: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
 Housing: LCP, UL94V-0  
 Cover housing: LCP, UL94V-0  
 Solder tab: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
 Frame pin: SUS

**RoHS compliance** This product displays (LF)(SN) on a label.

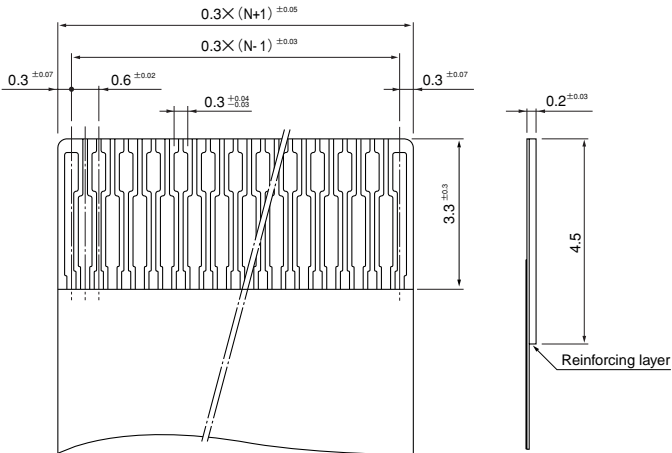
Circuits	Model No.	Dimensions (mm)			Q'ty / reel
		A	B	C	
11	11FXL-RSM1-S-H-TB	2.4	3.0	5.8	3,000
15	15FXL-RSM1-S-H-TB	3.6	4.2	7.0	3,000
17	17FXL-RSM1-S-H-TB	4.2	4.8	7.6	3,000
19	19FXL-RSM1-S-H-TB	4.8	5.4	8.2	3,000
21	21FXL-RSM1-S-H-TB	5.4	6.0	8.8	3,000
23	23FXL-RSM1-S-H-TB	6.0	6.6	9.4	3,000
25	25FXL-RSM1-S-H-TB	6.6	7.2	10.0	3,000
27	27FXL-RSM1-S-H-TB	7.2	7.8	10.6	3,000
29	29FXL-RSM1-S-H-TB	7.8	8.4	11.2	3,000
31	31FXL-RSM1-S-H-TB	8.4	9.0	11.8	3,000
33	33FXL-RSM1-S-H-TB	9.0	9.6	12.4	3,000
39	39FXL-RSM1-S-H-TB	10.8	11.4	14.2	3,000
51	51FXL-RSM1-S-H-G-TB	14.4	15.0	17.8	3,000
57	57FXL-RSM1-S-H-G-TB	16.2	16.8	19.6	3,000

#### Material and Finish

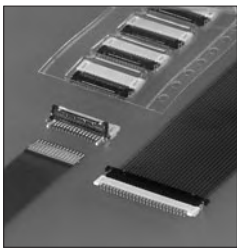
Contact: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
 Copper alloy, nickel-undercoated, gold-plated (51, 57 circuits)  
 Housing: LCP, UL94V-0  
 Cover housing: LCP, UL94V-0  
 Solder tab: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
 Reinforcement pin: KOVAR or SUS  
 Rotary pin: KOVAR or SUS

**RoHS compliance** This product displays (LF)(SN) on a label.

## Lead section dimensions of FPC

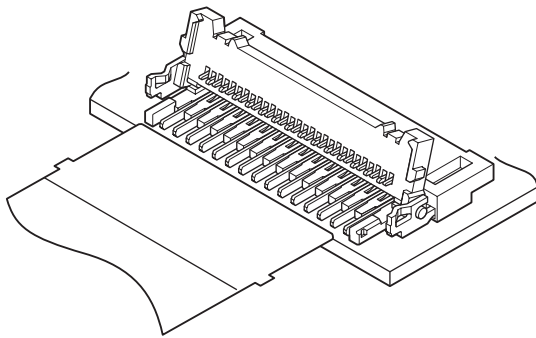


Note: N---Number of circuits

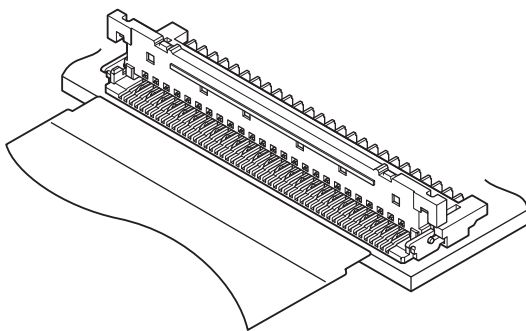


# FXW CONNECTOR

0.3mm pitch/Connectors for FPC



Normal type



Reverse type

**This low-profile FPC connector with a mounting height of 1.0mm has a Double ZIF Flip-lock slider structure.**

- Low-profile (1.0mm height) & adoption of Double ZIF structure
- One-touch sliding operation of Molded Cover
- Heat resisting design suitable for surface mounting
- FPC with protrusions for normal type

## Specifications

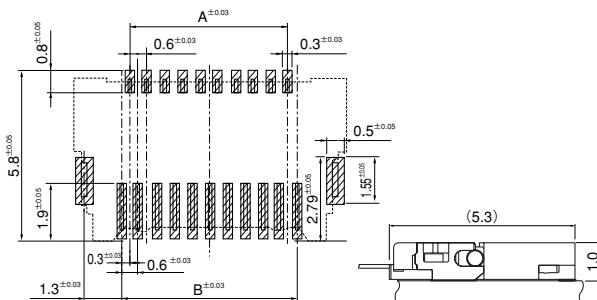
- Current rating: 0.2A AC, DC
- Voltage rating: 50V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/60m Ω max.  
After environmental testing/50m Ω max.  
(variation from initial value)
- Withstanding voltage: 200V AC/minute
- Applicable FPC: Conductor pitch/0.3mm  
<0.6mm pitch staggered>  
Conductor width/0.3mm  
Mating part thickness/0.12<sup>+0.03</sup><sub>-0.02</sub>mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

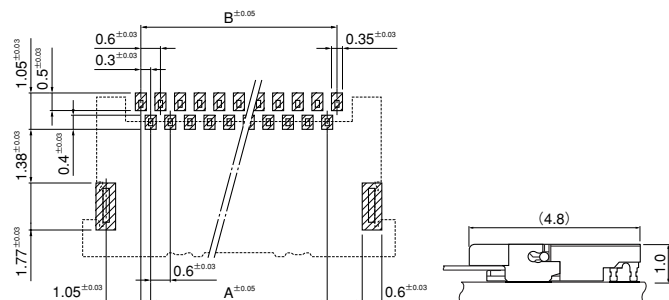
Recognized E60389

## PC board layout (viewed from component side) and Assembly layout

Normal type



Reverse type



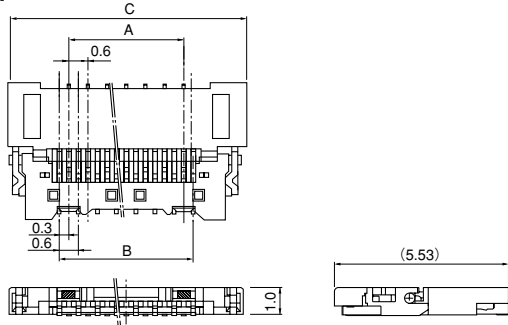
Note: 1. Tolerances are non-cumulative: ±0.03mm for all centers.  
2. The dimensions above should serve as a guideline. Contact JST for details.



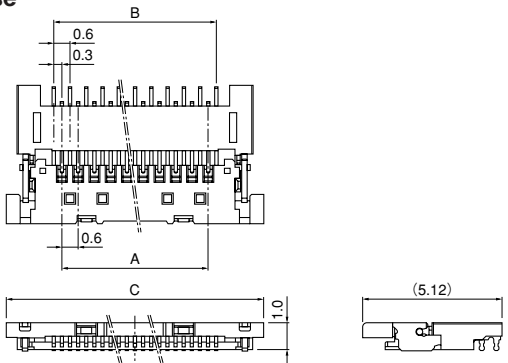
# FXW CONNECTOR

## Connector

### Normal type



### Reverse type



Circuits	Model No.	Dimensions (mm)			Q'ty / reel
		A	B	C	
25	<b>25FXW-SM1-G-S-TB</b>	6.6	7.2	10.4	5,000
29	<b>29FXW-SM1-G-S-TB</b>	7.8	8.4	11.6	5,000

### Material and Finish

Contact: Copper alloy, nickel-undercoated, gold-plated  
 Housing: Heat resisting resin, UL94V-0  
 Solder tab: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
 Cover: Heat resisting resin, UL94V-0

**RoHS compliance** This product displays (LF)(SN) on a label.

Circuits	Model No.	Dimensions (mm)			Q'ty / reel
		A	B	C	
17	<b>17FXW-RSM1-G-S-TB</b>	4.2	4.8	8.3	4,500
27	<b>27FXW-RSM1-G-S-TB</b>	7.2	7.8	11.3	4,500
31	<b>31FXW-RSM1-G-S-TB</b>	8.4	9.0	12.5	4,500
35	<b>35FXW-RSM1-G-S-TB</b>	9.6	10.2	13.7	4,500
41	<b>41FXW-RSM1-G-S-TB</b>	11.4	12.0	15.5	4,500
51	<b>51FXW-RSM1-G-S-TB</b>	14.4	15.0	18.5	4,500
59	<b>59FXW-RSM1-G-S-TB</b>	16.8	17.4	20.9	4,500

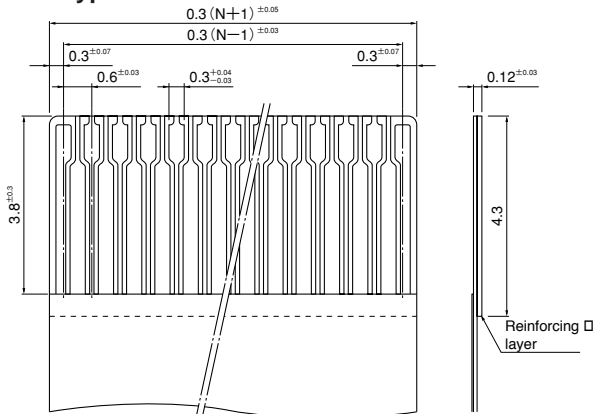
### Material and Finish

Contact: Copper alloy, nickel-undercoated, gold-plated  
 Housing: Heat resisting resin, UL94V-0  
 Solder tab: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
 Cover: Heat resisting resin, UL94V-0

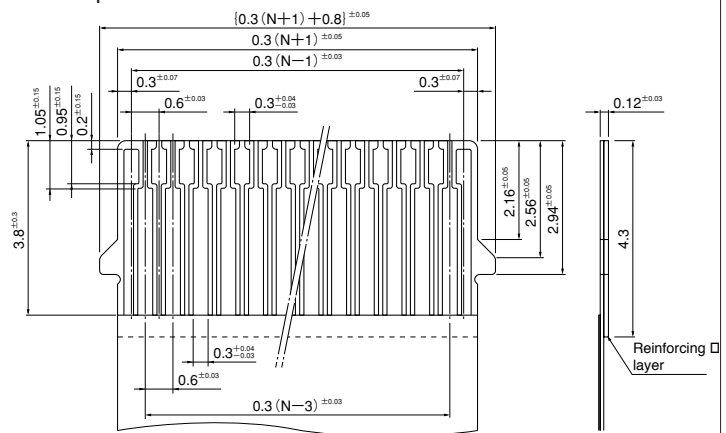
**RoHS compliance** This product displays (LF)(SN) on a label.

## Lead section dimensions of FPC

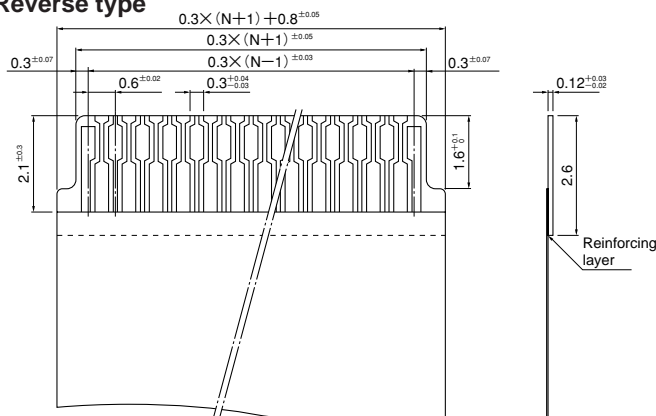
### Normal type



### <With protrusions>



### Reverse type

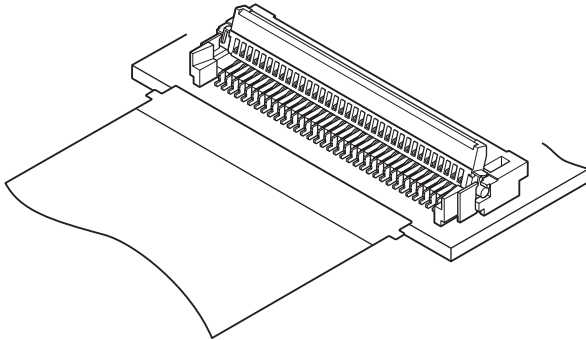


Note: N---Number of circuits



# FXM CONNECTOR

0.3mm pitch/Connectors for FPC



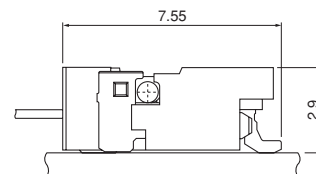
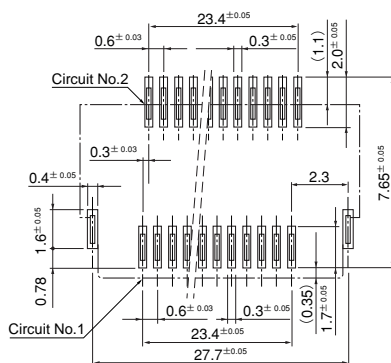
**A substantial size for the 0.3mm pitch connector ensures easy handling. Moreover, since this connector accepts a FPC with protrusion providing secure as well as foolproof mating at the customers production line.**

- **Double ZIF structure**
- **Self-lock mechanism enables the cover to close by one-touch operation**
- **A FPC with protrusion improves operability and reliability**

## Specifications

- Current rating: 0.2A AC, DC
- Voltage rating: 50V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/80m Ω max.  
After environmental testing/50m Ω max.  
(variation from initial value)
- Insulation resistance: 50M Ω min.
- Withstanding voltage: 200V AC/minute
- Applicable FPC: Conductor pitch/0.3mm  
<0.6mm pitch staggered>  
Conductor width/0.3mm  
Mating part thickness/0.3±0.05mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

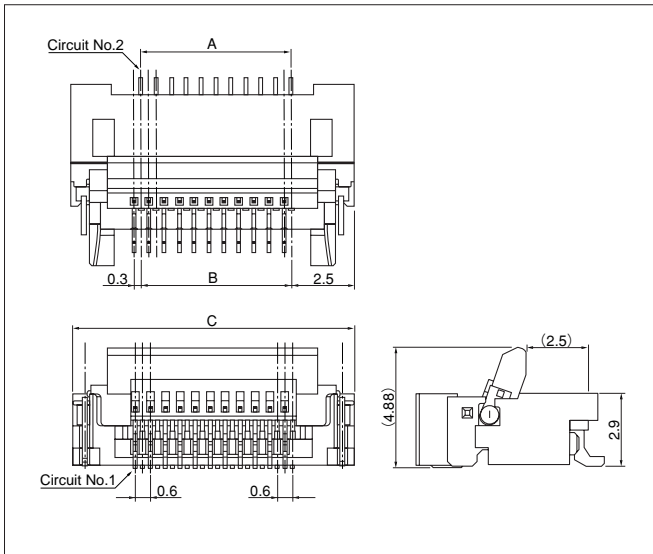
## PC board layout (viewed from component side) and Assembly layout



Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.  
2. The dimensions above should serve as a guideline. Contact JST for details.

# FXM CONNECTOR

## Connector



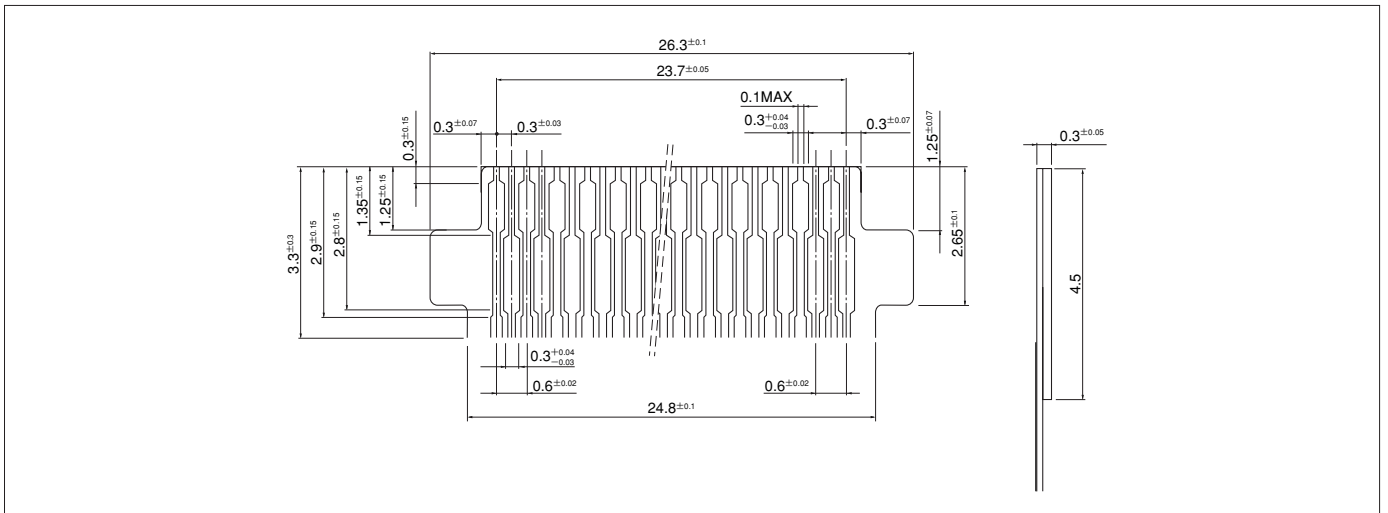
Circuits	Model No.	Dimensions (mm)			Q'ty / reel
		A	B	C	
80	<b>80FXM-RSM1-G-1-TB</b>	23.4	23.4	28.7	1,500

### Material and Finish

Contact: Copper alloy, nickel-undercoated, gold-plated  
 Cover: PPS, UL94V-0  
 Housing: LCP, UL94V-0  
 Solder tab: Copper alloy, copper-undercoated, tin-plated (reflow treatment)

**RoHS compliance** This product displays (LF)(SN) on a label.

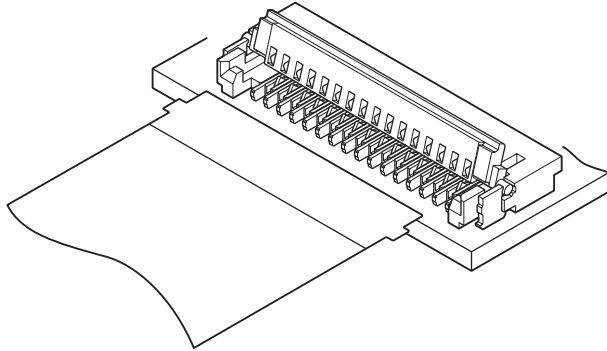
## Lead section dimensions of FPC





# FXY CONNECTOR

0.3mm pitch/Connectors for FPC



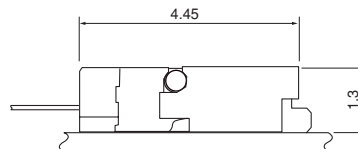
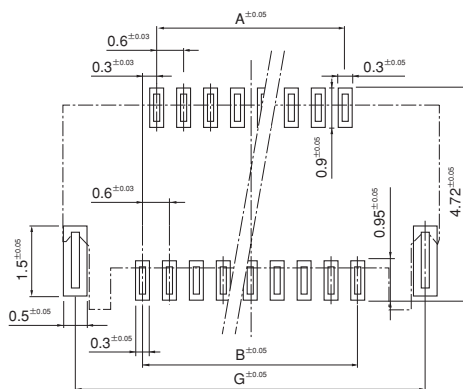
**In addition to achieving space saving and low profile features demanded by the market, this connector also realizes superb operability by adopting a FPC with protrusion. The use of the FPC provides secure and foolproof mating at the customers' production site.**

- **ZIF mechanism**
- **Self-lock mechanism enables the cover to close by one-touch operation**
- **A FPC with protrusion improves operability and reliability**

## Specifications

- Current rating: 0.2A AC, DC
- Voltage rating: 50V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/70m Ω max.  
After environmental testing/60m Ω max.  
(variation from initial value)
- Insulation resistance: 50M Ω min.
- Withstanding voltage: 200V AC/minute
- Applicable FPC: Conductor pitch/0.3mm  
<0.6mm pitch staggered>  
Conductor width/0.3mm  
Mating part thickness/0.2±0.03mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## PC board layout (viewed from component side) and Assembly layout

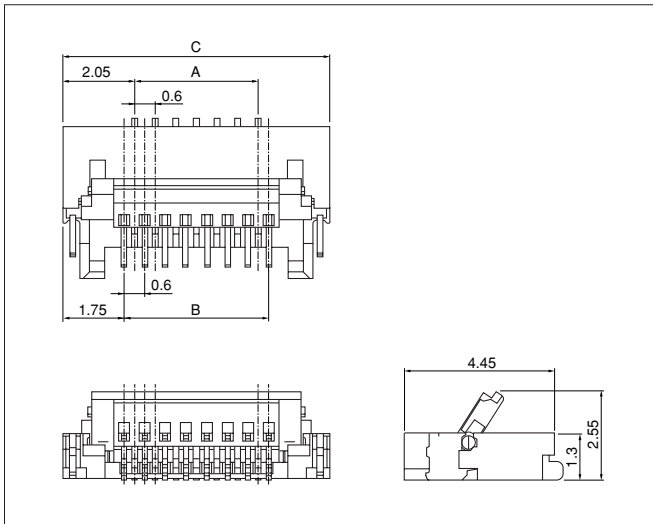


Circuits	Dimensions (mm)		
	A	B	G
19	4.8	5.4	8.4
25	6.6	7.2	10.2
27	7.2	7.8	10.8
31	8.4	9.0	12.0
33	9.0	9.6	12.6
37	10.2	10.8	13.8
45	12.6	13.2	16.2
51	14.4	15.0	18.0

Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.  
2. The dimensions above should serve as a guideline. Contact JST for details.

# FXY CONNECTOR

## Connector



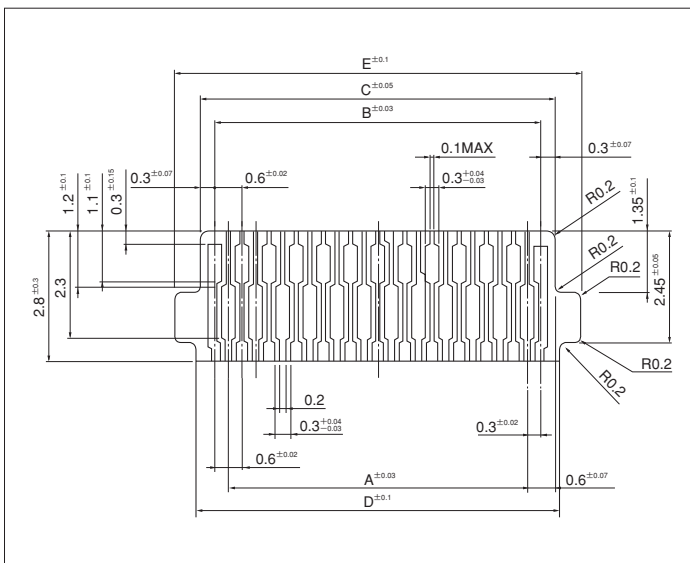
Circuits	Model No.	Dimensions (mm)			Q'ty / reel
		A	B	C	
15	15FXY-RSM1-GAN-1-TB	3.6	4.2	7.7	2,500
19	19FXY-RSM1-GAN-1-TB	4.8	5.4	8.9	2,500
25	25FXY-RSM1-GAN-1-TB	6.6	7.2	10.7	2,500
27	27FXY-RSM1-GAN-1-TB	7.2	7.8	11.3	2,500
31	31FXY-RSM1-GAN-1-TB	8.4	9.0	12.5	2,500
33	33FXY-RSM1-GAN-1-TB	9.0	9.6	13.1	2,500
37	37FXY-RSM1-GAN-1-TB	10.2	10.8	14.3	2,500
39	39FXY-RSM1-GAN-1-TB	10.8	11.4	14.9	2,500
45	45FXY-RSM1-GAN-1-TB	12.6	13.2	16.7	2,500
51	51FXY-RSM1-GAN-1-TB	14.4	15.0	18.5	2,500

### Material and Finish

Contact: Copper alloy, nickel-undercoated, gold-plated (nickel-stripe)  
 Cover: PPS, UL94V-0  
 Housing: LCP, UL94V-0  
 Solder tab: Copper alloy, copper-undercoated, tin-plated (reflow treatment)

**RoHS compliance** This product displays (LF)(SN) on a label.

## Lead section dimensions of FPC

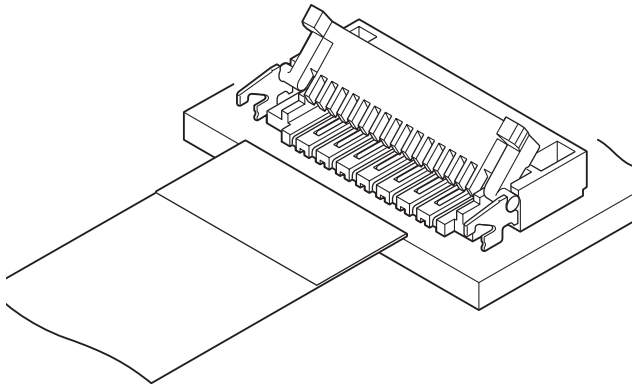


Circuits	Dimensions (mm)				
	A	B	C	D	E
19	4.8	5.4	6.0	6.3	7.2
25	6.6	7.2	7.8	8.1	9.0
27	7.2	7.8	8.4	8.7	9.6
31	8.4	9.0	9.6	9.9	10.8
33	9.0	9.6	10.2	10.5	11.4
37	10.2	10.8	11.4	11.7	12.6
45	12.6	13.2	13.8	14.1	15.0
51	14.4	15.0	15.6	15.9	16.8



# FXR CONNECTOR

0.3mm pitch/Connectors for FPC



**This FXR connector is a ZIF type connector for FPC with only 1.0mm height.**

- Low profile and ZIF mechanism
- Space saving design
- Heat resisting design suitable for surface mounting

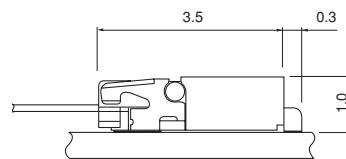
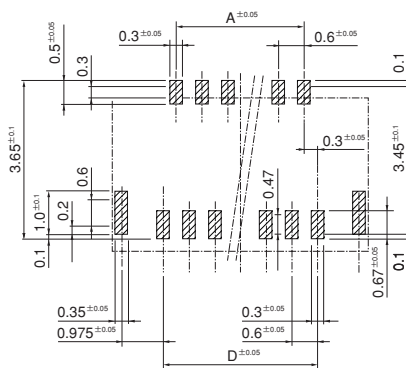
## Specifications

- Current rating: 0.2A AC, DC
- Voltage rating: 50V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/50m Ω max.  
After environmental testing/50m Ω max.  
(variation from initial value)
- Insulation resistance: 50M Ω min.
- Withstanding voltage: 200V AC/minute
- Applicable FPC: Conductor pitch/0.3mm  
Conductor width/0.3mm  
Mating part thickness/0.2±0.03mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

Recognized E60389

### PC board layout (viewed from component side) and Assembly layout

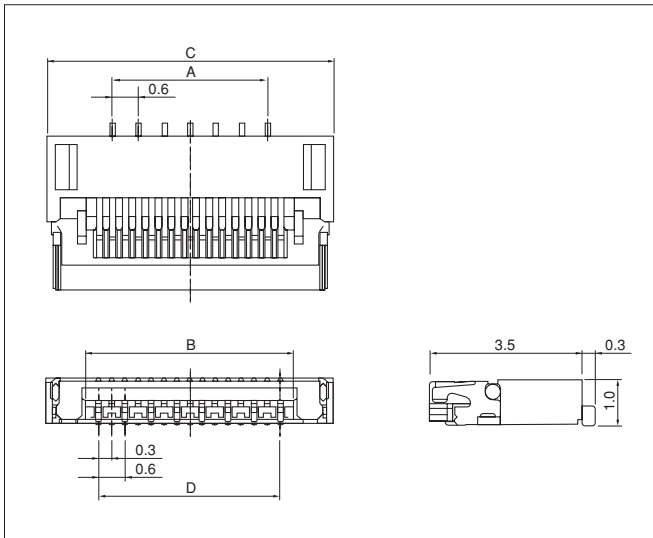


Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.

2. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.

# FXR CONNECTOR

## Connector



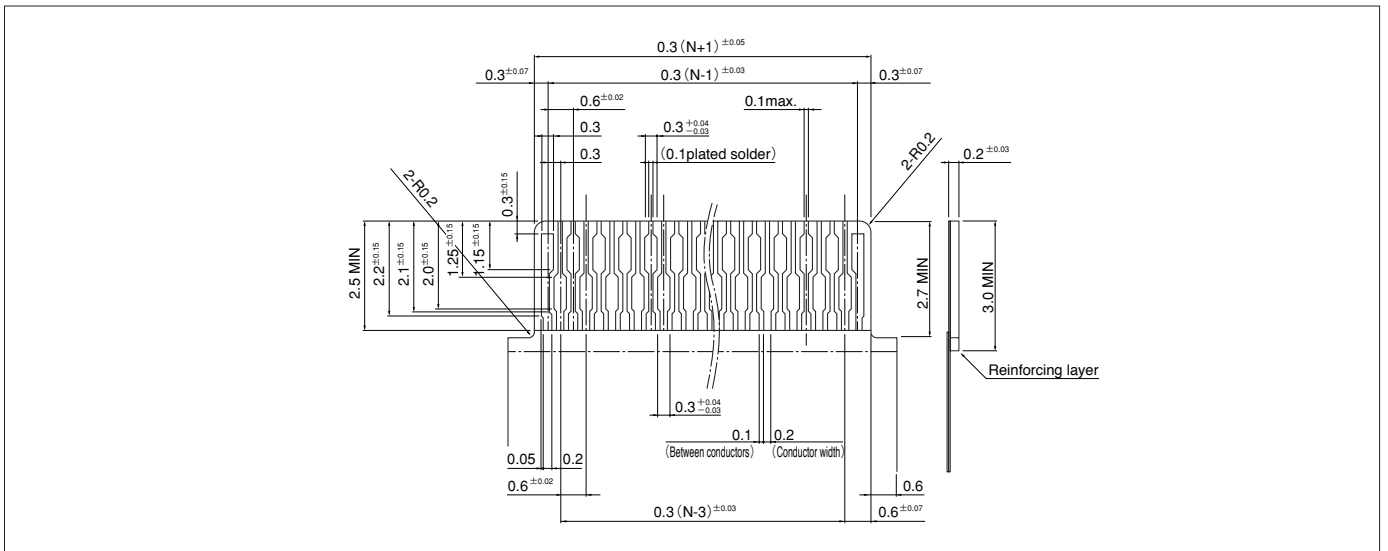
Circuits	Model No.	Dimensions (mm)				Q'ty / reel
		A	B	C	D	
11	11FXR-RSM1-GAN-TB	2.4	3.6	5.4	3.0	5,000
13	13FXR-RSM1-GAN-TB	3.0	4.2	6.0	3.6	5,000
15	15FXR-RSM1-GAN-TB	3.6	4.8	6.6	4.2	5,000
17	17FXR-RSM1-GAN-TB	4.2	5.4	7.2	4.8	5,000
19	19FXR-RSM1-GAN-TB	4.8	6.0	7.8	5.4	5,000
21	21FXR-RSM1-GAN-TB	5.4	6.6	8.4	6.0	5,000
23	23FXR-RSM1-GAN-TB	6.0	7.2	9.0	6.6	5,000
25	25FXR-RSM1-GAN-TB	6.6	7.8	9.6	7.2	5,000
27	27FXR-RSM1-GAN-TB	7.2	8.4	10.2	7.8	5,000
29	29FXR-RSM1-GAN-TB	7.8	9.0	10.8	8.4	5,000
31	31FXR-RSM1-GAN-TB	8.4	9.6	11.4	9.0	5,000
33	33FXR-RSM1-GAN-TB	9.0	10.2	12.0	9.6	5,000
35	35FXR-RSM1-GAN-TB	9.6	10.8	12.6	10.2	5,000
37	37FXR-RSM1-GAN-TB	10.2	11.4	13.2	10.8	5,000
39	39FXR-RSM1-GAN-TB	10.8	12.0	13.8	11.4	5,000
45	45FXR-RSM1-GAN-TB	12.6	13.8	15.6	13.2	5,000
47	47FXR-RSM1-GAN-TB	13.2	14.4	16.2	13.8	5,000
51	51FXR-RSM1-GAN-TB	14.4	15.6	17.4	15.0	5,000

### Material and Finish

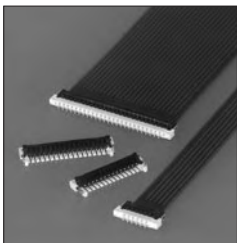
Contact: Copper alloy, nickel-undercoated, gold-plated (nickel-stripe)  
 Cover: PPS, UL94V-0  
 Housing: LCP, UL94V-0  
 Solder tab: Copper alloy, copper-undercoated, tin-plated (reflow treatment)

**RoHS compliance** This product displays (LF)(SN)(S)(1) on a label.

## Lead section dimensions of FPC

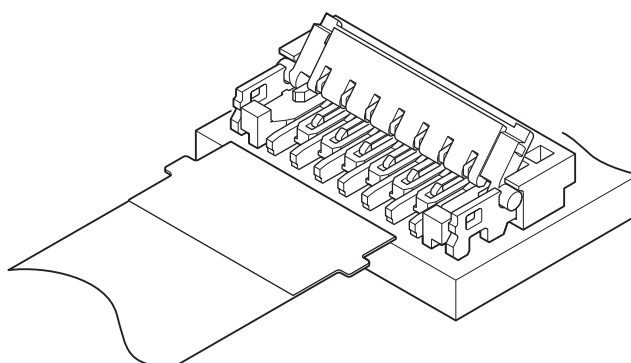


Note: N --- Number of circuits



# FXV CONNECTOR

0.3mm pitch/Connectors for FPC



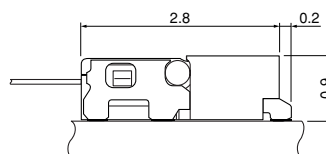
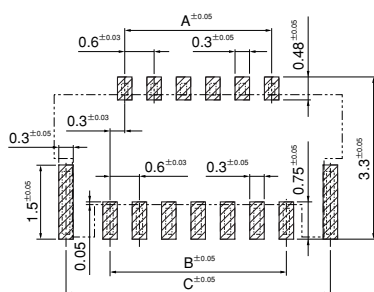
The FXV connector is a market require space saving and low profile 0.3mm pitch connector, and designed for corresponding to FPC with protrusions. As FPC with protrusions is used for this FXV connector, easy insertion operation, protection of incomplete insertion and miss-insertion are realized.

- Double ZIF design for easy insertion operation of FPC
- Self-lock cover design
- Low profile and space saving
- FPC with protrusions

## Specifications

- Current rating: 0.2A AC, DC
- Voltage rating: 50V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/60m Ω max.  
After environmental testing/60m Ω max.  
(variation from initial value)
- Insulation resistance: 50M Ω min.
- Withstanding voltage: 200V AC/minute
- Applicable FPC: Conductor pitch/0.3mm  
Conductor width/0.3mm  
Mating part thickness/0.2±0.03mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## PC board layout (viewed from component side) and Assembly layout

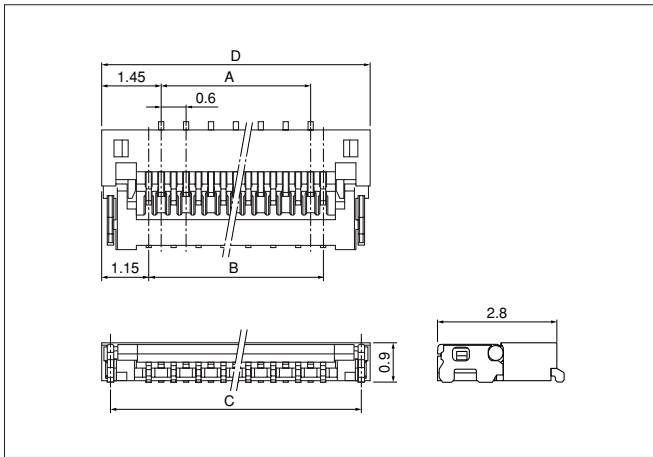


Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.  
2. The dimensions above should serve as a guideline. Contact JST for details.



# FXV CONNECTOR

## Connector



Circuits	Model No.	Dimensions (mm)				Q'ty / reel
		A	B	C	D	
11	11FXV-RSM1-GAN-TF	2.4	3.0	4.82	5.3	5,000
17	17FXV-RSM1-GAN-TF	4.2	4.8	6.62	7.1	5,000
21	21FXV-RSM1-GAN-TF	5.4	6.0	7.82	8.3	5,000
25	25FXV-RSM1-GAN-TF	6.6	7.2	9.02	9.5	5,000
27	27FXV-RSM1-GAN-TF	7.2	7.8	9.62	10.1	5,000
31	31FXV-RSM1-GAN-TF	8.4	9.0	10.82	11.3	5,000
33	33FXV-RSM1-GAN-TF	9.0	9.6	11.42	11.9	5,000
39	39FXV-RSM1-GAN-TF	10.8	11.4	13.22	13.7	5,000
43	43FXV-RSM1-GAN-TF	12.0	12.6	14.42	14.9	5,000
51	51FXV-RSM1-GAN-TF	14.4	15.0	16.82	17.3	5,000

### Material and Finish

Contact: Copper alloy, nickel-undercoated, gold-plated (nickel-stripe)

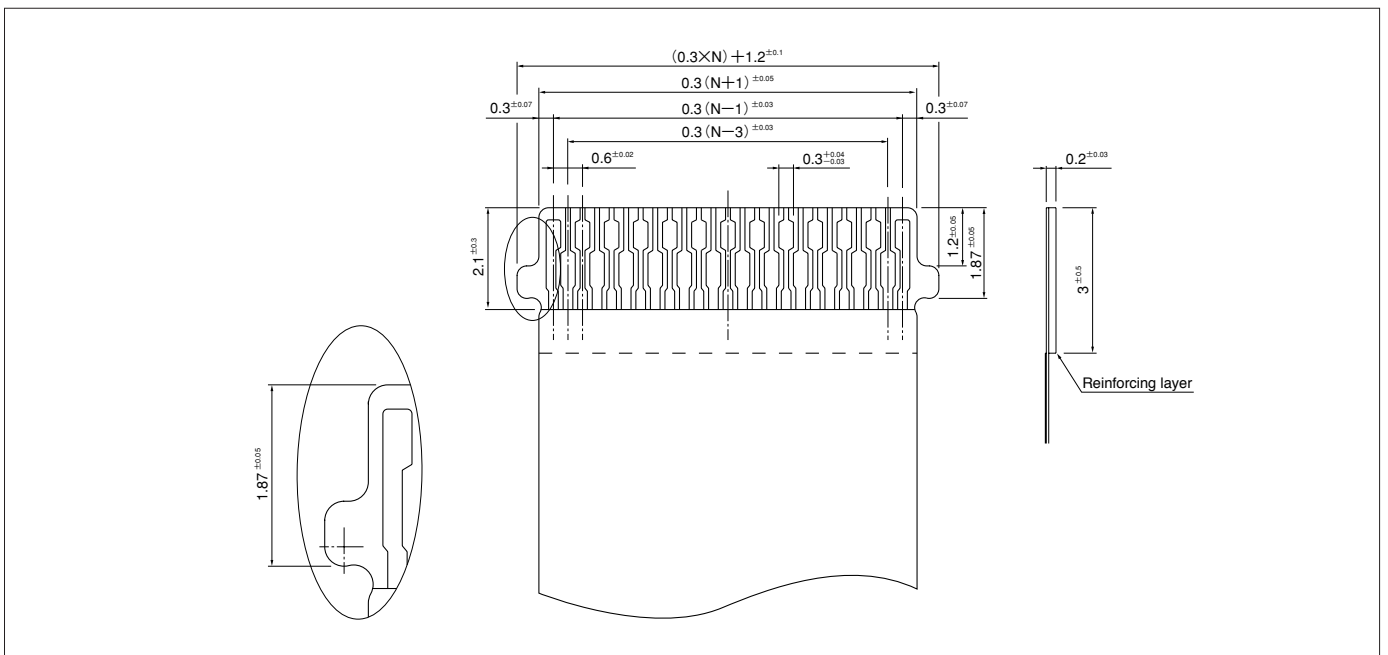
Housing: Heat resisting resin, UL94V-0

Solder tab: Copper alloy, copper-undercoated, tin-plated (reflow treatment)

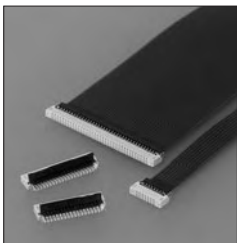
Cover: Heat resisting resin, UL94V-0

**RoHS compliance** This product displays (LF)(SN)(M) on a label.  
This products listed above are supplied on embossed-tape.

## Lead section dimensions of FPC

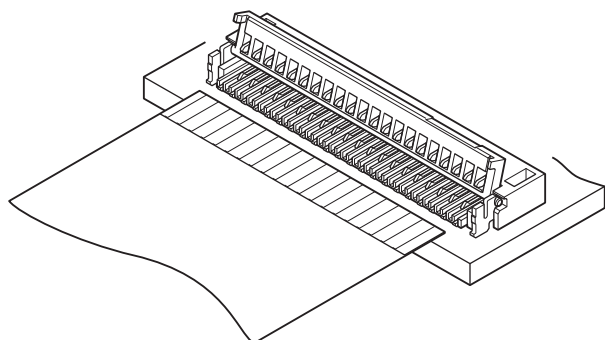


Note: N --- Number of circuits



# FXZ CONNECTOR

0.3mm pitch/Connectors for FPC



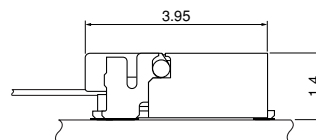
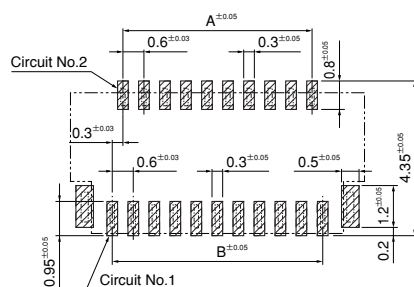
**This connector realizes space saving and low profile features demanded by the market, and it provides excellent operability. Various number of circuits can be available.**

- Double ZIF design for easy insertion operation of FPC
- Self-lock mechanism enables the cover to close by 'one-touch' operation
- Versatile number of circuit

## Specifications

- Current rating: 0.2A AC, DC
- Voltage rating: 50V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/60m Ω max.  
After environmental testing/60m Ω max.  
(variation from initial value)
- Insulation resistance: 50M Ω min.
- Withstanding voltage: 200V AC/minute
- Applicable FPC: Conductor pitch/0.3mm  
Conductor width/0.3mm  
Mating part thickness/0.2±0.03mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

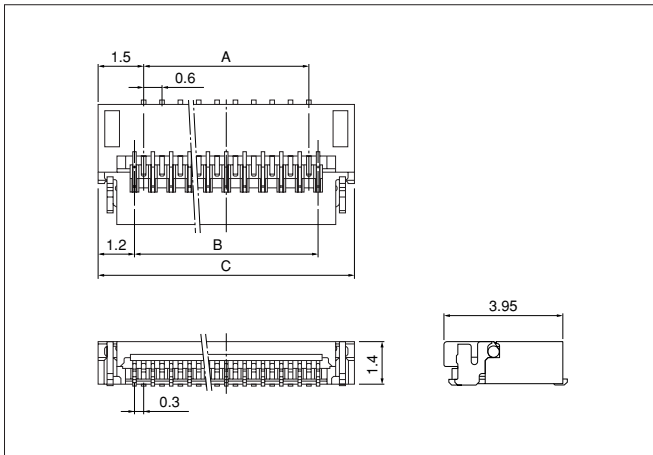
## PC board layout (viewed from component side) and Assembly layout



Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.  
2. The dimensions above should serve as a guideline. Contact JST for details.

# FXZ CONNECTOR

## Connector



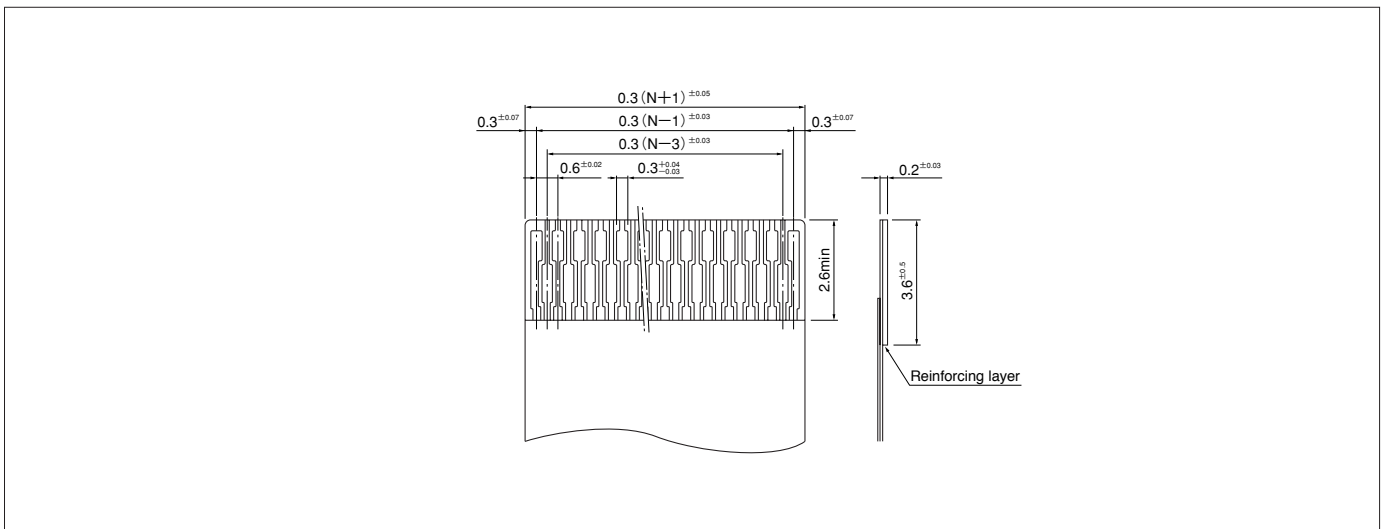
Circuits	Model No.	Dimensions (mm)			Q'ty/ reel
		A	B	C	
15	15FXZ-RSM1-GAN-ETF	3.6	4.2	6.6	2,500
17	17FXZ-RSM1-GAN-ETF	4.2	4.8	7.2	2,500
23	23FXZ-RSM1-GAN-ETF	6.0	6.6	9.0	2,500
25	25FXZ-RSM1-GAN-ETF	6.6	7.2	9.6	2,500
29	29FXZ-RSM1-GAN-ETF	7.8	8.4	10.8	2,500
31	31FXZ-RSM1-GAN-ETF	8.4	9.0	11.4	2,500
35	35FXZ-RSM1-GAN-ETF	9.6	10.2	12.6	2,500
39	39FXZ-RSM1-GAN-ETF	10.8	11.4	13.8	2,500
51	51FXZ-RSM1-GAN-ETF	14.4	15.0	17.4	2,500
53	53FXZ-RSM1-GAN-ETF	15.0	15.6	18.0	2,500
61	61FXZ-RSM1-GAN-ETF	17.4	18.0	20.4	2,500
73	73FXZ-RSM1-GAN-ETF	21.0	21.6	24.0	2,500

### Material and Finish

Contact: Copper alloy, nickel-undercoated, gold-plated (nickel-stripe)  
Housing: Heat resisting resin, UL94V-0  
Solder tab: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
Cover: Heat resisting resin, UL94V-0

**RoHS compliance** This product displays (LF)(SN) on a label.  
This products listed above are supplied on embossed-tape.

## Lead section dimensions of FPC

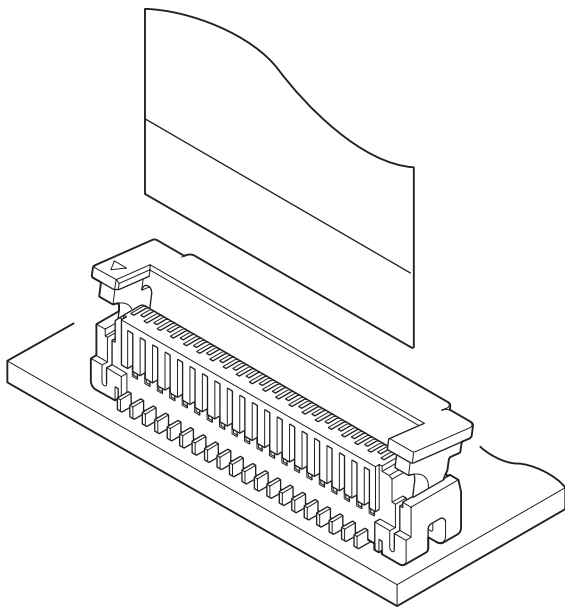


Note: N --- Number of circuits



# FXZT CONNECTOR

0.3mm pitch/Connectors for FPC



**Vertical 0.3mm pitch ZIF type connector.**  
**This connector was mainly developed to connect FPC and subminiature digital products such as DVC, DSC, PDAs and so on.**

- Vertical ZIF type FPC connector
- Space saving
- Adoption of slider structure

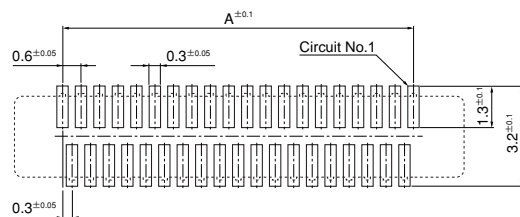
## Specifications

- Current rating: 0.2A AC, DC
- Voltage rating: 50V AC, DC
- Temperature range: -25°C to +85°C  
 (including temperature rise in applying electrical current)
- Contact resistance: Initial value/50m Ω max.  
 After environmental testing/50m Ω max.  
 (variation from initial value)
- Insulation resistance: 50M Ω min.
- Withstanding voltage: 200V AC/minute
- Applicable FPC: Conductor pitch/0.3mm  
 <0.6mm pitch staggered>  
 Conductor width/0.3mm  
 Mating part thickness/0.2±0.03mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

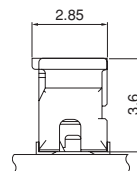
## Standards

Recognized E60389

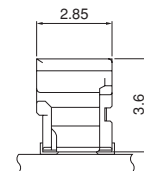
## PC board layout (viewed from component side) and Assembly layout



**Inner lock type**  
 (39 circuits or less)



**Outer lock type**  
 (41 circuits or more)

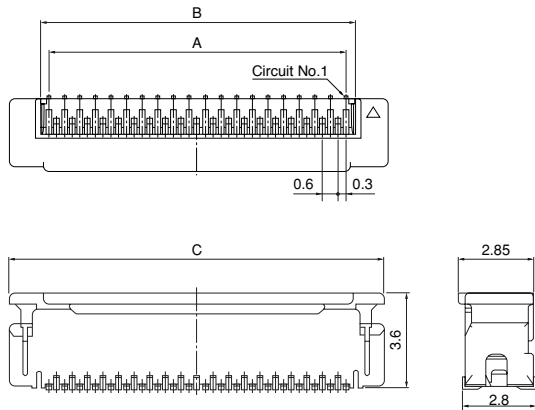


Note: 1. Tolerances are non-cumulative: ±0.1mm for all centers.  
 2. The dimensions above should serve as a guideline. Contact JST for details.

# FXZT CONNECTOR

## Connector

### Inner lock type (39 circuits or less)



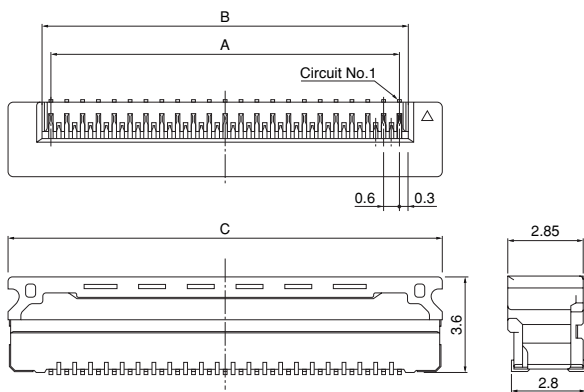
Circuits	Model No.	Dimensions (mm)			Q'ty / reel
		A	B	C	
17	17FXZT-SM1-GAN-TF	4.8	5.4	8.0	2,000
21	21FXZT-SM1-GAN-TF	6.0	6.6	9.2	2,000
23	23FXZT-SM1-GAN-TF	6.6	7.2	9.8	2,000
25	25FXZT-SM1-GAN-TF	7.2	7.8	10.4	2,000
27	27FXZT-SM1-GAN-TF	7.8	8.4	11.0	2,000
31	31FXZT-SM1-GAN-TF	9.0	9.6	12.2	2,000
33	33FXZT-SM1-GAN-TF	9.6	10.2	12.8	2,000
39	39FXZT-SM1-GAN-TF	11.4	12.0	14.6	2,000

#### Material and Finish

Contact: Copper alloy, nickel-undercoated, gold-plated (nickel-stripe)  
 Slider housing: Heat resisting resin, UL94V-0, black  
 Socket housing: Heat resisting resin, UL94V-0, natural

**RoHS compliance** This product displays (LF)(SN) on a label.

### Outer lock type (41 circuits or more)



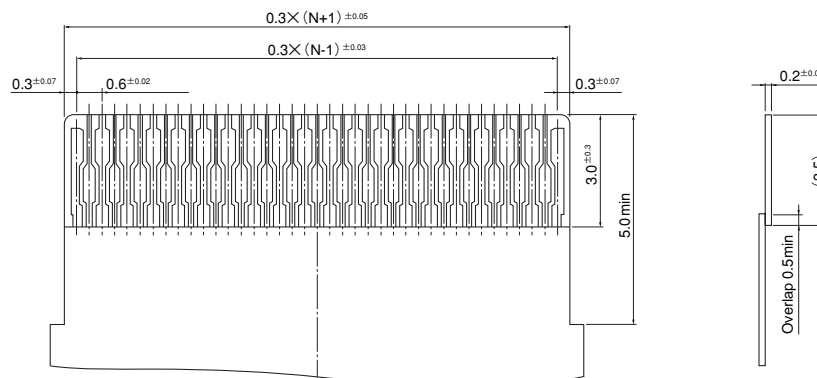
Circuits	Model No.	Dimensions (mm)			Q'ty / reel
		A	B	C	
45	45FXZT-SM1-GAN-TF	13.2	13.8	16.4	2,000
51	51FXZT-SM1-GAN-TF	15.0	15.6	18.2	2,000

#### Material and Finish

Contact: Copper alloy, nickel-undercoated, gold-plated (nickel-stripe)  
 Slider housing: Heat resisting resin, UL94V-0, black  
 Socket housing: Heat resisting resin, UL94V-0, natural

**RoHS compliance** This product displays (LF)(SN) on a label.

## Lead section dimensions of FPC

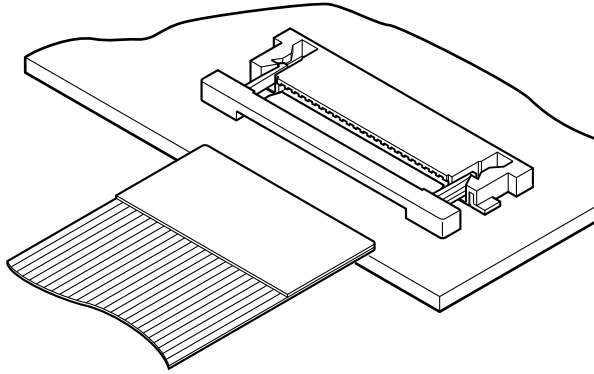


Note: N---Number of circuits



# FLH CONNECTOR

0.5mm pitch/Connectors for FPC



**Compact connector with just 1.2mm high after mounting on the PC board.**

- **Thin design**
- **Heat resisting design suitable for surface mounting**
- **In-line surface mounting**
- **Two types of connections**
- **Embossed tape for automatic mounting**

## Specifications

- Current rating: 0.5A AC, DC
- Voltage rating: 50V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/40m Ω max.  
After environmental testing/60m Ω max.
- Insulation resistance: 800M Ω min.
- Withstanding voltage: 200V AC/minute
- Applicable FPC: Conductor pitch/0.5mm  
Conductor width/0.35mm  
Mating part thickness/0.30±0.03mm

*Note: FPC to be actually used should be checked for applicability.*

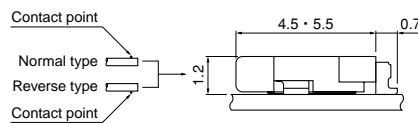
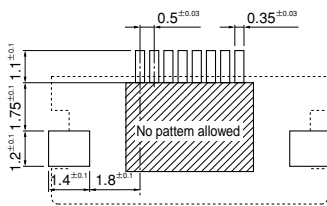
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

Recognized E60389

Certified LR20812

## PC board layout (viewed from component side) and Assembly layout

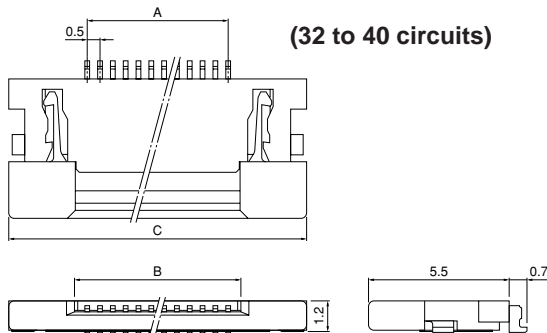
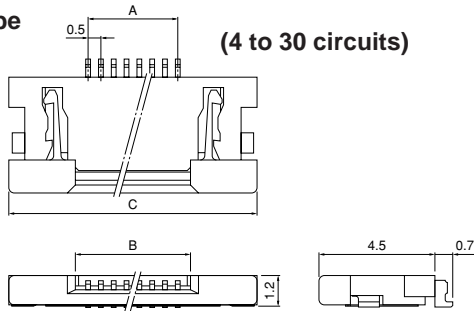


*Note: 1. Tolerances are non-cumulative: ±0.03mm for all centers.  
2. The dimensions above should serve as a guideline. Contact JST for details.*

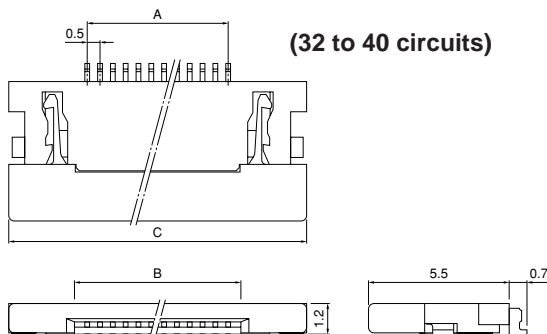
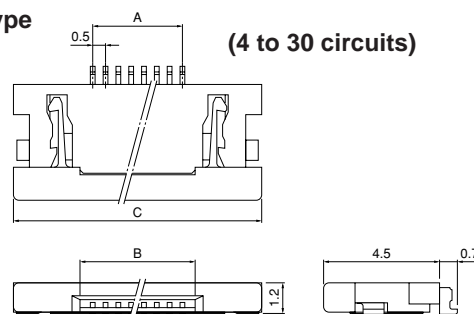
# FLH CONNECTOR

## Connector

### Normal type



### Reverse type



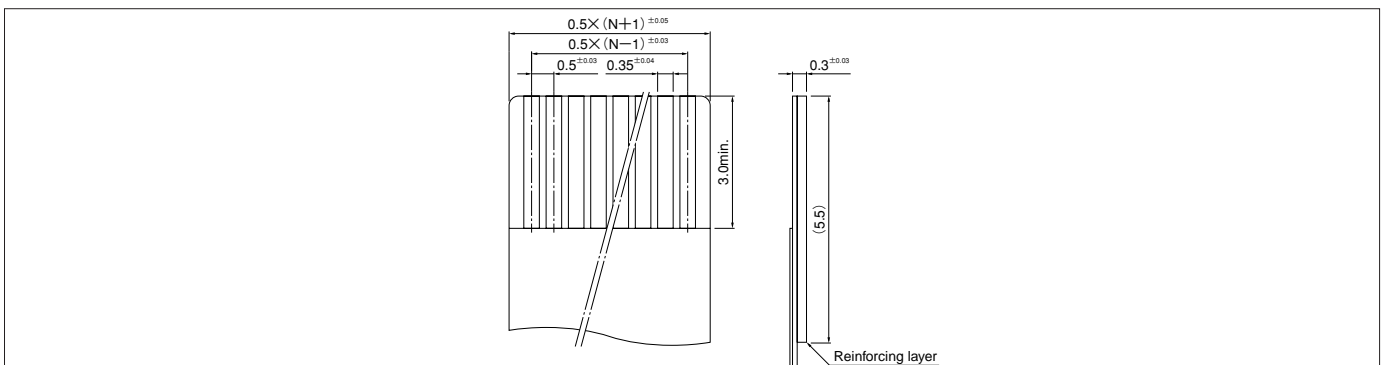
Circuits	Model No.		Dimensions (mm)			Qty / reel
	Normal type	Reverse type	A	B	C	
4	04FLH-SM1-TB	04FLH-RSM1-TB	1.5	2.55	7.7	3,000
6	06FLH-SM1-TB	06FLH-RSM1-TB	2.5	3.55	8.7	3,000
7	07FLH-SM1-TB	07FLH-RSM1-TB	3.0	4.05	9.2	3,000
8	08FLH-SM1-TB	08FLH-RSM1-TB	3.5	4.55	9.7	3,000
10	10FLH-SM1-TB	10FLH-RSM1-TB	4.5	5.55	10.7	3,000
11	11FLH-SM1-TB	11FLH-RSM1-TB	5.0	6.05	11.2	3,000
12	12FLH-SM1-TB	12FLH-RSM1-TB	5.5	6.55	11.7	3,000
13	13FLH-SM1-TB	13FLH-RSM1-TB	6.0	7.05	12.2	3,000
14	14FLH-SM1-TB	14FLH-RSM1-TB	6.5	7.55	12.7	3,000
15	15FLH-SM1-TB	15FLH-RSM1-TB	7.0	8.05	13.2	3,000
16	16FLH-SM1-TB	16FLH-RSM1-TB	7.5	8.55	13.7	3,000
17	17FLH-SM1-TB	17FLH-RSM1-TB	8.0	9.05	14.2	3,000
18	18FLH-SM1-TB	18FLH-RSM1-TB	8.5	9.55	14.7	3,000
19	—	19FLH-RSM1-TB	9.0	10.05	15.2	3,000
20	20FLH-SM1-TB	20FLH-RSM1-TB	9.5	10.55	15.7	3,000
21	21FLH-SM1-TB	—	10.0	11.05	16.2	3,000
22	22FLH-SM1-TB	22FLH-RSM1-TB	10.5	11.55	16.7	3,000
24	24FLH-SM1-TB	24FLH-RSM1-TB	11.5	12.55	17.7	3,000
26	26FLH-SM1-TB	—	12.5	13.55	18.7	3,000
28	28FLH-SM1-TB	28FLH-RSM1-TB	13.5	14.55	19.7	3,000
30	30FLH-SM1-TB	30FLH-RSM1-TB	14.5	15.55	20.7	3,000
32	32FLH-SM1-TB	32FLH-RSM1-TB	15.5	16.55	21.7	3,000
34	—	34FLH-RSM1-TB	16.5	17.55	22.7	3,000
40	40FLH-SM1-TB	40FLH-RSM1-TB	19.5	20.55	25.7	3,000

### Material and Finish

Contact: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
Housing: LCP, UL94V-0  
Solder tab: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
Slider: PA 6T, UL94V-0

**RoHS compliance** This product displays (LF)(SN) on a label.  
Note: The products listed above are supplied on embossed tape.

## Lead section dimensions of FPC

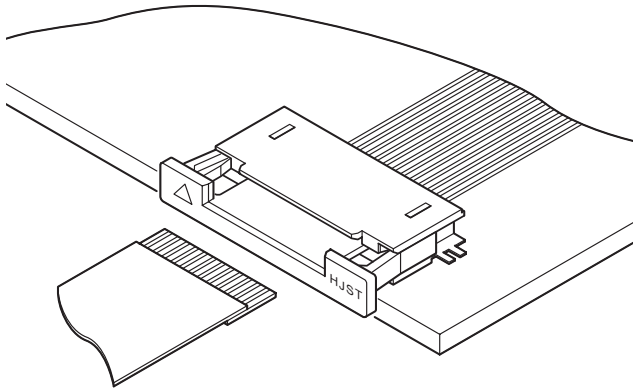


Note: N --- Number of circuits



# FLZ CONNECTOR

0.5mm pitch/Connectors for FFC and FPC



**This extremely small 0.5mm pitch connector with a height of only 2.0mm above the PCB surface allows interconnection in extremely small spaces and is an example of JST's leading edge technology.**

- Zero insertion force mechanism
- Heat resisting design suitable for surface mounting
- In-line surface mount tails
- Two types of connections
- Embossed tape for automatic mounting

## Specifications

- Current rating: 0.5A AC, DC
- Voltage rating: 50V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/40m Ω max.  
After environmental testing/60m Ω max.
- Insulation resistance: 800M Ω min.
- Withstanding voltage: 200V AC/minute
- Applicable FFC and FPC: Conductor pitch/0.5mm  
Conductor width/0.35mm  
Mating part thickness/0.30±0.03mm

Note: FFC and FPC to be actually used should be checked for applicability.

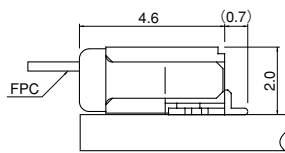
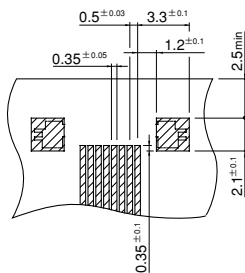
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

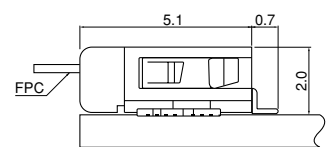
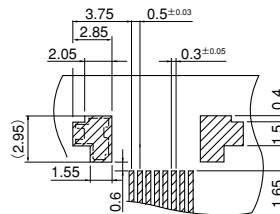
Ⓜ Recognized E60389

Ⓢ Certified LR20812

## PC board layout (viewed from component side) and Assembly layout



### Inner lock type



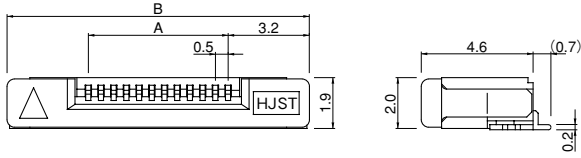
Note: 1. Tolerances are non-cumulative: ±0.03mm for all centers.  
2. The dimensions above should serve as a guideline. Contact JST for details.



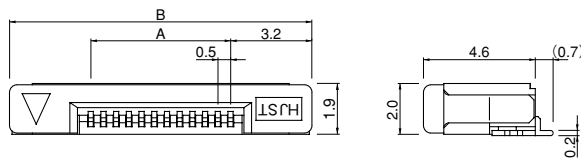
# FLZ CONNECTOR

## Connector

### Normal type

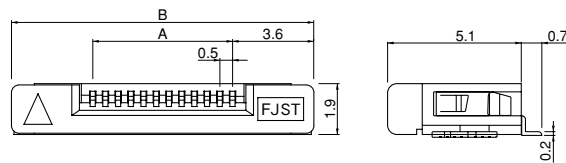


### Reverse type

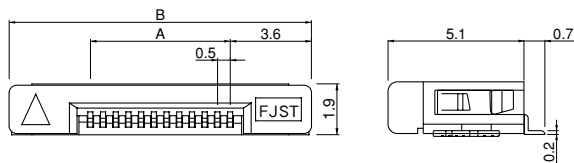


### <Inner lock type>

#### Normal type



#### Reverse type



Circuits	Model No.		Dimensions (mm)		Q'ty / reel
	Normal type	Reverse type	A	B	
6	06FLZ-SM2-TB	06FLZ-RSM2-TB	2.5	8.9	2,000
7	07FLZ-SM2-TB	07FLZ-RSM2-TB	3.0	9.4	2,000
8	08FLZ-SM2-TB	08FLZ-RSM2-TB	3.5	9.9	2,000
9	09FLZ-SM2-TB	09FLZ-RSM2-TB	4.0	10.4	2,000
10	10FLZ-SM2-TB	10FLZ-RSM2-TB	4.5	10.9	2,000
11	11FLZ-SM2-TB	11FLZ-RSM2-TB	5.0	11.4	2,000
12	12FLZ-SM2-TB	12FLZ-RSM2-TB	5.5	11.9	2,000
13	13FLZ-SM2-TB	13FLZ-RSM2-TB	6.0	12.4	2,000
14	14FLZ-SM2-TB	14FLZ-RSM2-TB	6.5	12.9	2,000
15	15FLZ-SM2-TB	15FLZ-RSM2-TB	7.0	13.4	2,000
16	16FLZ-SM2-TB	16FLZ-RSM2-TB	7.5	13.9	2,000
17	17FLZ-SM2-TB	17FLZ-RSM2-TB	8.0	14.4	2,000
18	18FLZ-SM2-TB	18FLZ-RSM2-TB	8.5	14.9	2,000
19	19FLZ-SM2-TB	19FLZ-RSM2-TB	9.0	15.4	2,000
20	20FLZ-SM2-TB	20FLZ-RSM2-TB	9.5	15.9	2,000
21	21FLZ-SM2-TB	21FLZ-RSM2-TB	10.0	16.4	2,000
22	22FLZ-SM2-TB	22FLZ-RSM2-TB	10.5	16.9	2,000
23	23FLZ-SM2-TB	23FLZ-RSM2-TB	11.0	17.4	2,000
24	24FLZ-SM2-TB	24FLZ-RSM2-TB	11.5	17.9	2,000
25	25FLZ-SM2-TB	25FLZ-RSM2-TB	12.0	18.4	2,000
26	26FLZ-SM2-TB	26FLZ-RSM2-TB	12.5	18.9	2,000
27	27FLZ-SM2-TB	27FLZ-RSM2-TB	13.0	19.4	2,000
28	28FLZ-SM2-TB	28FLZ-RSM2-TB	13.5	19.9	2,000
30	30FLZ-SM2-TB	30FLZ-RSM2-TB	14.5	20.9	2,000
33	33FLZ-SM2-TB	—	16.0	22.4	2,000

### <Inner lock type>

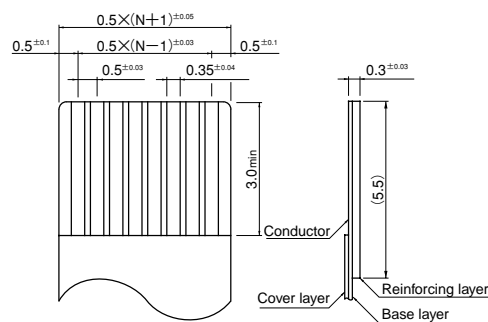
Circuits	Model No.		Dimensions (mm)		Q'ty / reel
	Normal type	Reverse type	A	B	
13	—	13FLZ-RSM2-R-TB	6.0	13.1	2,000
30	30FLZ-SM2-R-TB	—	14.5	21.6	2,000
32	32FLZ-SM2-R-TB	32FLZ-RSM2-R-TB	15.5	22.6	2,000
34	34FLZ-SM2-R-TB	34FLZ-RSM2-R-TB	16.5	23.6	2,000
36	36FLZ-SM2-R-TB	36FLZ-RSM2-R-TB	17.5	24.6	2,000
40	40FLZ-SM2-R-TB	40FLZ-RSM2-R-TB	19.5	26.6	2,000
42	42FLZ-SM2-R-TB	—	20.5	27.6	2,000
45	45FLZ-SM2-R-TB	—	22.0	29.1	2,000
50	50FLZ-SM2-R-TB	—	24.5	31.6	2,000

#### Material and Finish

Contact: Phosphor bronze, copper-undercoated, tin-plated (reflow treatment)  
 Slider housing: PA 6T, UL94V-0 (black)  
 Housing: PA 6T, UL94V-0  
 Normal type...gray  
 Reverse type...natural  
 Solder tab: Phosphor bronze, copper-undercoated, tin-plated (reflow treatment)

**RoHS compliance** This product displays (LF)(SN) on a label.  
 Note: The products listed above are supplied on embossed tape.

## Lead section dimensions of FFC and FPC

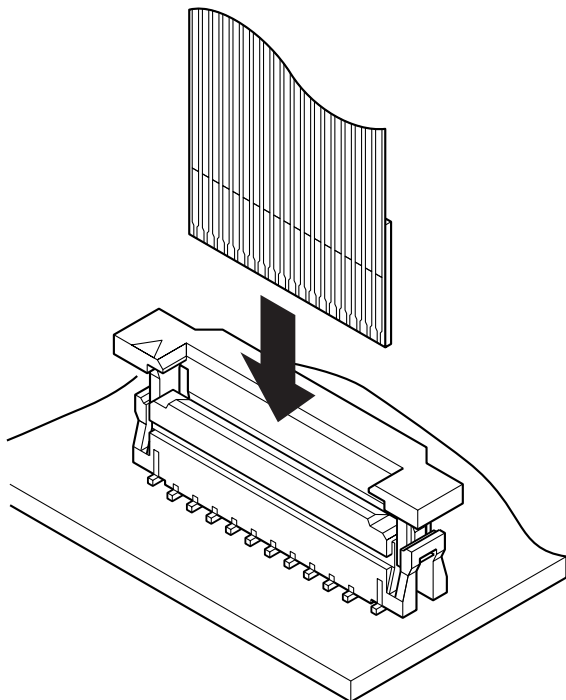


Note: N --- Number of circuits



# FLZT CONNECTOR

0.5mm pitch/Connectors for FPC



**Vertical 0.5mm pitch ZIF type connector with staggered solder tails. Both normal type and reverse type are available.**

- Zero insertion force mechanism
- Two types of connections
- Heat resisting design suitable for surface mounting

## Specifications

- Current rating: 0.5A AC, DC
- Voltage rating: 50V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/20m Ω max.  
After environmental testing/40m Ω max.
- Insulation resistance: 100M Ω min.
- Withstanding voltage: 200V AC/minute
- Applicable FPC: Conductor pitch/0.5mm  
Conductor width/0.35mm  
Mating part thickness/0.3±0.05mm

Note: FPC to be actually used should be checked for applicability.

- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

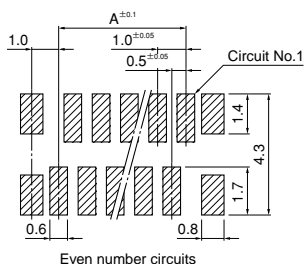
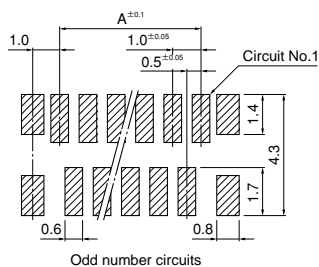
## Standards

Ⓡ Recognized E60389

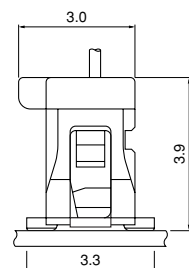
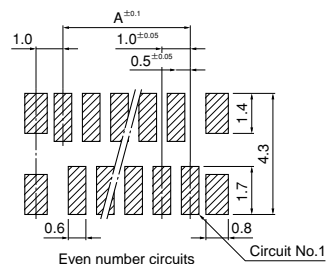
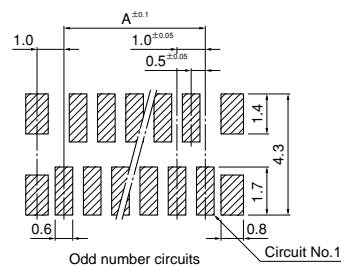
Ⓢ Certified LR20812

## PC board layout (viewed from component side) and Assembly layout

### Normal type



### Reverse type

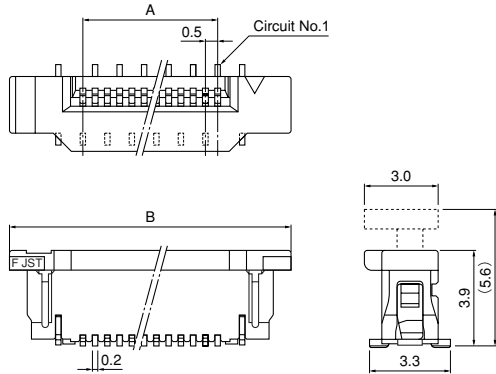


Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.  
2. The dimensions above should serve as a guideline. Contact JST for details.

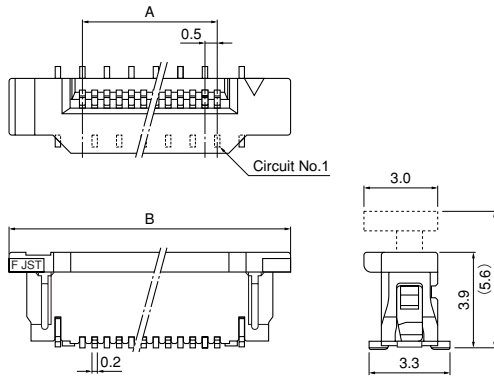
# FLZT CONNECTOR

## Connector

### Normal type



### Reverse type



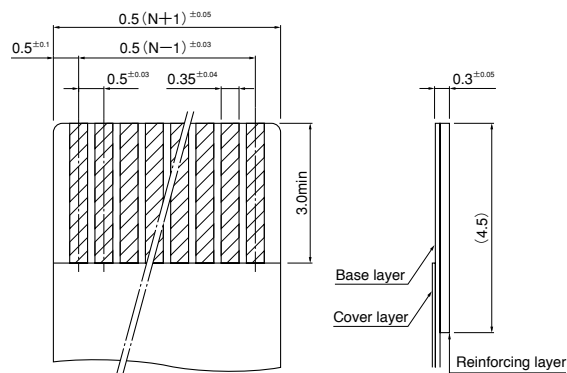
Circuits	Model No.		Dimensions (mm)		Q'ty / reel
	Normal type	Reverse type	A	B	
6	06FLZT-SM1-TF	06FLZT-RSM1-TF	2.5	8.5	1,500
8	08FLZT-SM1-TF	08FLZT-RSM1-TF	3.5	9.5	1,500
10	10FLZT-SM1-TF	10FLZT-RSM1-TF	4.5	10.5	1,500
12	12FLZT-SM1-TF	12FLZT-RSM1-TF	5.5	11.5	1,500
14	14FLZT-SM1-TF	14FLZT-RSM1-TF	6.5	12.5	1,500
15	15FLZT-SM1-TF	15FLZT-RSM1-TF	7.0	13.0	1,500
16	16FLZT-SM1-TF	16FLZT-RSM1-TF	7.5	13.5	1,500
20	20FLZT-SM1-TF	20FLZT-RSM1-TF	9.5	15.5	1,500
22	22FLZT-SM1-TF	22FLZT-RSM1-TF	10.5	16.5	1,500
24	24FLZT-SM1-TF	24FLZT-RSM1-TF	11.5	17.5	1,500
28	28FLZT-SM1-TF	28FLZT-RSM1-TF	13.5	19.5	1,500
30	30FLZT-SM1-TF	30FLZT-RSM1-TF	14.5	20.5	1,500
37	37FLZT-SM1-TF	37FLZT-RSM1-TF	18.0	24.0	1,500
40	40FLZT-SM1-TF	40FLZT-RSM1-TF	19.5	25.5	1,500
42	42FLZT-SM1-TF	42FLZT-RSM1-TF	20.5	26.5	1,500

### Material and Finish

Contact: Phosphor bronze, copper-undercoated, tin-plated (reflow treatment)  
 Slider housing: PPS, UL94V-0  
 Normal type...natural (brown)  
 Reverse type...black  
 Housing: PPS, UL94V-0, natural  
 Solder tab: Brass, copper-undercoated, tin-plated (reflow treatment)

**RoHS compliance** This product displays (LF)(SN) on a label.

## Lead section dimensions of FPC

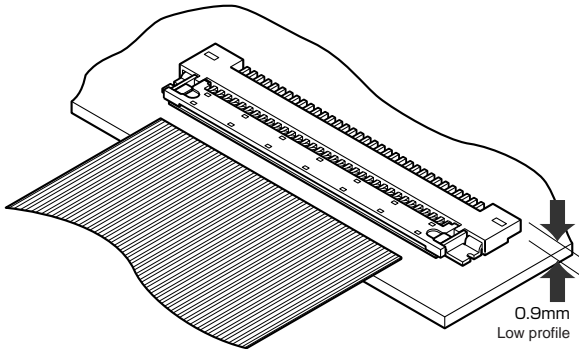


Note: N---Number of circuits



# FHX CONNECTOR

0.5mm pitch/Connectors for FPC



**ZIF (zero insertion force) flip lock type connectors.**

- Low-profile
- Heat resisting design suitable for surface mounting

## Specifications

- Current rating: 0.5A AC, DC
- Voltage rating: 50V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/60m Ω max.  
After environmental testing/60m Ω max.  
(variation from initial value)
- Insulation resistance: 800M Ω min.
- Withstanding voltage: 200V AC/minute
- Applicable FPC: Conductor pitch/0.5mm  
Conductor width/0.35mm  
Mating part thickness/0.12±0.03mm

Note: FPC to be actually used should be checked for applicability.

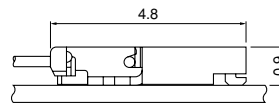
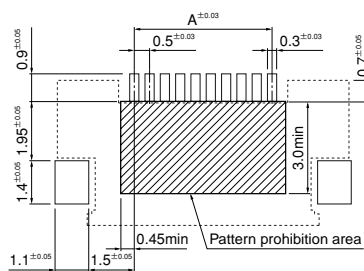
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

Recognized E60389

Certified LR20812

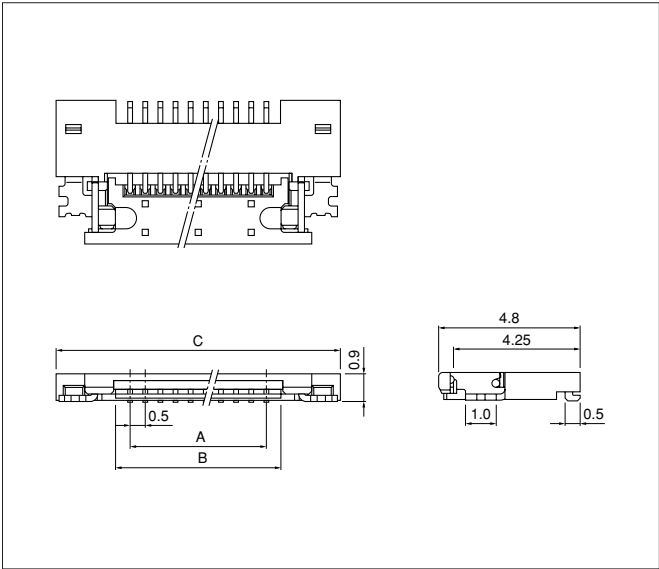
## PC board layout (viewed from component side) and Assembly layout



- Note: 1. Tolerances are non-cumulative: ±0.03mm for all centers.  
2. The dimensions above should serve as a guide line. Contact JST for details.

# FHX CONNECTOR

## Connector



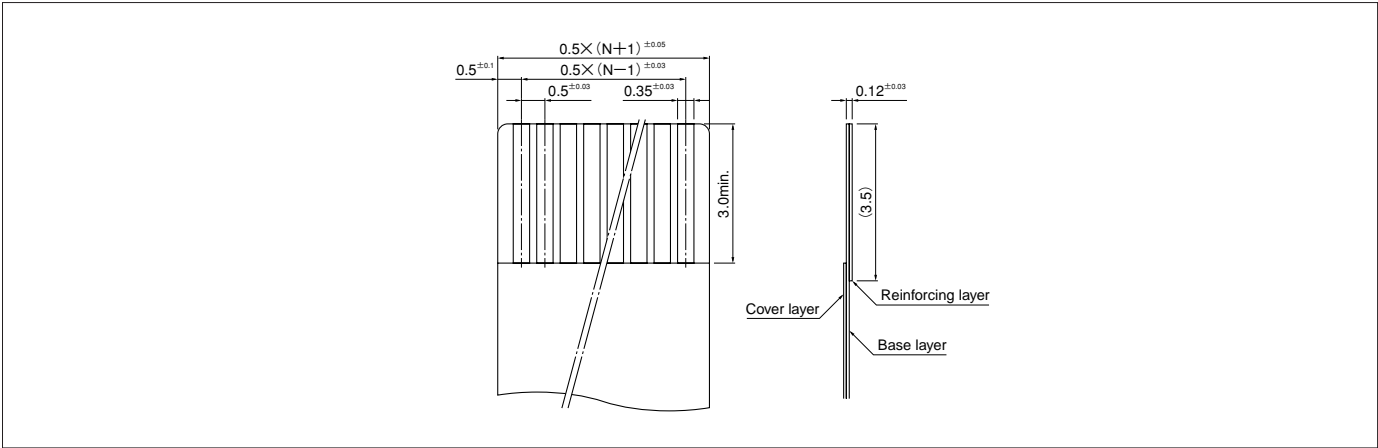
Circuits	Model No.	Dimensions (mm)			Q'ty / reel
		A	B	C	
19	<b>19FHX-RSM1-G-1-S-TB</b>	9.0	10.0	14.0	3,000
20	<b>20FHX-RSM1-G-1-S-TB</b>	9.5	10.5	14.5	3,000
24	<b>24FHX-RSM1-G-1-S-TB</b>	11.5	12.5	16.5	3,000
27	<b>27FHX-RSM1-G-1-S-TB</b>	13.0	14.0	18.0	3,000
34	<b>34FHX-RSM1-G-1-S-TB</b>	16.5	17.5	21.5	3,000
40	<b>40FHX-RSM1-G-1-S-TB</b>	19.5	20.5	24.5	3,000

### Material and Finish

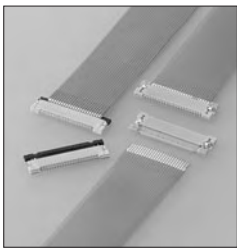
Contact: Copper alloy, nickel-undercoated, gold-plated  
 Housing: LCP, UL94V-0, natural (white)  
 Solder tab: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
 Cover: LCP, UL94V-0, black

**RoHS compliance** This product displays (LF)(SN) on a label.

## Lead section dimensions of FPC

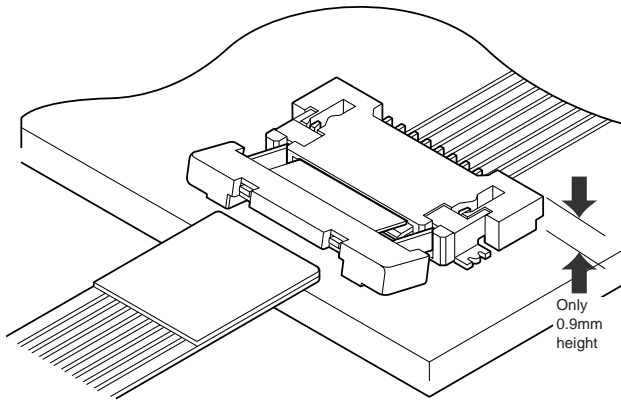


Note: N --- Number of circuits



# FHZ CONNECTOR

0.5mm pitch/Connectors for FPC



Suitable for thin FPCs of 0.1mm, 0.12mm or 0.2mm thick.

- Low-profile
- Circuit pattern can be designed under the connector

## Specifications

- Current rating: 0.5A AC, DC
- Voltage rating: 50V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/40m Ω max.  
After environmental testing/20m Ω max.  
(variation from initial value)
- Insulation resistance: 800M Ω min.
- Withstanding voltage: 200V AC/minute
- Applicable FPC: Conductor pitch/0.5mm  
Conductor width/0.35mm  
Mating part thickness/0.10±0.01mm  
0.12±0.03mm  
0.20±0.03mm

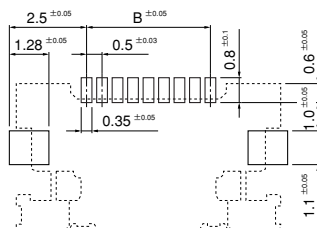
Note: FPC to be actually used should be checked for applicability.

- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

- Ⓜ Recognized E60389
- Ⓢ Certified LR20812

## PC board layout (viewed from component side) and Assembly layout

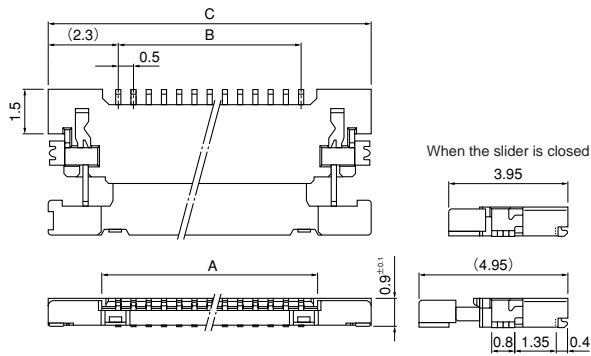


- Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.  
2. The dimensions above should serve as a guide line. Contact JST for details.

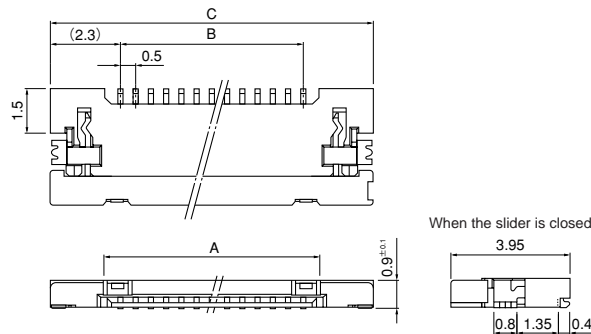
# FHZ CONNECTOR

## Connector

### Normal type



### Reverse type



### Normal type

Slider	Circuits	Model No.	Dimensions (mm)			Applicable FPC thickness (mm)	Q'ty / reel
			A	B	C		
Opened	15	15FHZ-SM1-S-TB (F)	8.05	7.0	11.6	0.1	4,000
	24	24FHZ-SM1-S-TB (F)	12.55	11.5	16.1	0.1	4,000
	26	26FHZ-SM1-S-TB (F)	13.55	12.5	17.1	0.1	4,000
	29	29FHZ-SM1-S-TB (F)	15.05	14.0	18.6	0.1	4,000
Closed	24	24FHZ-SM1-S-TB	12.55	11.5	16.1	0.1	4,000
Opened	4	04FHZ-SM1-TB (F)	2.55	1.5	6.1	0.2	4,000
	15	15FHZ-SM1-TB (F)	8.05	7.0	11.6	0.2	4,000
	18	18FHZ-SM1-TB (F)	9.55	8.5	13.1	0.2	4,000
	29	29FHZ-SM1-T-G-TB (F)	15.05	14.0	18.6	0.12	4,000
Closed	33	33FHZ-SM1-T-TB (F)	17.05	16.0	20.6	0.12	4,000
	4	04FHZ-SM1-TB	2.55	1.5	6.1	0.2	4,000
	18	18FHZ-SM1-TB	9.55	8.5	13.1	0.2	4,000
	20	20FHZ-SM1-TB	10.55	9.5	14.1	0.2	4,000
	22	22FHZ-SM1-TB	11.55	10.5	15.1	0.2	4,000

### Reverse type

Slider	Circuits	Model No.	Dimensions (mm)			Applicable FPC thickness (mm)	Q'ty / reel
			A	B	C		
Closed	6	06FHZ-RSM1-TB	3.55	2.5	7.1	0.2	4,000
	8	08FHZ-RSM1-TB	4.55	3.5	8.1	0.2	4,000
	10	10FHZ-RSM1-G-TB	5.55	4.5	9.1	0.2	4,000
	18	18FHZ-RSM1-TB	9.55	8.5	13.1	0.2	4,000
	20	20FHZ-RSM1-TB	10.55	9.5	14.1	0.2	4,000
	22	22FHZ-RSM1-TB	11.55	10.5	15.1	0.2	4,000

### Material and Finish

Contact: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
29FHZ-SM1-T-G-TB (F) and 10FHZ-RSM1-G-TB ... nickel-undercoated, gold-plated (flash)

Housing: LCP, UL94V-0, Normal type...yellow  
Reverse type...natural

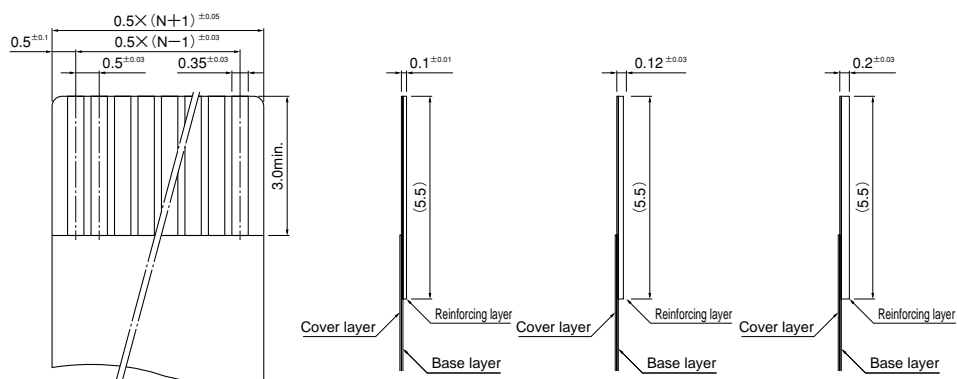
Solder tab: Copper alloy, copper-undercoated, tin-plated (reflow treatment)

Slider: PA 9T, UL94V-0, Applicable FPC thickness 0.1 gray  
Applicable FPC thickness 0.12 blue  
Applicable FPC thickness 0.2 black

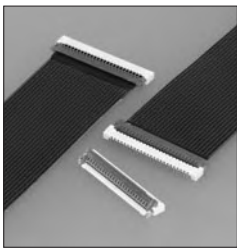
Slider arm: Stainless

**RoHS compliance** This product displays (LF)(SN) on a label.

## Lead section dimensions of FPC

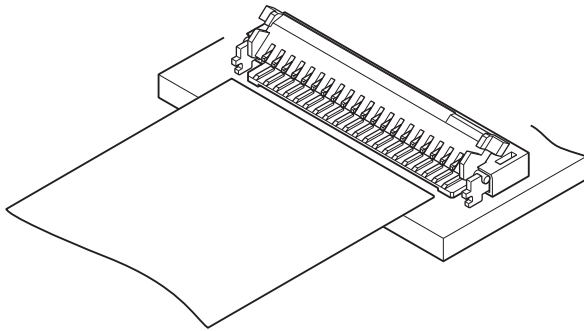


Note: N --- Number of circuits



# FHSY CONNECTOR

0.5mm pitch/Connectors for FPC



**This ZIF (zero insertion force) type flip lock FPC connector achieves a low profile feature of a 0.9mm mounting height despite the thickness of the FPC being 0.3mm.**

- Space saving design
- Heat resisting design suitable for surface mounting
- Embossed tape for automatic mounting

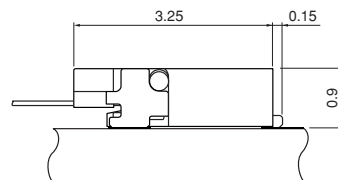
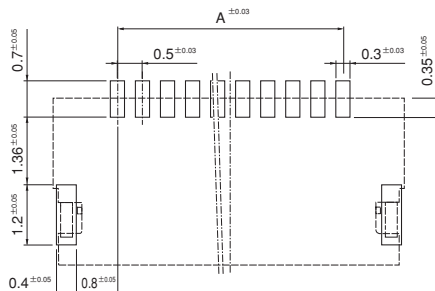
## Specifications

- Current rating: 0.5A AC, DC
- Voltage rating: 50V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/60m Ω max.  
After environmental testing/60m Ω max.  
(variation from initial value)
- Insulation resistance: 800M Ω min.
- Withstanding voltage: 200V AC/minute
- Applicable FPC: Conductor pitch/0.5mm  
Conductor width/0.35mm  
Mating part thickness/0.3±0.05mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

Recognized E60389

### PC board layout (viewed from component side) and Assembly layout

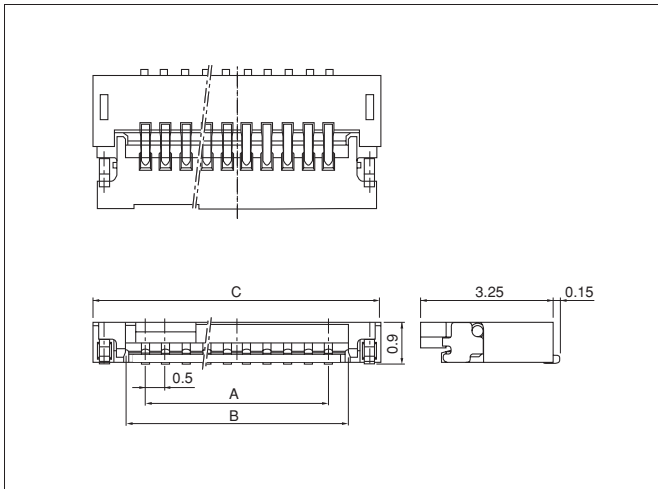


Note: 1. Tolerances are non-cumulative: ±0.03mm for all centers.  
2. The dimensions above should serve as a guideline. Contact JST for details.



# FHSY CONNECTOR

## Connector



Circuits	Model No.	Dimensions (mm)			Q'ty / reel
		A	B	C	
5	<b>05FHSY-RSM1-GAN-TB</b>	2.0	3.0	4.56	3,000
6	<b>06FHSY-RSM1-GAN-TB</b>	2.5	3.5	5.06	3,000
11	<b>11FHSY-RSM1-GAN-TB</b>	5.0	6.0	7.56	3,000
12	<b>12FHSY-RSM1-GAN-TB</b>	5.5	6.5	8.06	3,000
16	<b>16FHSY-RSM1-GAN-TB</b>	7.5	8.5	10.06	3,000
18	<b>18FHSY-RSM1-GAN-TB</b>	8.5	9.5	11.06	3,000
20	<b>20FHSY-RSM1-GAN-TB</b>	9.5	10.5	12.06	3,000
24	<b>24FHSY-RSM1-GAN-TB</b>	11.5	12.5	14.06	3,000
28	<b>28FHSY-RSM1-GAN-TB</b>	13.5	14.5	16.06	3,000

### Material and Finish

Contact: Copper alloy, nickel-undercoated, gold-plated (nickel-stripe)

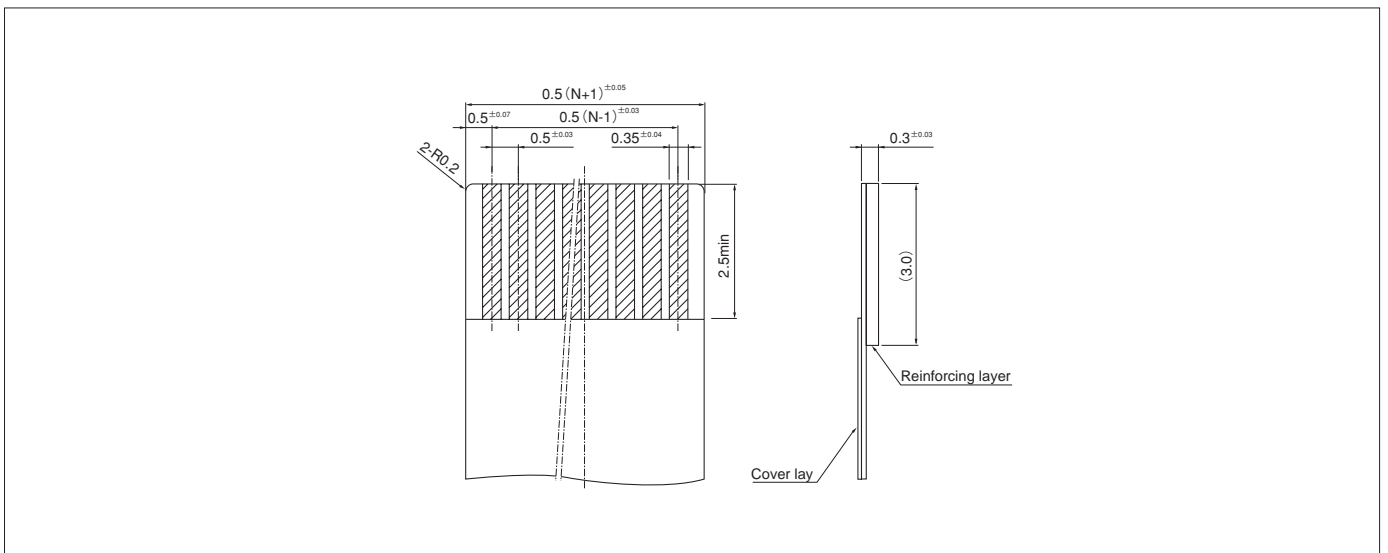
Cover: Heat resisting resin, UL94V-0

Housing: Heat resisting resin, UL94V-0

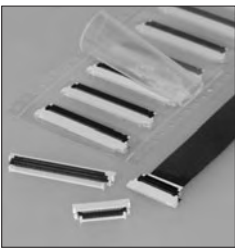
Solder tab: Copper alloy, copper-undercoated, tin-plated (reflow treatment)

**RoHS compliance** This product displays (LF)(SN) on a label.

## Lead section dimensions of FPC

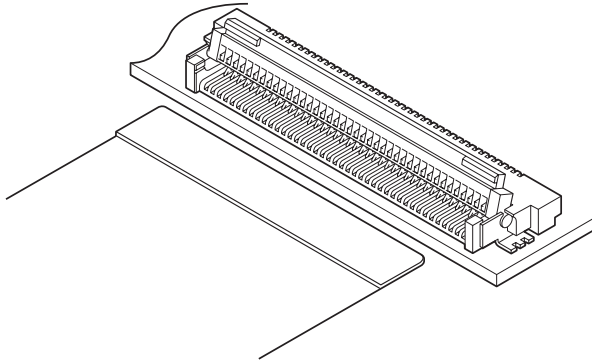


Note: N --- Number of circuits



# FLZX CONNECTOR

0.5mm pitch/Connectors for FFC and FPC



**The connector for the 0.3mm thickness FFC or FPC with a mounting height of 2.0mm.**

**This 0.5mm pitch FFC or FPC connector adopts a ZIF structure, which provides superior performance in durability and offers effective protection from wearing. The use of the rotating type cover contributes to easy operation especially with big circuits connectors.**

- Rotating type cover
- Reliable cover
- Heat resisting design for surface mounting

## Specifications

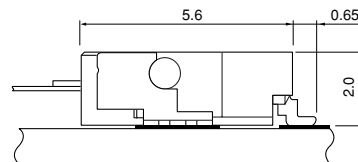
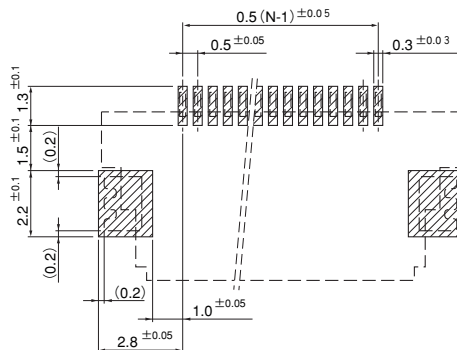
- Current rating: 0.5A AC, DC
  - Voltage rating: 50V AC, DC
  - Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
  - Contact resistance: Initial value/40m Ω max.  
After environmental testing/60m Ω max.
  - Insulation resistance: 500M Ω min.
  - Withstanding voltage: 200V AC/minute
  - Applicable FFC and FPC: Conductor pitch/0.5mm  
Conductor width/0.35mm  
Mating part thickness/0.3±0.03mm
- \* RoHS compliant products are published.  
\* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.  
\* Contact JST for details.

## Standards

Recognized E60389

Certified LR20812

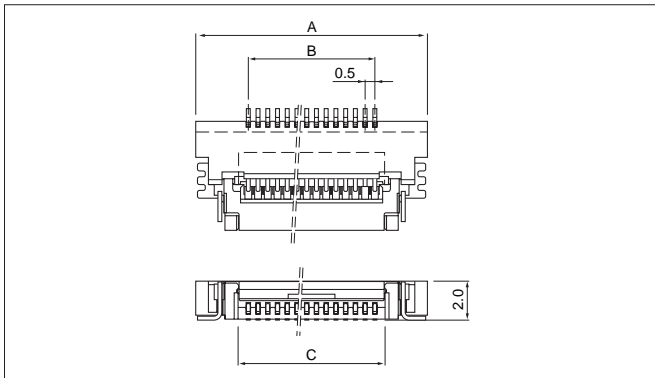
## PC board layout (viewed from component side) and Assembly layout



Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.  
2. The dimensions above should serve as a guideline. Contact JST for details.  
3. N --- Number of circuits

# FLZX CONNECTOR

## Connector



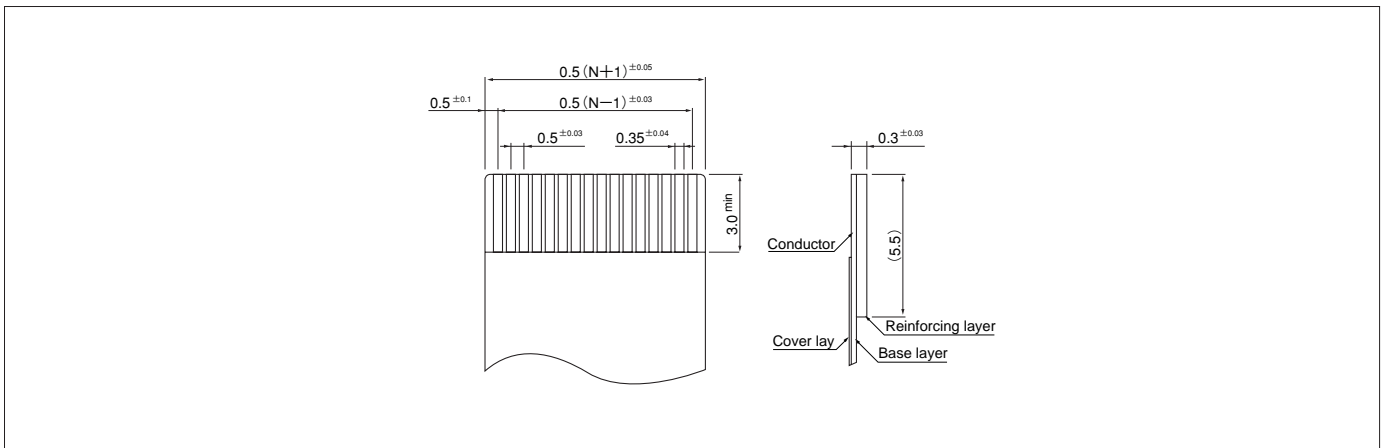
Circuits	Model No.	Dimensions (mm)			Q'ty / reel
		A	B	C	
20	<b>20FLZX-RSM1-A-TB</b>	14.9	9.5	10.55	2,000
24	<b>24FLZX-RSM1-A-TB</b>	16.9	11.5	12.55	2,000
32	<b>32FLZX-RSM1-A-TB</b>	20.9	15.5	16.55	2,000
34	<b>34FLZX-RSM1-A-TB</b>	21.9	16.5	17.55	2,000
50	<b>50FLZX-RSM1-A-TB</b>	29.9	24.5	25.55	2,000

### Material and Finish

Contact: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
Housing: Heat resisting resin, UL94V-0  
Solder tab: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
Cover housing: Heat resisting resin, UL94V-0

**RoHS compliance** This product displays (LF)(SN) on a label.

## Lead section dimensions of FFC and FPC

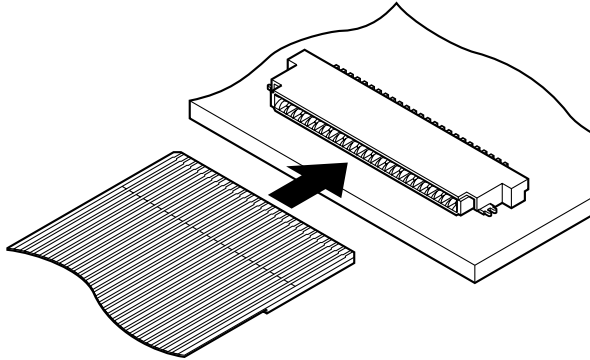


Note: N --- Number of circuits



# FH CONNECTOR

0.5mm pitch/Connectors for FPC



**The large miniaturization at pitch direction and depth direction and low profile as 1.2mm mounting height are realized. FH connector is miniaturized and space saving Non-ZIF type connector for FPC.**

- Double-sided contact
- Applicable to standard FPC

## Specifications

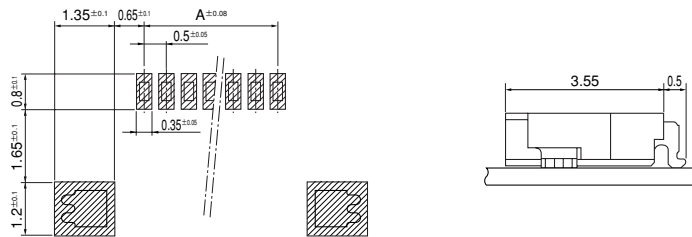
- Current rating: 0.5A AC, DC
  - Voltage rating: 50V AC, DC
  - Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
  - Contact resistance: Initial value/40m Ω max.  
After environmental testing/20m Ω max.  
(variation from initial value)
  - Insulation resistance: 500M Ω min.
  - Withstanding voltage: 200V AC/minute
  - Applicable FPC: Conductor pitch/0.5mm  
Conductor width/0.35mm  
Mating part thickness/0.3±0.05mm
- \* RoHS compliant products are published.  
\* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.  
\* Contact JST for details.

## Standards

Recognized E60389

Certified LR20812

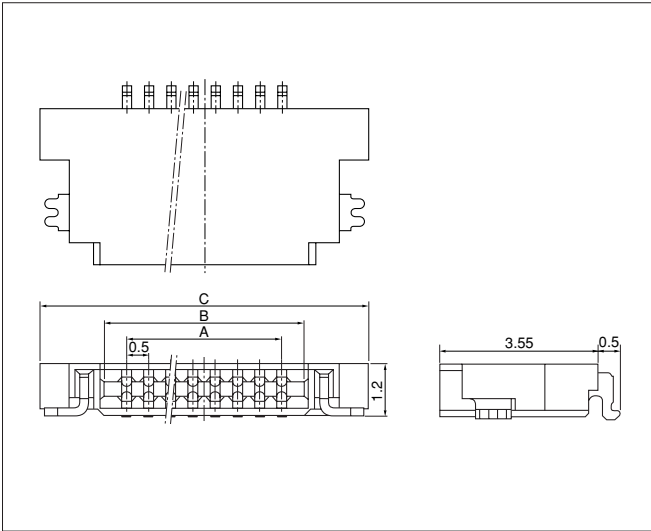
## PC board layout (viewed from component side) and Assembly layout



Note: 1. Tolerances are non-cumulative: ±0.08mm for all centers.  
2. The dimensions above should serve as a guideline. Contact JST for details.

# FH CONNECTOR

## Connector



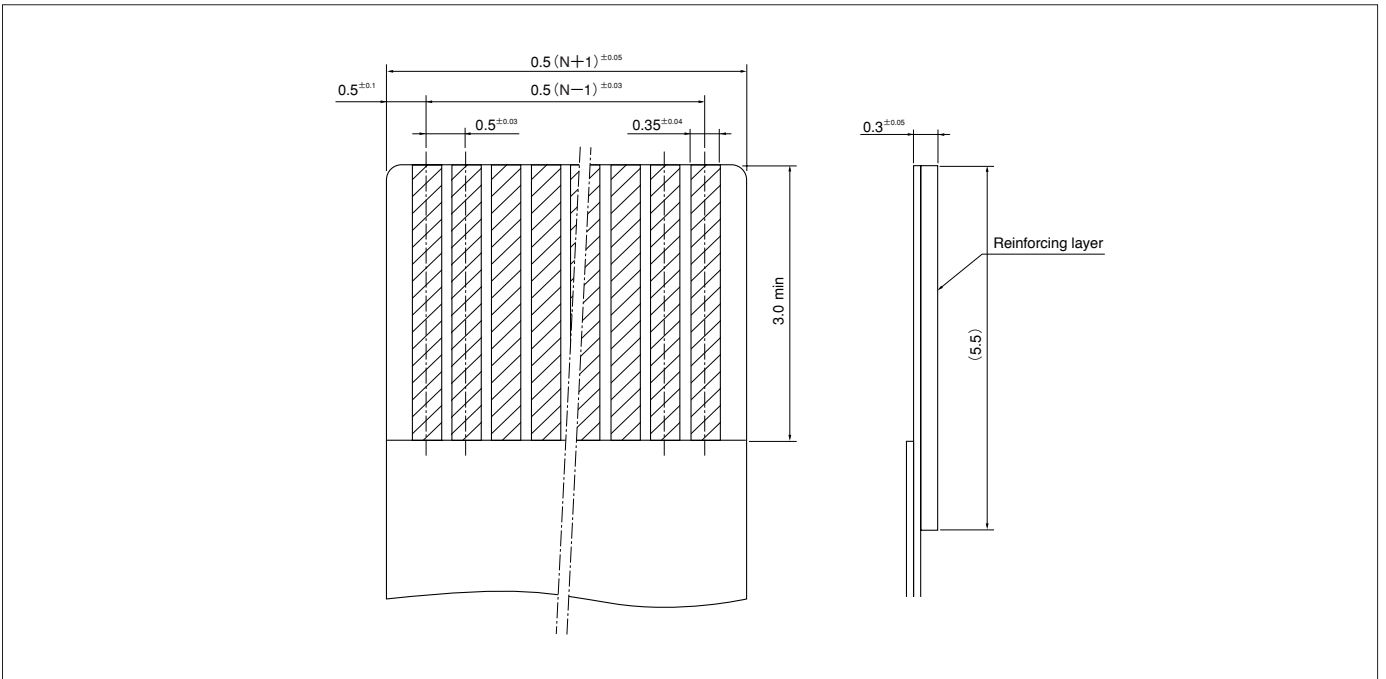
Circuits	Model No.	Dimensions (mm)			Q'ty / reel
		A	B	C	
5	<b>05FH-SM1-TB</b>	2.0	3.0	5.9	4,000
6	<b>06FH-SM1-TB</b>	2.5	3.5	6.4	4,000
7	<b>07FH-SM1-TB</b>	3.0	4.0	6.9	4,000
8	<b>08FH-SM1-TB</b>	3.5	4.5	7.4	4,000
10	<b>10FH-SM1-TB</b>	4.5	5.5	8.4	4,000
11	<b>11FH-SM1-TB</b>	5.0	6.0	8.9	4,000
12	<b>12FH-SM1-TB</b>	5.5	6.5	9.4	4,000
14	<b>14FH-SM1-TB</b>	6.5	7.5	10.4	4,000
16	<b>16FH-SM1-TB</b>	7.5	8.5	11.4	4,000
18	<b>18FH-SM1-TB</b>	8.5	9.5	12.4	4,000
20	<b>20FH-SM1-TB</b>	9.5	10.5	13.4	4,000
25	<b>25FH-SM1-TB</b>	12.0	13.0	15.9	4,000

### Material and Finish

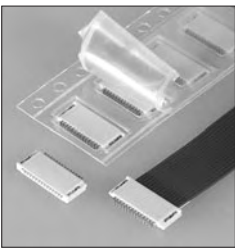
Contact: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
Housing: LCP, UL94V-0  
Solder tab: Copper alloy, copper-undercoated, tin-plated (reflow treatment)

**RoHS compliance** This product displays (LF)(SN) on a label.

## Lead section dimensions of FPC

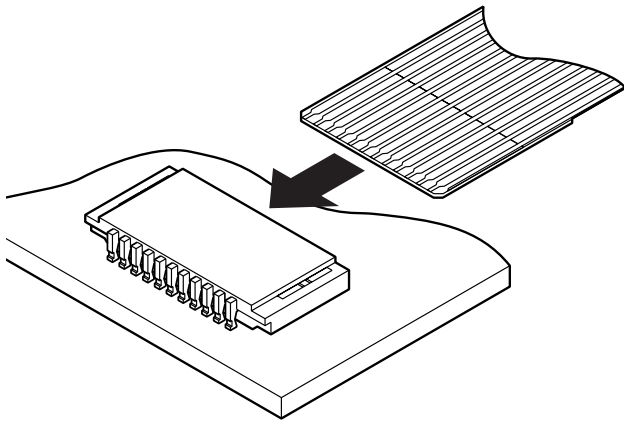


Note: N --- Number of circuits



# FHJ CONNECTOR

0.5mm pitch/Connectors for FPC



**Non-ZIF type low profile of 1.2mm mounting height. 0.3mm thick standard type FPC is applicable.**

- Compact mounting space
- Heat resisting design suitable for surface mounting

## Specifications

- Current rating: 0.5A AC, DC
- Voltage rating: 50V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/40m Ω max.  
After environmental testing/20m Ω max.  
(variation from initial value)
- Insulation resistance: 500M Ω min.
- Withstanding voltage: 200V AC/minute
- Applicable FPC: Conductor pitch/0.5mm  
Conductor width/0.35mm  
Mating part thickness/0.3±0.05mm

Note: FPC to be actually used should be checked for applicability.

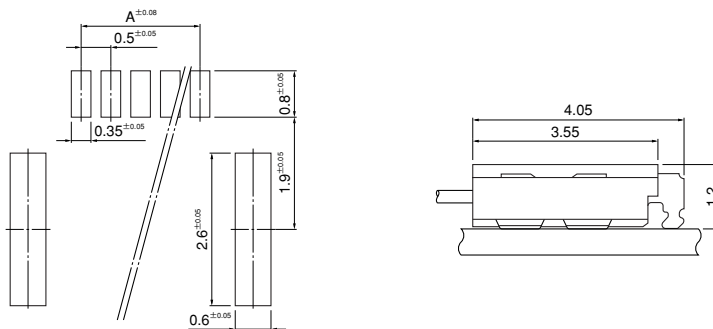
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

Recognized E60389

Certified LR20812

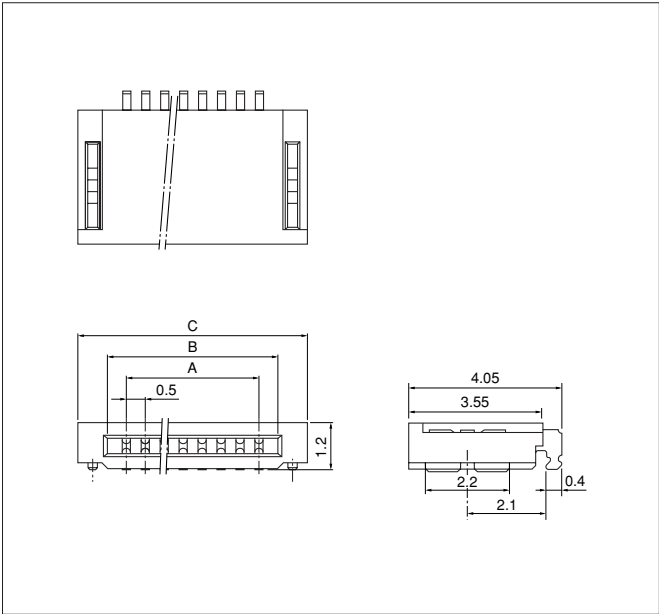
### PC board layout (viewed from component side) and Assembly layout



- Note: 1. Tolerances are non-cumulative: ±0.08mm for all centers.  
2. The dimensions above should serve as a guide line. Contact JST for details.

# FHJ CONNECTOR

## Connector



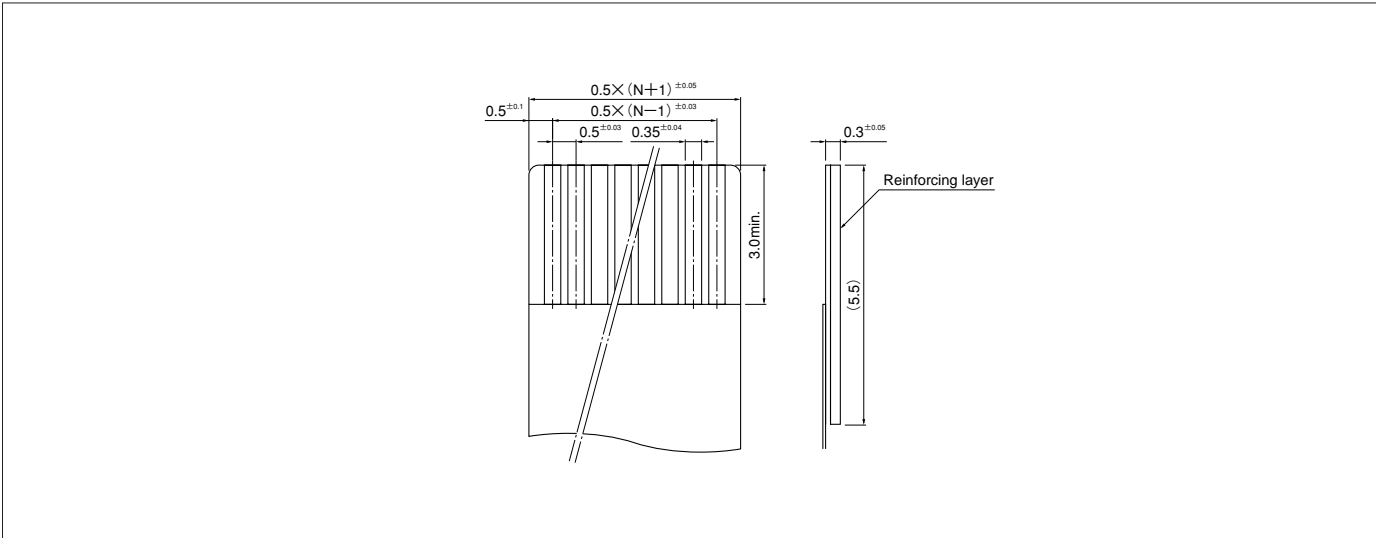
Circuits	Model No.	Dimensions (mm)			Q'ty / reel
		A	B	C	
5	05FHJ-SM1-TB	2.0	3.0	4.6	4,000
6	06FHJ-SM1-TB	2.5	3.5	5.1	4,000
7	07FHJ-SM1-TB	3.0	4.0	5.6	4,000
8	08FHJ-SM1-TB	3.5	4.5	6.1	4,000
10	10FHJ-SM1-TB	4.5	5.5	7.1	4,000
11	11FHJ-SM1-TB	5.0	6.0	7.6	4,000
12	12FHJ-SM1-TB	5.5	6.5	8.1	4,000
14	14FHJ-SM1-TB	6.5	7.5	9.1	4,000
16	16FHJ-SM1-TB	7.5	8.5	10.1	4,000
18	18FHJ-SM1-TB	8.5	9.5	11.1	4,000
20	20FHJ-SM1-TB	9.5	10.5	12.1	4,000
21	21FHJ-SM1-TB	10.0	11.0	12.6	4,000
24	24FHJ-SM1-TB	11.5	12.5	14.1	4,000

### Material and Finish

Contact: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
 Housing: LCP, UL94V-0  
 Solder tab: Copper alloy, copper-undercoated, tin-plated (reflow treatment)

**RoHS compliance** This product displays (LF)(SN) on a label.

## Lead section dimensions of FPC

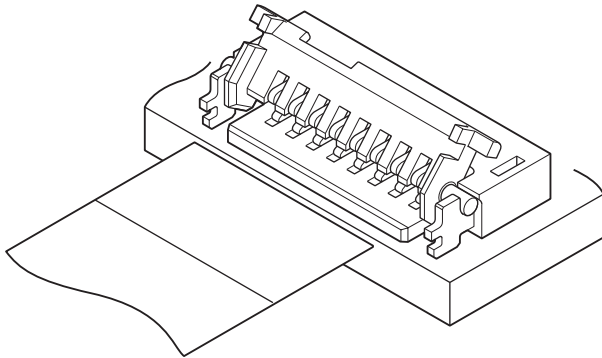


Note: N --- Number of circuits



# FHS CONNECTOR

0.5mm pitch/Connectors for FPC



**FHS connector is a space-saving type connector for FPC with 3.1mm depth, though it is low profile of 0.9mm mounting height. 0.2mm thick standard FPC.**

- **Space saving design**
- **Heat resisting design suitable for surface mounting**
- **Self-lock mechanism enables the cover to close by one-touch operation**

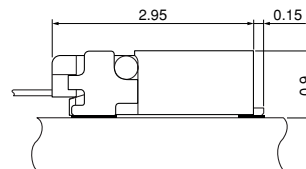
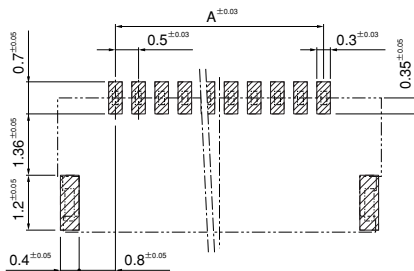
## Specifications

- Current rating: 0.5A AC, DC
- Voltage rating: 50V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/60m Ω max.  
After environmental testing/60m Ω max.  
(variation from initial value)
- Insulation resistance: 800M Ω min.
- Withstanding voltage: 200V AC/minute
- Applicable FPC: Conductor pitch/0.5mm  
Conductor width/0.35mm  
Mating part thickness/0.2±0.03mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

Recognized E60389

### PC board layout (viewed from component side) and Assembly layout

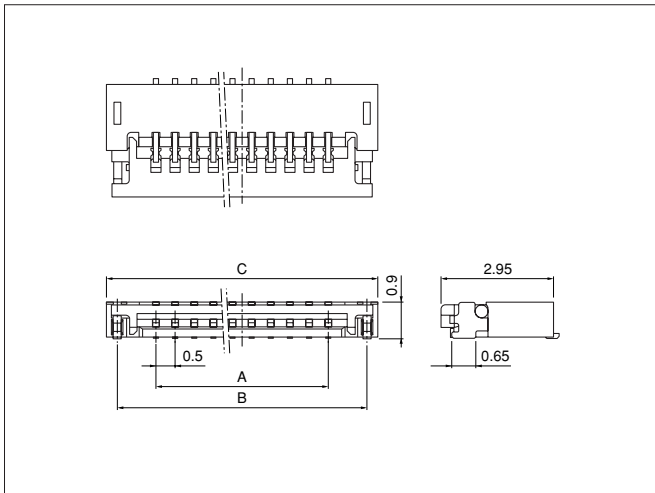


Note: 1. Tolerances are non-cumulative: ±0.03mm for all centers.  
2. The dimensions above should serve as a guideline. Contact JST for details.



# FHS CONNECTOR

## Connector



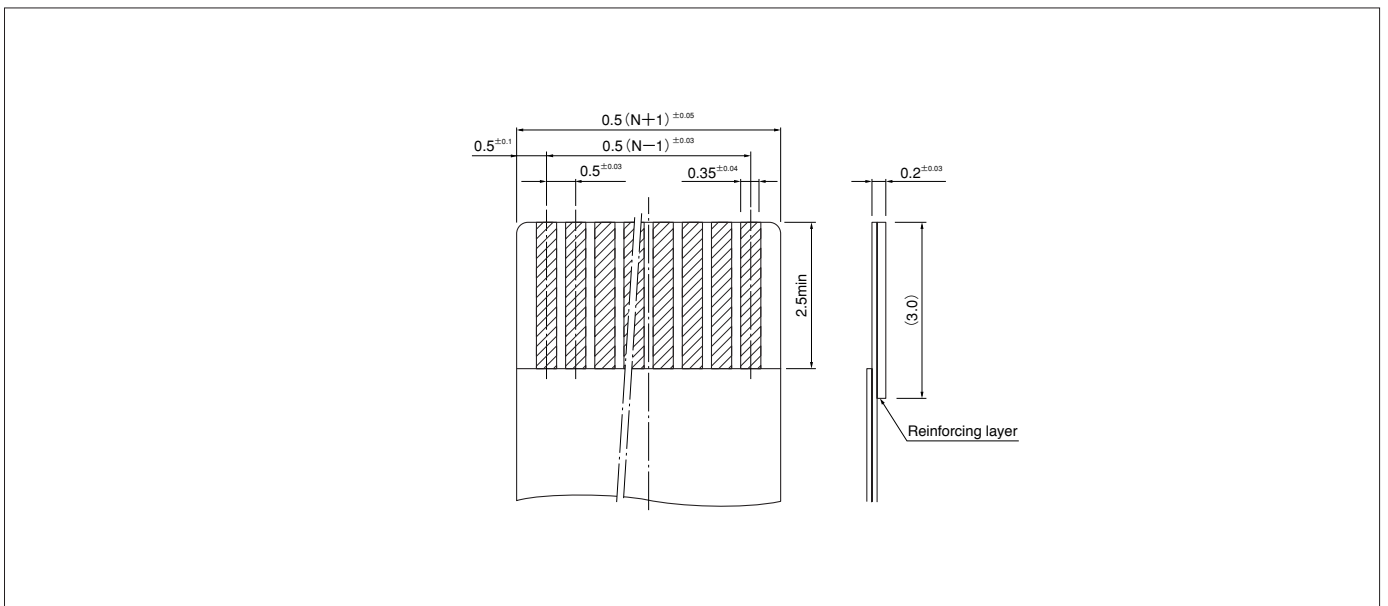
Circuits	Model No.	Dimensions (mm)			Q'ty / reel
		A	B	C	
3	<b>03FHS-RSM1-GAN-TB</b>	1.0	3.0	3.56	6,000
4	<b>04FHS-RSM1-GAN-TB</b>	1.5	3.5	4.06	6,000
6	<b>06FHS-RSM1-GAN-TB</b>	2.5	4.5	5.06	6,000
8	<b>08FHS-RSM1-GAN-TB</b>	3.5	5.5	6.06	6,000
9	<b>09FHS-RSM1-GAN-TB</b>	4.0	6.0	6.56	6,000

### Material and Finish

Contact: Copper alloy, nickel-undercoated, gold-plated (nickel-stripe)  
Housing: LCP, UL94V-0  
Solder tab: Brass, copper-undercoated, tin-plated (reflow treatment)  
Cover: PPS, UL94V-0

**RoHS compliance** This product displays (LF)(SN) on a label.  
This products listed above are supplied on embossed-tape.

## Lead section dimensions of FPC

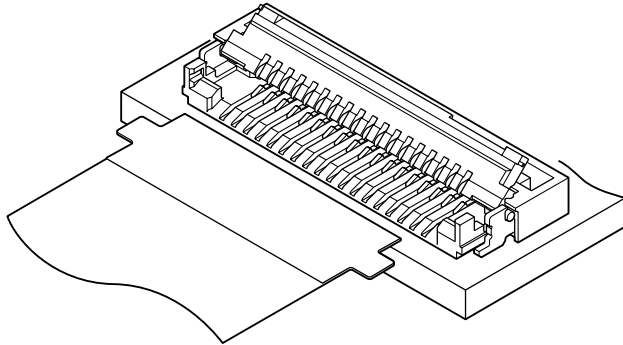


Note: N --- Number of circuits



# FHY CONNECTOR

0.5mm pitch/Connectors for FPC



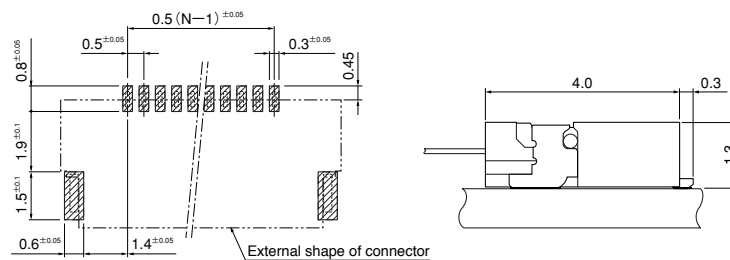
**The connector for the 0.3mm thickness FPC with a mounting height of 1.3 mm. FPC with protrusion prevents incomplete insertion and mis-insertion, so that it provides reliable connection.**

- A FPC with protrusion improves operability and reliability
- Reliable cover
- Self-lock mechanism enables the cover to close by one-touch operation

## Specifications

- Current rating: 0.5A AC, DC
- Voltage rating: 50V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/60m Ω max.  
After environmental testing/60m Ω max.  
(variation from initial value)
- Insulation resistance: 800M Ω min.
- Withstanding voltage: 200V AC/minute
- Applicable FPC: Conductor pitch/0.5mm  
Conductor width/0.35mm  
Mating part thickness/0.3±0.03mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

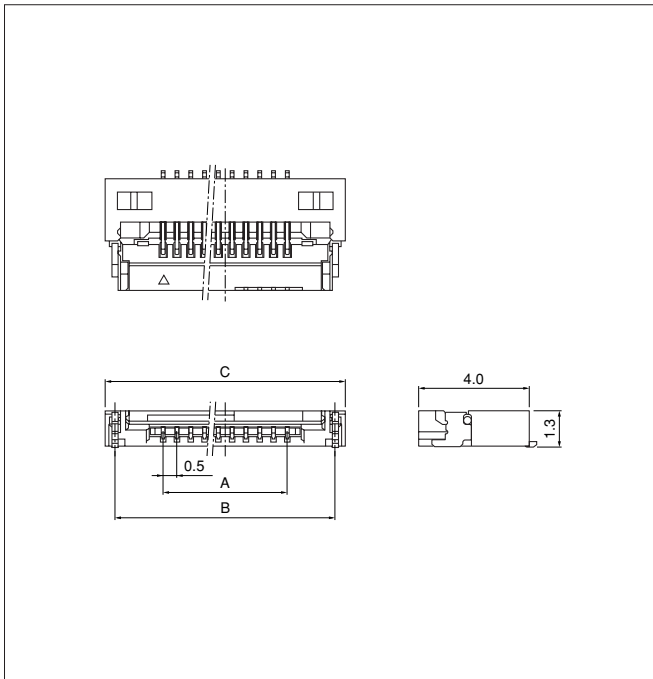
## PC board layout (viewed from component side) and Assembly layout



- Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.  
2. The dimensions above should serve as a guideline. Contact JST for details.  
3. N --- Number of circuits

# FHY CONNECTOR

## Connector



This products listed above are supplied on embossed-tape.

### Gold-plated product

Circuits	Model No.	Dimensions (mm)			Qty / reel
		A	B	C	
10	<b>10FHY-RSM1-GAN-TF</b>	4.5	8.0	8.7	3,000
18	<b>18FHY-RSM1-GAN-TF</b>	8.5	12.0	12.7	3,000
30	<b>30FHY-RSM1-GAN-TF</b>	14.5	18.0	18.7	3,000

### Material and Finish

Contact: Copper alloy, nickel-undercoated, gold-plated (nickel-stripe)  
Housing: Heat resisting resin, UL94V-0, natural  
Solder tab: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
Cover: Heat resisting resin, UL94V-0, black

**RoHS compliance** This product displays (LF)(SN) on a label.

### Tin-plated product

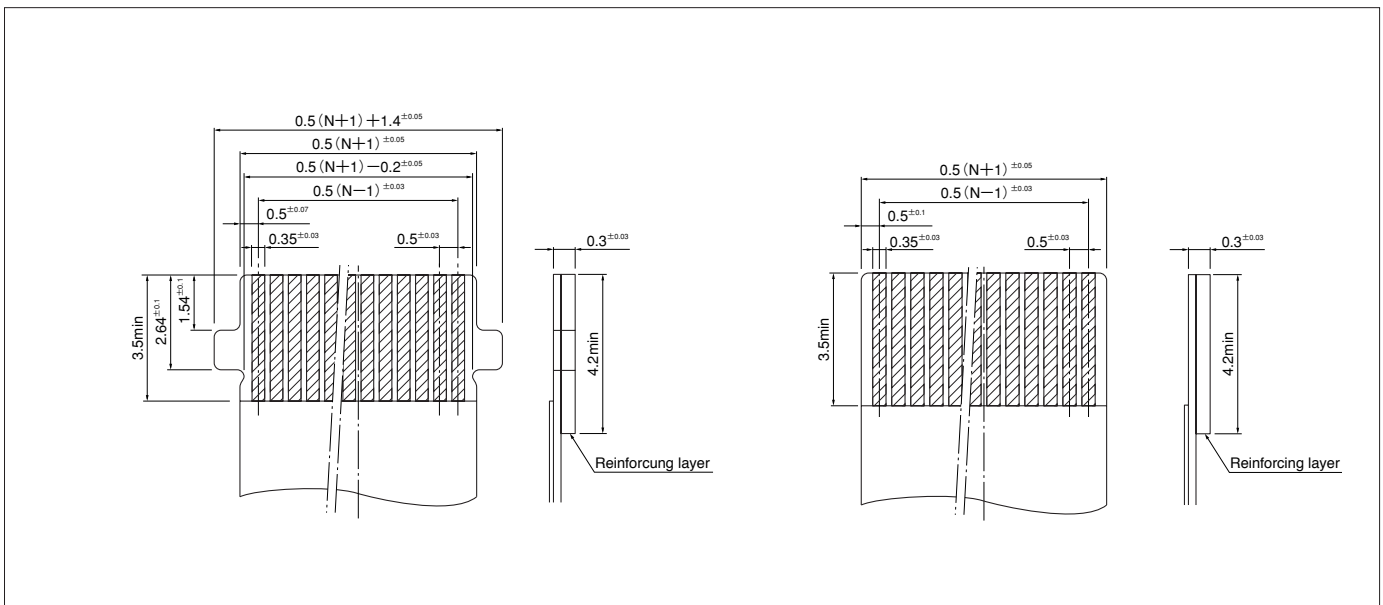
Circuits	Model No.	Dimensions (mm)			Qty / reel
		A	B	C	
40	<b>40FHY-RSM1-TF</b>	19.5	23.0	23.7	3,000
50	<b>50FHY-RSM1-TF</b>	24.5	28.0	28.7	3,000

### Material and Finish

Contact: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
Housing: Heat resisting resin, UL94V-0, natural  
Solder tab: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
Cover: Heat resisting resin, UL94V-0, black

**RoHS compliance** This product displays (LF)(SN) on a label.

## Lead section dimensions of FPC

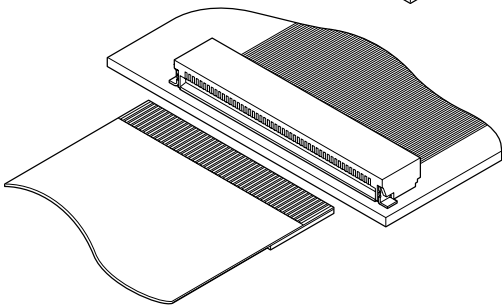
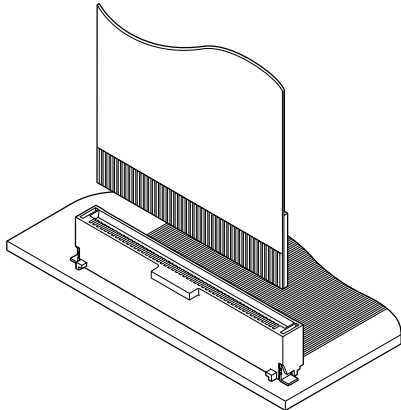


Note: N --- Number of circuits



# FY CONNECTOR

0.5mm pitch/Connectors for FFC



## 0.5mm pitch non-ZIF snap-in type FFC connector.

- Heat resisting design suitable for surface mounting
- One-sided contact construction
- Solder tabs
- Embossed tape for automatic mounting

## Specifications

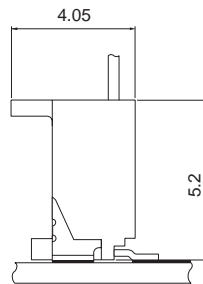
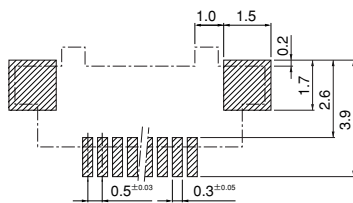
- Current rating: 0.3A AC, DC
  - Voltage rating: 30V AC, DC
  - Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
  - Contact resistance: Initial value/50m Ω max.  
After environmental testing/70m Ω max.
  - Insulation resistance: 100M Ω min.
  - Withstanding voltage: 200V AC/minute
  - Applicable FFC: Conductor pitch/0.5mm  
Conductor width/0.3mm  
Mating part thickness/0.3±0.03mm
- \* RoHS compliant products are published.  
\* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.  
\* Contact JST for details.

## Standards

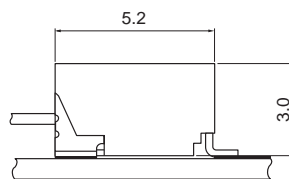
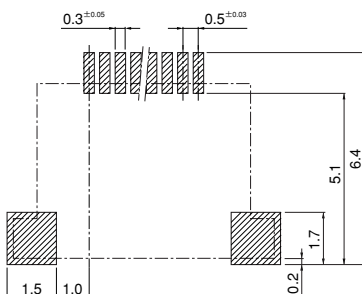
- Ⓡ Recognized E60389
- Ⓢ Certified LR20812
- Ⓡ R50006970

## PC board layout (viewed from component side) and Assembly layout

### Top entry type

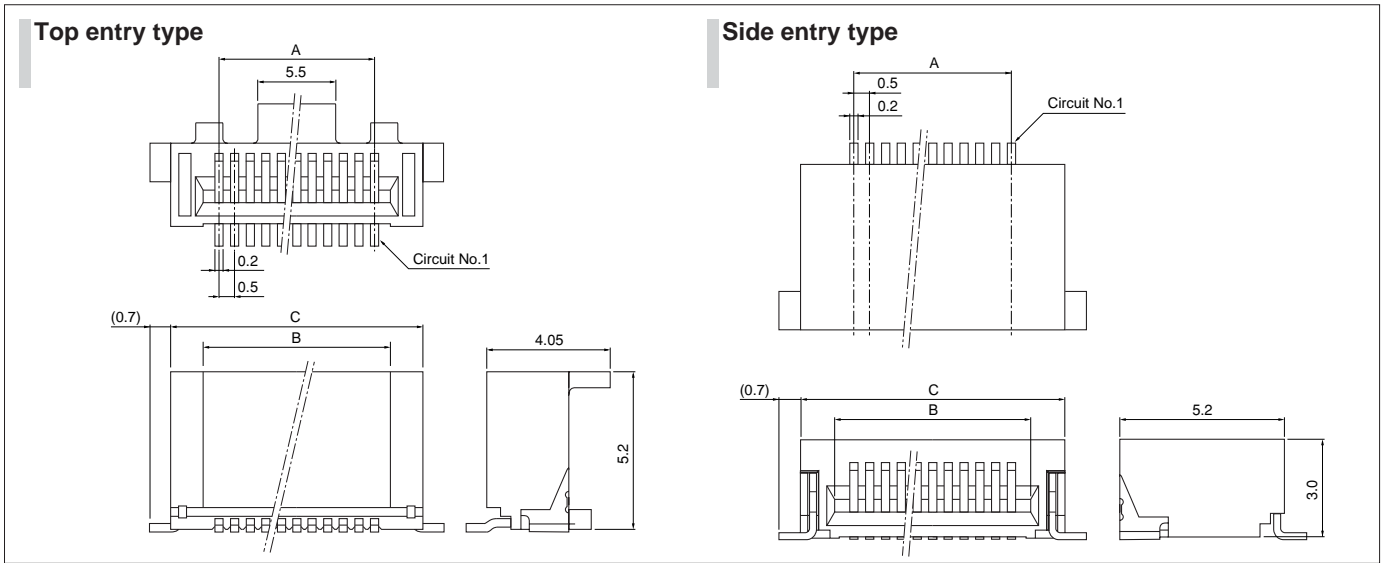


### Side entry type



Note: 1. Tolerances are non-cumulative: ±0.03mm for all centers.  
2. The dimensions above should serve as a guideline. Contact JST for details.

## Connector



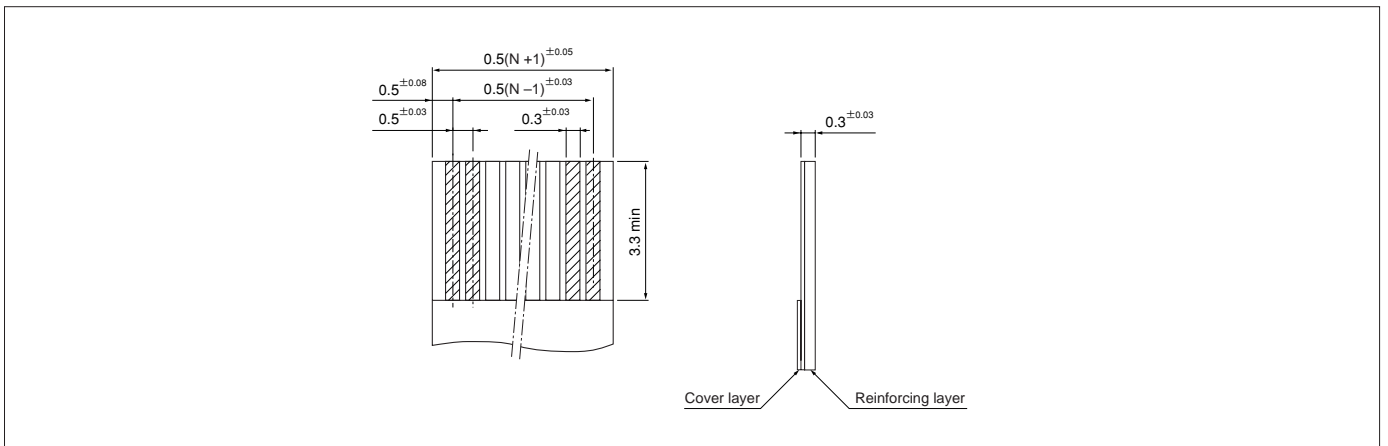
Circuits	Model No.		Dimensions (mm)			Q'ty / reel	
	Top entry type	Side entry type	A	B	C	Top entry type	Side entry type
30	<b>30FY-BMT-TB</b>	<b>30FY-SMT-TF</b>	14.5	15.5	17.7	1,250	2,000
40	<b>40FY-BMT-TB</b>	<b>40FY-SMT-TF</b>	19.5	20.5	22.7	1,250	2,000
50	<b>50FY-BMT-TB</b>	<b>50FY-SMT-TF</b>	24.5	25.5	27.7	1,250	2,000

### Material and Finish

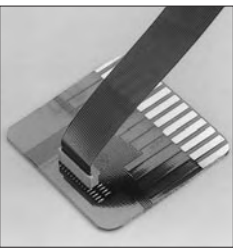
Contact: Phosphor bronze, copper-undercoated, tin-plated (reflow treatment)  
 Housing: PPS, UL94V-0  
 Solder tab: Brass, copper-undercoated, tin-plated (reflow treatment)

**RoHS compliance** This product displays (LF)(SN) on a label.

## Lead section dimensions of FFC

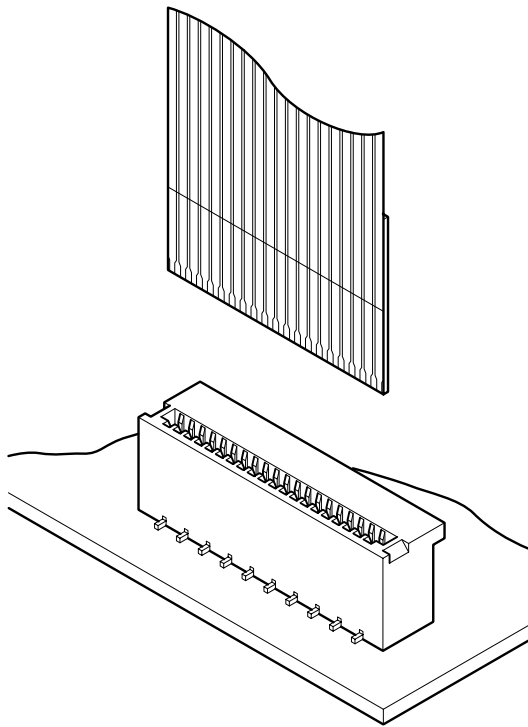


Note: N --- Number of circuits



# FLT CONNECTOR

0.5mm pitch/Connectors for FPC



- Heat resisting design suitable for surface mounting
- Staggered surface mount tails
- Embossed tape for automatic mounting
- FPC insertion is easy
- Compact design

## Specifications

- Current rating: 0.5A AC, DC
- Voltage rating: 50V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/50m Ω max.  
After environmental testing/20m Ω max.  
(variation from initial value)
- Insulation resistance: 500M Ω min.
- Withstanding voltage: 200V AC/minute
- Applicable FPC: Conductor pitch/0.5mm  
Conductor width/0.35mm  
Mating part thickness/0.30±0.05mm

Note: FPC to be actually used should be checked for applicability.

\* RoHS compliant products are published.

\* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.

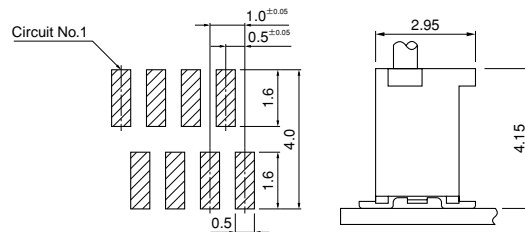
\* Contact JST for details.

## Standards

Ⓜ Recognized E60389

Ⓢ Certified LR20812

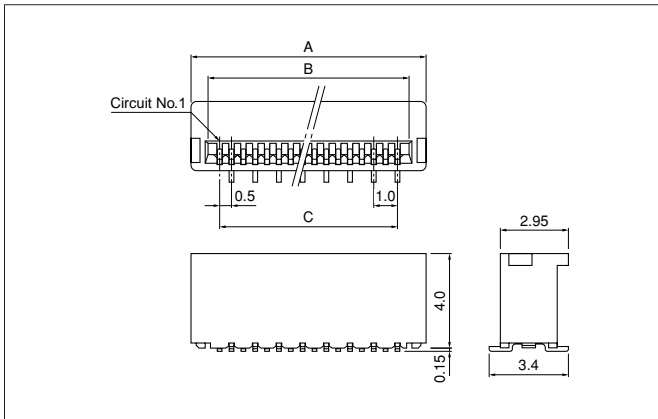
## PC board layout (viewed from component side) and Assembly layout



- Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.  
2. The dimensions above should serve as a guide line. Contact JST for details.

# FLT CONNECTOR

## Connector



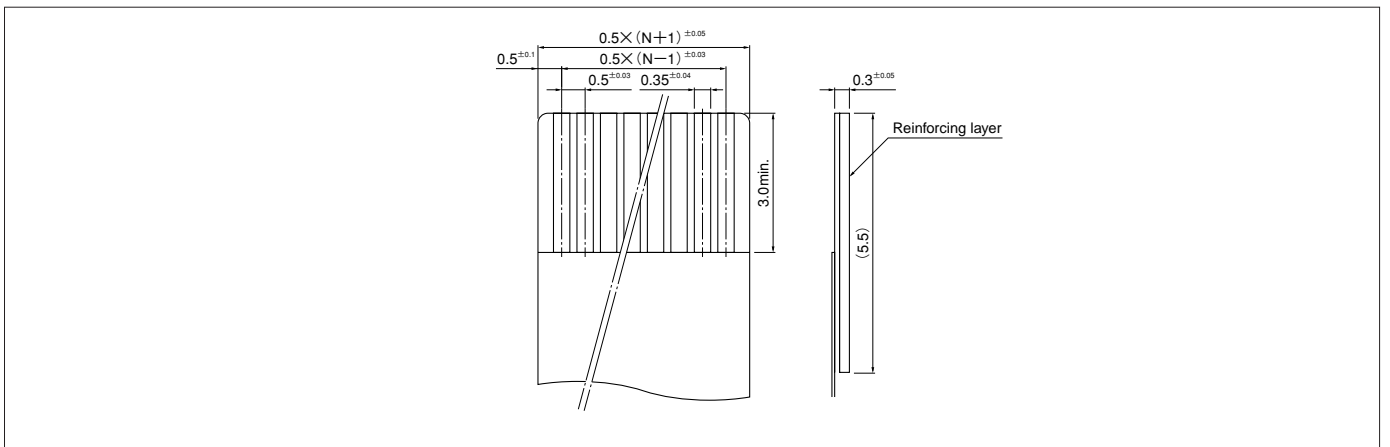
Circuits	Model No.	Dimensions (mm)			Q'ty / reel
		A	B	C	
6	<b>06FLT-SM2-TB</b>	4.9	3.5	2.5	2,500
8	<b>08FLT-SM2-TB</b>	5.9	4.5	3.5	2,500
10	<b>10FLT-SM2-TB</b>	6.9	5.5	4.5	2,500
12	<b>12FLT-SM2-TB</b>	7.9	6.5	5.5	2,500
14	<b>14FLT-SM2-TB</b>	8.9	7.5	6.5	2,500
16	<b>16FLT-SM2-TB</b>	9.9	8.5	7.5	2,500
18	<b>18FLT-SM2-TB</b>	10.9	9.5	8.5	2,500
20	<b>20FLT-SM2-TB</b>	11.9	10.5	9.5	2,500
22	<b>22FLT-SM2-TB</b>	12.9	11.5	10.5	2,500
24	<b>24FLT-SM2-TB</b>	13.9	12.5	11.5	2,500
26	<b>26FLT-SM2-TB</b>	14.9	13.5	12.5	2,500
28	<b>28FLT-SM2-TB</b>	15.9	14.5	13.5	2,500
30	<b>30FLT-SM2-TB</b>	16.9	15.5	14.5	2,500
32	<b>32FLT-SM2-TB</b>	17.9	16.5	15.5	2,500
40	<b>40FLT-SM2-TB</b>	21.9	20.5	19.5	2,500

### Material and Finish

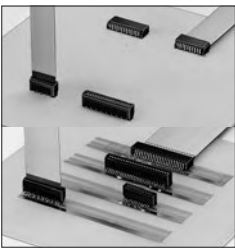
Contact: Phosphor bronze, copper-undercoated, tin-plated (reflow treatment)  
Housing: PA 6T, UL94V-0

**RoHS compliance** This product displays (LF)(SN) on a label.  
Note: The products listed above are supplied on embossed-tape.

## Lead section dimensions of FPC

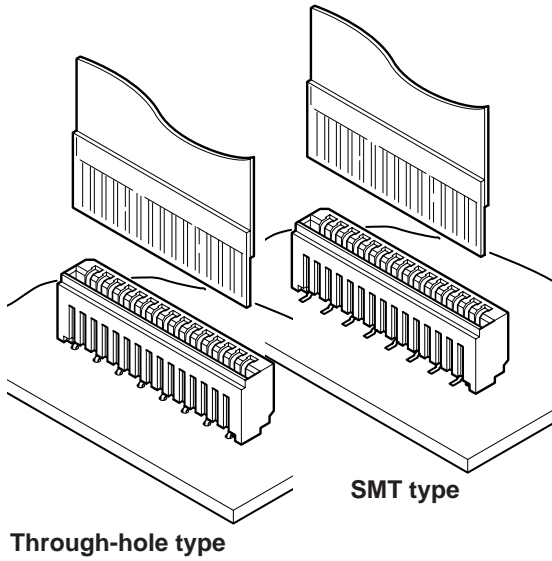


Note: N --- Number of circuits



# FMN CONNECTOR

1.0mm pitch/Connectors for FFC



Through-hole type

SMT type

- Compact
- Low insertion force
- Both through-hole and SMT types are available
- Embossed tape for automatic mounting

## Specifications

- Current rating: 0.5A DC
- Voltage rating: 50V DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/30m Ω max.  
After environmental testing/50m Ω max.
- Insulation resistance: 500M Ω min.
- Withstanding voltage: 500V AC/minute
- Applicable FFC: Conductor pitch/1.0mm  
Conductor width/0.7mm  
Mating part thickness/0.30±0.05mm
- Applicable PC board thickness: 1.6mm

Note: FFC to be actually used should be checked for applicability.

- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

Recognized E60389

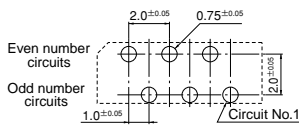
Certified LR20812

## PC board layout (viewed from component side) and Assembly layout

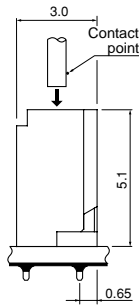
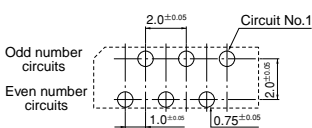
### <Through-hole type>

#### Top entry type

##### Normal type

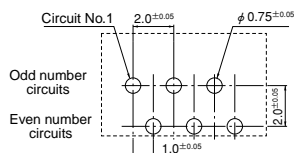


##### Reverse type

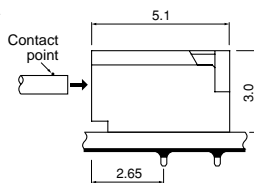
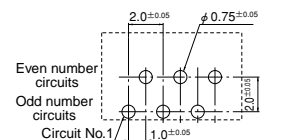


#### Side entry type

##### Normal type



##### Reverse type

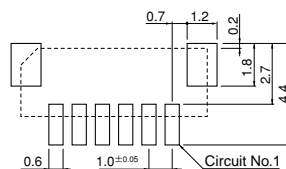


### <SMT type>

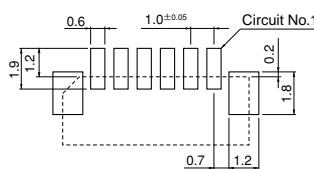
#### Top entry type

##### <In-line>

##### Normal type

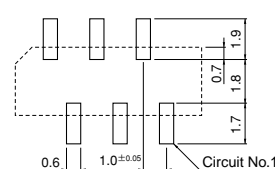


##### Reverse type

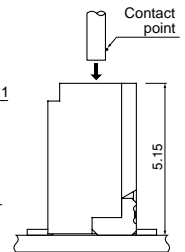
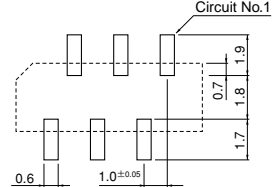


##### <Staggered>

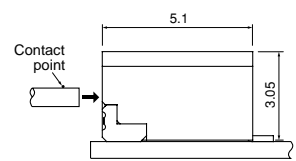
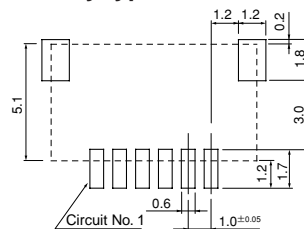
##### Normal type



##### Reverse type



#### Side entry type



Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.  
2. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.

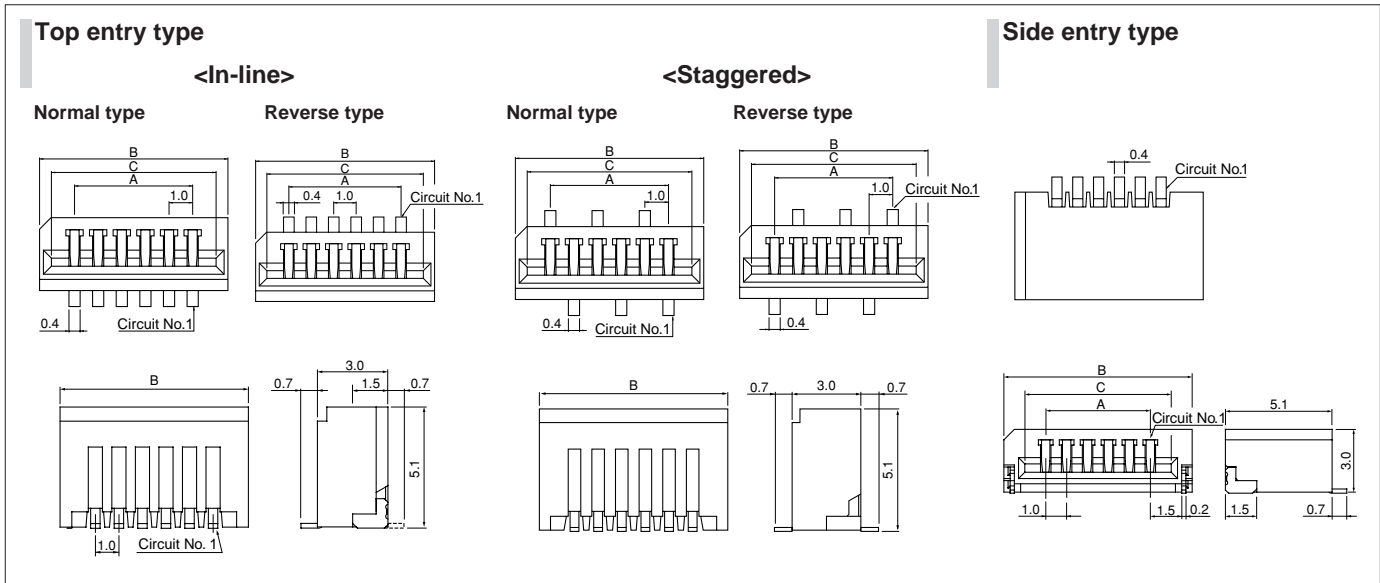
Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.  
2. The dimensions above should serve as a guideline.  
Contact JST for details.





# FMN CONNECTOR

## SMT type Connector



Circuits	Model No.					Dimensions (mm)				Qty / reel	
	Top entry type					A	B		C	Top entry type	Side entry type
	Single-row		Staggered		Side entry type		Top entry type	Side entry type			
	Normal type	Reverse type	Normal type	Reverse type							
4	04FMN-BMT-A-TF	04FMN-BMTR-A-TB	04FMN-BMTTN-A-TF	04FMN-BMTTR-A-TB	04FMN-SMT-A-TF	3.0	6.0	7.0	5.0	1,000	2,000
5	05FMN-BMT-A-TF	05FMN-BMTR-A-TB	05FMN-BMTTN-A-TF	05FMN-BMTTR-A-TB	05FMN-SMT-A-TF	4.0	7.0	8.0	6.0	1,000	2,000
6	06FMN-BMT-A-TF	06FMN-BMTR-A-TB	06FMN-BMTTN-A-TF	06FMN-BMTTR-A-TB	06FMN-SMT-A-TF	5.0	8.0	9.0	7.0	1,000	2,000
7	07FMN-BMT-A-TF	07FMN-BMTR-A-TB	07FMN-BMTTN-A-TF	07FMN-BMTTR-A-TB	07FMN-SMT-A-TF	6.0	9.0	10.0	8.0	1,000	2,000
8	08FMN-BMT-A-TF	08FMN-BMTR-A-TB	08FMN-BMTTN-A-TF	08FMN-BMTTR-A-TB	08FMN-SMT-A-TF	7.0	10.0	11.0	9.0	1,000	2,000
9	09FMN-BMT-A-TF	09FMN-BMTR-A-TB	09FMN-BMTTN-A-TF	09FMN-BMTTR-A-TB	09FMN-SMT-A-TF	8.0	11.0	12.0	10.0	1,000	2,000
10	10FMN-BMT-A-TF	10FMN-BMTR-A-TB	10FMN-BMTTN-A-TF	10FMN-BMTTR-A-TB	10FMN-SMT-A-TF	9.0	12.0	13.0	11.0	1,000	2,000
11	11FMN-BMT-A-TF	11FMN-BMTR-A-TB	11FMN-BMTTN-A-TF	11FMN-BMTTR-A-TB	11FMN-SMT-A-TF	10.0	13.0	14.0	12.0	1,000	2,000
12	12FMN-BMT-A-TF	12FMN-BMTR-A-TB	12FMN-BMTTN-A-TF	12FMN-BMTTR-A-TB	12FMN-SMT-A-TF	11.0	14.0	15.0	13.0	1,000	2,000
13	13FMN-BMT-A-TF	13FMN-BMTR-A-TB	13FMN-BMTTN-A-TF	13FMN-BMTTR-A-TB	13FMN-SMT-A-TF	12.0	15.0	16.0	14.0	1,000	2,000
14	14FMN-BMT-A-TF	14FMN-BMTR-A-TB	14FMN-BMTTN-A-TF	14FMN-BMTTR-A-TB	14FMN-SMT-A-TF	13.0	16.0	17.0	15.0	1,000	2,000
15	15FMN-BMT-A-TF	15FMN-BMTR-A-TB	15FMN-BMTTN-A-TF	15FMN-BMTTR-A-TB	15FMN-SMT-A-TF	14.0	17.0	18.0	16.0	1,000	2,000
16	16FMN-BMT-A-TF	16FMN-BMTR-A-TB	16FMN-BMTTN-A-TF	16FMN-BMTTR-A-TB	16FMN-SMT-A-TF	15.0	18.0	19.0	17.0	1,000	2,000
17	17FMN-BMT-A-TF	17FMN-BMTR-A-TB	17FMN-BMTTN-A-TF	17FMN-BMTTR-A-TB	17FMN-SMT-A-TF	16.0	19.0	20.0	18.0	1,000	2,000
18	18FMN-BMT-A-TF	18FMN-BMTR-A-TB	18FMN-BMTTN-A-TF	18FMN-BMTTR-A-TB	18FMN-SMT-A-TF	17.0	20.0	21.0	19.0	1,000	2,000
19	19FMN-BMT-A-TF	19FMN-BMTR-A-TB	19FMN-BMTTN-A-TF	19FMN-BMTTR-A-TB	19FMN-SMT-A-TF	18.0	21.0	22.0	20.0	1,000	2,000
20	20FMN-BMT-A-TF	20FMN-BMTR-A-TB	20FMN-BMTTN-A-TF	20FMN-BMTTR-A-TB	20FMN-SMT-A-TF	19.0	22.0	23.0	21.0	1,000	2,000
21	21FMN-BMT-A-TF	21FMN-BMTR-A-TB	21FMN-BMTTN-A-TF	21FMN-BMTTR-A-TB	21FMN-SMT-A-TF	20.0	23.0	24.0	22.0	1,000	2,000
22	22FMN-BMT-A-TF	22FMN-BMTR-A-TB	22FMN-BMTTN-A-TF	22FMN-BMTTR-A-TB	22FMN-SMT-A-TF	21.0	24.0	25.0	23.0	1,000	2,000
23	23FMN-BMT-A-TF	23FMN-BMTR-A-TB	23FMN-BMTTN-A-TF	23FMN-BMTTR-A-TB	23FMN-SMT-A-TF	22.0	25.0	26.0	24.0	1,000	2,000
24	24FMN-BMT-A-TF	24FMN-BMTR-A-TB	24FMN-BMTTN-A-TF	24FMN-BMTTR-A-TB	24FMN-SMT-A-TF	23.0	26.0	27.0	25.0	1,000	2,000
25	25FMN-BMT-A-TF	25FMN-BMTR-A-TB	25FMN-BMTTN-A-TF	25FMN-BMTTR-A-TB	25FMN-SMT-A-TF	24.0	27.0	28.0	26.0	1,000	2,000
26	26FMN-BMT-A-TF	26FMN-BMTR-A-TB	26FMN-BMTTN-A-TF	26FMN-BMTTR-A-TB	26FMN-SMT-A-TF	25.0	28.0	29.0	27.0	1,000	2,000
27	27FMN-BMT-A-TF	27FMN-BMTR-A-TB	27FMN-BMTTN-A-TF	27FMN-BMTTR-A-TB	27FMN-SMT-A-TF	26.0	29.0	30.0	28.0	1,000	2,000
28	28FMN-BMT-A-TF	28FMN-BMTR-A-TB	28FMN-BMTTN-A-TF	28FMN-BMTTR-A-TB	28FMN-SMT-A-TF	27.0	30.0	31.0	29.0	1,000	2,000
29	29FMN-BMT-A-TF	29FMN-BMTR-A-TB	29FMN-BMTTN-A-TF	29FMN-BMTTR-A-TB	29FMN-SMT-A-TF	28.0	31.0	32.0	30.0	1,000	2,000
30	30FMN-BMT-A-TF	30FMN-BMTR-A-TB	30FMN-BMTTN-A-TF	30FMN-BMTTR-A-TB	30FMN-SMT-A-TF	29.0	32.0	33.0	31.0	1,000	2,000
31	31FMN-BMT-A-TF	31FMN-BMTR-A-TB	31FMN-BMTTN-A-TF	31FMN-BMTTR-A-TB	31FMN-SMT-A-TF	30.0	33.0	34.0	32.0	1,000	2,000
32	32FMN-BMT-A-TF	32FMN-BMTR-A-TB	32FMN-BMTTN-A-TF	32FMN-BMTTR-A-TB	32FMN-SMT-A-TF	31.0	34.0	35.0	33.0	1,000	2,000
33	33FMN-BMT-A-TF	33FMN-BMTR-A-TB	33FMN-BMTTN-A-TF	33FMN-BMTTR-A-TB	33FMN-SMT-A-TF	32.0	35.0	36.0	34.0	1,000	2,000
34	34FMN-BMT-A-TF	34FMN-BMTR-A-TB	34FMN-BMTTN-A-TF	34FMN-BMTTR-A-TB	34FMN-SMT-A-TF	33.0	36.0	37.0	35.0	1,000	2,000
35	35FMN-BMT-A-TF	35FMN-BMTR-A-TB	35FMN-BMTTN-A-TF	35FMN-BMTTR-A-TB	35FMN-SMT-A-TF	34.0	37.0	38.0	36.0	1,000	2,000
36	36FMN-BMT-A-TF	36FMN-BMTR-A-TB	36FMN-BMTTN-A-TF	36FMN-BMTTR-A-TB	36FMN-SMT-A-TF	35.0	38.0	39.0	37.0	1,000	2,000
37	37FMN-BMT-A-TF	37FMN-BMTR-A-TB	37FMN-BMTTN-A-TF	37FMN-BMTTR-A-TB	37FMN-SMT-A-TF	36.0	39.0	40.0	38.0	1,000	2,000
38	38FMN-BMT-A-TF	38FMN-BMTR-A-TB	38FMN-BMTTN-A-TF	38FMN-BMTTR-A-TB	38FMN-SMT-A-TF	37.0	40.0	41.0	39.0	1,000	2,000
39	39FMN-BMT-A-TF	39FMN-BMTR-A-TB	39FMN-BMTTN-A-TF	39FMN-BMTTR-A-TB	39FMN-SMT-A-TF	38.0	41.0	42.0	40.0	1,000	2,000
40	40FMN-BMT-A-TF	40FMN-BMTR-A-TB	40FMN-BMTTN-A-TF	40FMN-BMTTR-A-TB	40FMN-SMT-A-TF	39.0	42.0	43.0	41.0	1,000	2,000

### Material and Finish

Contact: Phosphor bronze, copper-undercoated, tin-plated (reflow treatment)  
 Housing: PA 6T, UL94V-0, black  
 Solder tab: Brass, copper-undercoated, tin-plated (reflow treatment)

**RoHS compliance** This product displays (LF)(SN) on a label.

Note: 1. The products listed above are supplied on embossed tape.

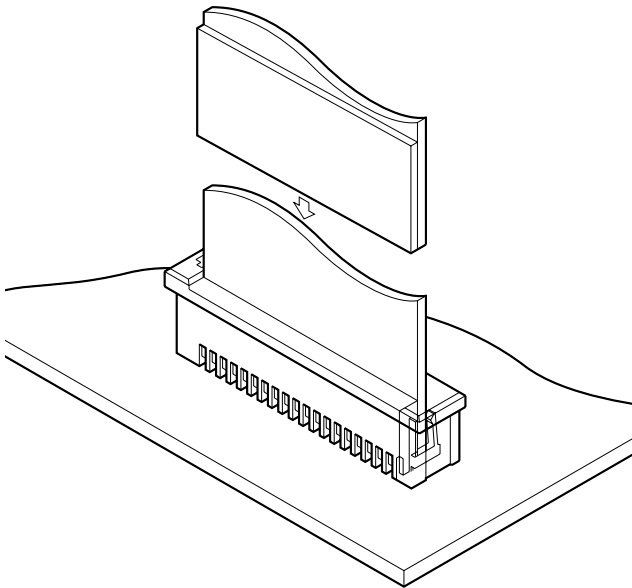
2. Contact JST for the top entry type headers with suction cap.



# FMZ CONNECTOR



1.0mm pitch/Connectors for FFC



**The FMZ series, a Zero Insertion Force (ZIF) connector series, was developed to increase wear resistance and extend the connector's mating life. It is a very compact connector with a thickness of only 4.2mm and a pitch of only 1.0mm and is thus useful for high density packaging. The contact has a reliable double-leaf construction which provides stable connection.**

- Zero insertion force mechanism
- Temporary retention feature
- Compact
- Double-leaf contact

## Specifications

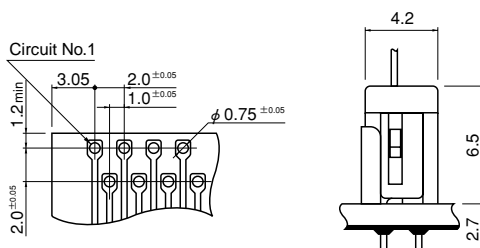
- Current rating: 0.5A AC, DC
  - Voltage rating: 50V AC, DC
  - Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
  - Contact resistance: Initial value/20m Ω max.  
After environmental testing/30m Ω max.
  - Insulation resistance: 800M Ω min.
  - Withstanding voltage: 500V AC/minute
  - Applicable FFC : Conductor pitch/1.0mm  
Conductor width/0.7mm  
Mating part thickness/  
6 to 10, 12 to 16, 20 circuits:0.30±0.05mm  
22, 26, 28, 30 circuits:0.30<sup>+0.05</sup>mm
  - Applicable PC board thickness: 0.8 to 1.6mm
- Note: FFC to be actually used should be checked for applicability.*
- \* RoHS compliant products are published.
  - \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
  - \* Contact JST for details.

## Standards

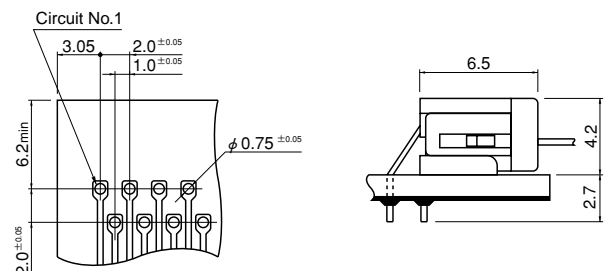
- Ⓡ Recognized E60389
- Ⓢ Certified LR20812

## PC board layout (viewed from soldering side) and Assembly layout

### Top entry type



### Side entry type



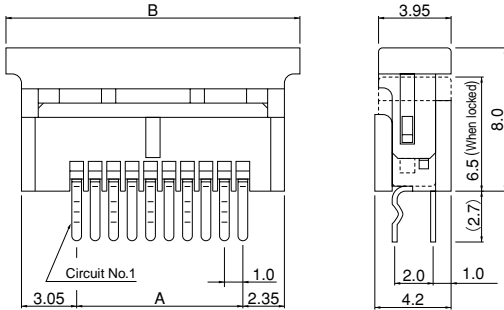
Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.

2. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.

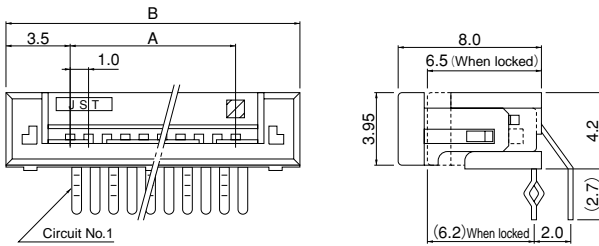
# FMZ CONNECTOR

## Connector

### Top entry type



### Side entry type



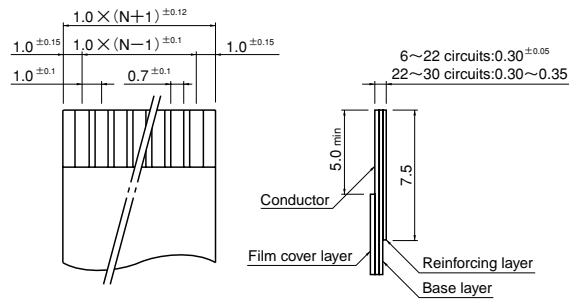
Circuits	Model No.		Dimensions (mm)		Q'ty / box	
	Top entry type	Side entry type	A	B	Top entry type	Side entry type
6	06FMZ-BT	06FMZ-ST	5.0	12.0	1,440	800
8	08FMZ-BT	08FMZ-ST	7.0	14.0	1,440	800
9	09FMZ-BT	09FMZ-ST	8.0	15.0	960	600
10	10FMZ-BT	10FMZ-ST	9.0	16.0	960	600
12	12FMZ-BT	12FMZ-ST	11.0	18.0	960	600
13	13FMZ-BT	13FMZ-ST	12.0	19.0	960	600
14	14FMZ-BT	14FMZ-ST	13.0	20.0	960	400
15	15FMZ-BT	15FMZ-ST	14.0	21.0	780	400
16	16FMZ-BT	16FMZ-ST	15.0	22.0	780	400
17	17FMZ-BT	17FMZ-ST	16.0	23.0	780	400
20	20FMZ-BT	20FMZ-ST	19.0	26.0	720	400
22	22FMZ-BT	22FMZ-ST	21.0	28.0	720	400
24	—	24FMZ-ST	23.0	30.0	—	300
26	26FMZ-BT	26FMZ-ST	25.0	32.0	480	300
28	28FMZ-BT	28FMZ-ST	27.0	34.0	480	300
30	30FMZ-BT	30FMZ-ST	29.0	36.0	480	300

### Material and Finish

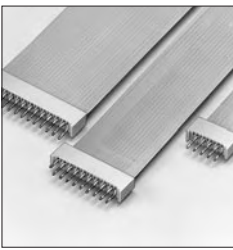
Contact: Phosphor bronze, copper-undercoated, tin-plated (reflow treatment)  
Housing: Glass-filled PBT, UL94V-0

**RoHS compliance** This product displays (LF)(SN) on a label.

## Lead section dimensions of FFC



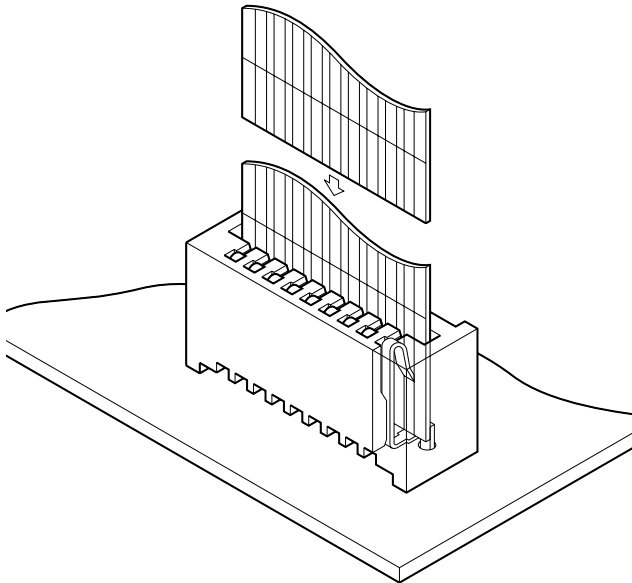
Note: N --- Number of circuits



# FE CONNECTOR

1.25mm pitch/Connectors for FFC

**NON-ZIF**  
TYPE



**The FE connector ensures easy, secure connection of flexible flat cables (FFC). This compact connector is 4.8mm wide, 7.5mm high, and provides high contact pressure even though little force is required for insertion. The result is smooth insertion and reliable contact performance. The connector is useful in making personal computers, VCRs and car stereo systems smaller and lighter.**

- Low insertion force and high contact pressure
- Snap-in connection
- Temporary board retention feature

## Specifications

- Current rating: 1.0A AC, DC
- Voltage rating: 200V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/20m Ω max.  
After environmental testing/30m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 500V AC/minute
- Applicable FFC: Conductor pitch/1.25mm  
Conductor width/0.8mm  
Mating part thickness/0.3±0.05mm

Note: FFC to be actually used should be checked for applicability.

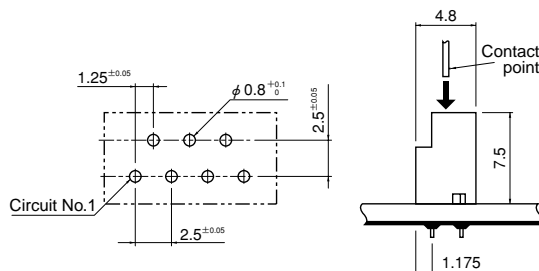
- Applicable PC board thickness: 1.2 to 1.6mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

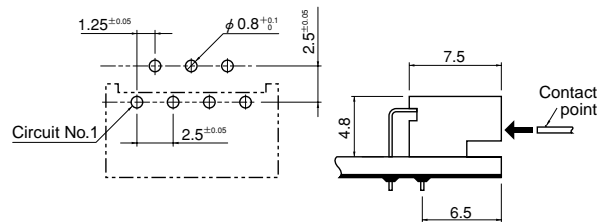
- Ⓜ Recognized E60389
- Ⓢ Certified LR20812

## PC board layout (viewed from component side) and Assembly layout

### Top entry type



### Side entry type



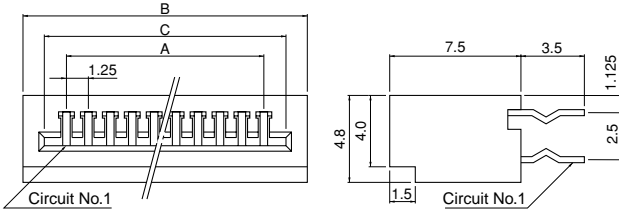
Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.

2. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.

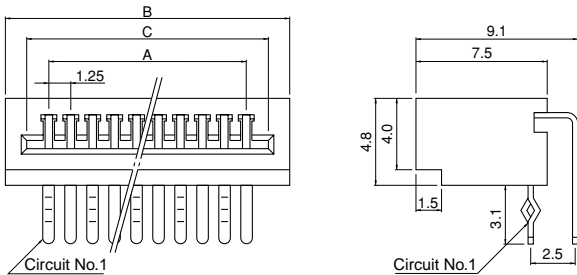
# FE CONNECTOR

## Connector

### Top entry type



### Side entry type



Circuits	Model No.		Dimensions (mm)			Q'ty / box	
	Top entry type	Side entry type	A	B	C	Top entry type	Side entry type
4	04FE-BT-VK-N	04FE-ST-VK-N	3.75	8.55	6.35	2,350	1,410
5	05FE-BT-VK-N	05FE-ST-VK-N	5.00	9.80	7.60	2,000	1,200
6	06FE-BT-VK-N	06FE-ST-VK-N	6.25	11.05	8.85	1,800	1,080
7	07FE-BT-VK-N	07FE-ST-VK-N	7.50	12.30	10.10	1,600	960
8	08FE-BT-VK-N	08FE-ST-VK-N	8.75	13.55	11.35	1,500	900
9	09FE-BT-VK-N	09FE-ST-VK-N	10.00	14.80	12.60	1,350	810
10	10FE-BT-VK-N	10FE-ST-VK-N	11.25	16.05	13.85	1,250	750
11	11FE-BT-VK-N	11FE-ST-VK-N	12.50	17.30	15.10	1,150	690
12	12FE-BT-VK-N	12FE-ST-VK-N	13.75	18.55	16.35	1,100	660
13	13FE-BT-VK-N	13FE-ST-VK-N	15.00	19.80	17.60	1,000	600
14	14FE-BT-VK-N	14FE-ST-VK-N	16.25	21.05	18.85	950	570
15	15FE-BT-VK-N	15FE-ST-VK-N	17.50	22.30	20.10	900	540
16	16FE-BT-VK-N	16FE-ST-VK-N	18.75	23.55	21.35	850	510
17	17FE-BT-VK-N	17FE-ST-VK-N	20.00	24.80	22.60	800	480
18	18FE-BT-VK-N	18FE-ST-VK-N	21.25	26.05	23.85	750	450
19	19FE-BT-VK-N	19FE-ST-VK-N	22.50	27.30	25.10	700	420
20	20FE-BT-VK-N	20FE-ST-VK-N	23.75	28.55	26.35	700	420
21	21FE-BT-VK-N	21FE-ST-VK-N	25.00	29.80	27.60	650	390
22	22FE-BT-VK-N	22FE-ST-VK-N	26.25	31.05	28.85	650	390
23	23FE-BT-VK-N	23FE-ST-VK-N	27.50	32.30	30.10	600	360
24	24FE-BT-VK-N	24FE-ST-VK-N	28.75	33.55	31.35	600	360
25	25FE-BT-VK-N	25FE-ST-VK-N	30.00	34.80	32.60	550	330
26	26FE-BT-VK-N	26FE-ST-VK-N	31.25	36.05	33.85	550	330
27	27FE-BT-VK-N	27FE-ST-VK-N	32.50	37.30	35.10	500	300
28	28FE-BT-VK-N	28FE-ST-VK-N	33.75	38.55	36.35	500	300
29	29FE-BT-VK-N	29FE-ST-VK-N	35.00	39.80	37.60	500	300
30	30FE-BT-VK-N	30FE-ST-VK-N	36.25	41.05	38.85	450	270
31	31FE-BT-VK-N	31FE-ST-VK-N	37.50	42.30	40.10	450	270
32	32FE-BT-VK-N	32FE-ST-VK-N	38.75	43.55	41.35	450	270
33	33FE-BT-VK-N	33FE-ST-VK-N	40.00	44.80	42.60	450	270
34	34FE-BT-VK-N	34FE-ST-VK-N	41.25	46.05	43.85	400	240
35	35FE-BT-VK-N	35FE-ST-VK-N	42.50	47.30	45.10	400	240
36	36FE-BT-VK-N	36FE-ST-VK-N	43.75	48.55	46.35	400	240
37	37FE-BT-VK-N	37FE-ST-VK-N	45.00	49.80	47.60	400	240
38	38FE-BT-VK-N	38FE-ST-VK-N	46.25	51.05	48.85	350	210
39	39FE-BT-VK-N	39FE-ST-VK-N	47.50	52.30	50.10	350	210
40	40FE-BT-VK-N	40FE-ST-VK-N	48.75	53.55	51.35	350	210

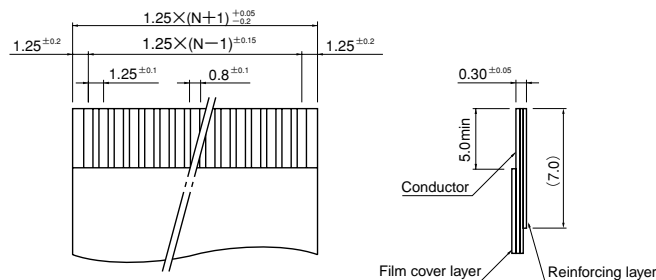
### Material and Finish

Contact: Copper alloy, tin-plated (reflow treatment)  
Housing: PBT, UL94V-0, white

### RoHS compliance

Note: 33 to 40 circuits products are not UL/CSA approved.

## Lead section dimensions of FFC



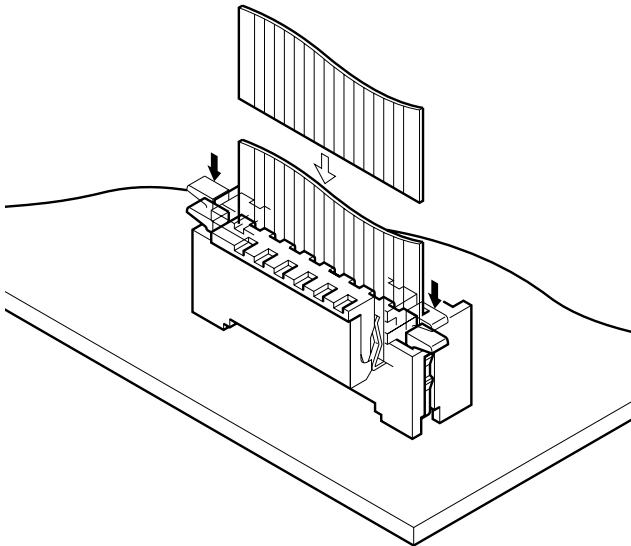
Note: N --- Number of circuits



# FDZ CONNECTOR



2.54mm pitch/Connectors for FPC and membrane switch leads



**The FDZ connector, a Zero Insertion Force (ZIF) connector, was developed to connect FPC and membrane switch leads. This combination of features allows greater freedom in internal wiring designs. No force is required to insert the leads. Once inserted, the leads are securely held and locked by moving the slide. The contact is double-sided to ensure greater reliability.**

- Double-sided contact
- Zero insertion force and locking mechanism
- Temporary board retention feature
- Boss for polarity identification
- Flux is not a problem

## Specifications

- Current rating: Tin-plated copper foil lead/1.0A AC, DC  
Silver paste carbon-printed lead/50mA AC, DC
  - Voltage rating: 250V AC, DC
  - Temperature range: -40°C to +85°C  
(including temperature rise in applying electrical current)
  - Contact resistance: <Tin-plated copper foil lead>  
Initial value/30m Ω max.  
After environmental testing/50m Ω max.  
<Silver paste carbon-printed lead>  
Initial value/10 Ω max.  
After environmental testing/15 Ω max.
  - Insulation resistance: 1,000M Ω min.
  - Withstanding voltage: 1,200V AC/minute
  - Applicable FPC and membrane switch lead:  
Conductor pitch/2.54mm  
Conductor width/1.3mm  
Mating part thickness/125 micron
  - Applicable PC board thickness: 1.6mm
- Note: FPC to be actually used should be checked for applicability.*  
 \* RoHS compliant products are published.  
 \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.  
 \* Contact JST for details.

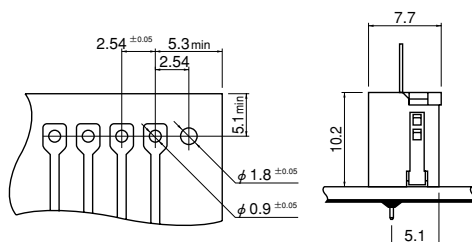
## Standards

Recognized E60389

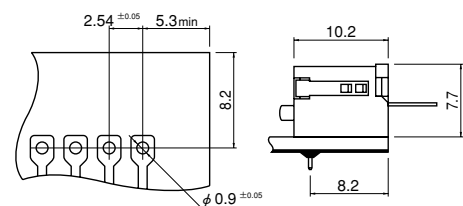
Certified LR20812

## PC board layout (viewed from soldering side) and Assembly layout

### Top entry type



### Side entry type



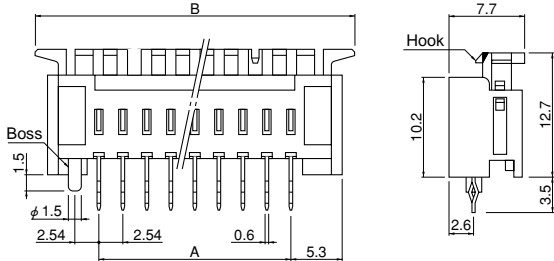
Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.

2. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.

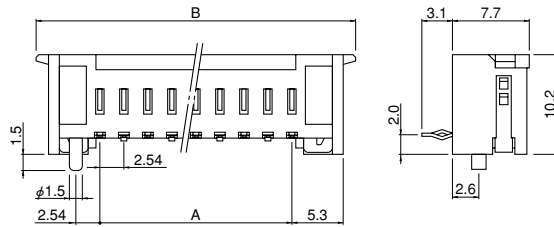
# FDZ CONNECTOR

## Connector

### Top entry type (Before slide lock)



### Side entry type (After slide lock)



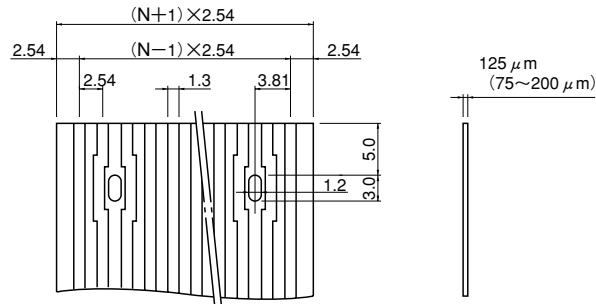
Circuits	Model No.		Dimensions (mm)		Q'ty / box
	Top entry type	Side entry type	A	B	
5	05FDZ-BT(S)	05FDZ-ST(S)	10.16	23.56	100
6	06FDZ-BT(S)	06FDZ-ST(S)	12.70	26.10	100
8	08FDZ-BT(S)	08FDZ-ST(S)	17.78	31.18	100
9	09FDZ-BT(S)	09FDZ-ST(S)	20.32	33.72	100
10	10FDZ-BT(S)	10FDZ-ST(S)	22.86	36.26	100
11	11FDZ-BT(S)	11FDZ-ST(S)	25.40	38.80	50
12	12FDZ-BT(S)	12FDZ-ST(S)	27.94	41.34	50
13	13FDZ-BT(S)	13FDZ-ST(S)	30.48	43.88	50
17	17FDZ-BT(S)	17FDZ-ST(S)	40.64	54.04	50
19	19FDZ-BT(S)	—	45.72	59.12	50

#### Material and Finish

Contact: Phosphor bronze, copper-undercoated, tin-plated (reflow treatment)  
Housing: Glass-filled PBT, UL94V-0

**RoHS compliance** This product displays (LF)(SN) on a label.  
Note: 19FDZ-BT(S) is not UL/CSA approved.

## Lead section dimensions of FPC



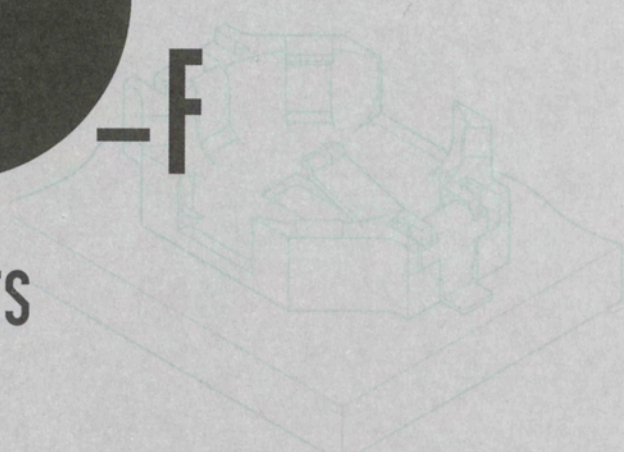
Note: N --- Number of circuits



# 1

F

## Others



Connector for button batteries used in the compact mobile equipment such as mobile phones. Mounting cost will be reduced by using this connector in place of manual soldering. And, button batteries can be more easily disassembled after use for recycling's sake.

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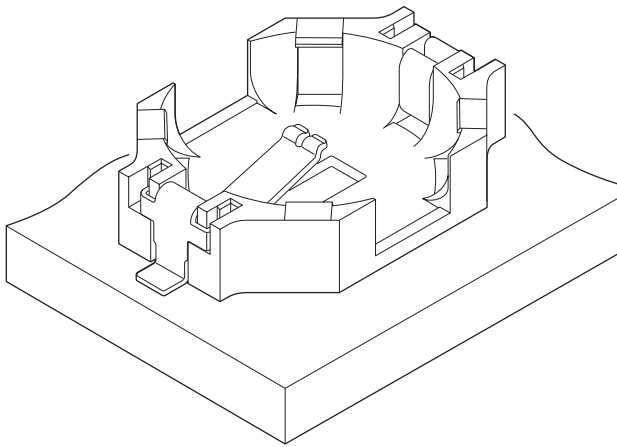
PB CONNECTOR.....	234
AYU1 CONNECTOR (Frequency from DC to 12GHz).....	236
AYU3 CONNECTOR (Frequency up to 6GHz).....	239

- Resistant to the shock
- Double contact point





# PB CONNECTOR



**Connector for button batteries used in the compact mobile equipment such as mobile phones. Mounting cost will be reduced by using this connector in place of manual soldering. And, button batteries can be more easily disassembled after use for recycling's sake.**

- Resistant to the shock
- Double contact point

## Specifications

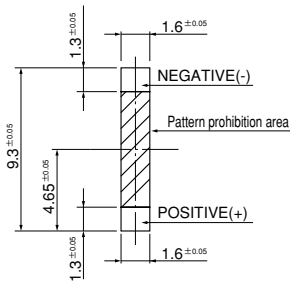
- Applicable batteries: 414 type battery/4.8mm dia. × 1.4 height  
518 type battery/5.8mm dia. × 1.8 height  
614 type battery/6.8mm dia. × 1.4 height  
621 type battery/6.8mm dia. × 2.1 height
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/100m Ω max.  
After environmental testing/120m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 500V AC/minute
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

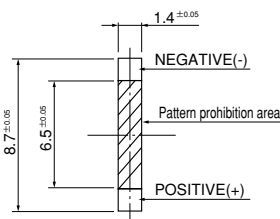
Recognized E60389

## PC board layout (viewed from component side)

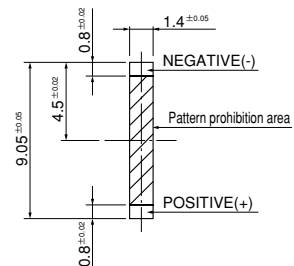
PB-414SR12K-TF



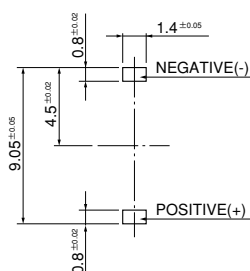
PB-414SS12-TF



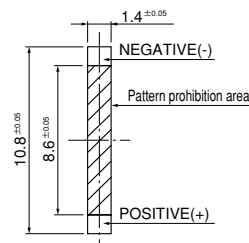
PB-518SR13-TF



PB-518SW13-TF

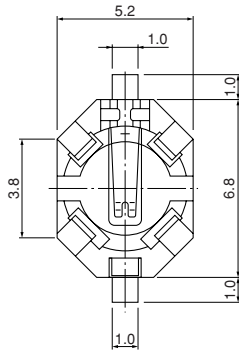


PB-614SS13-TF  
PB-621SR13-TF



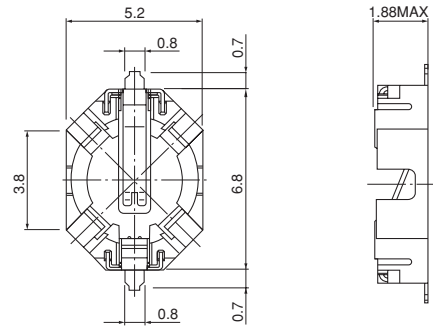
## Connector

### 414 type

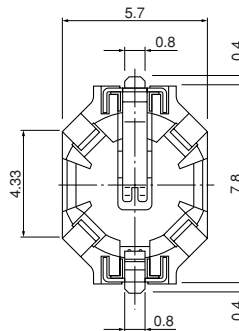


※ The dimension should be measured from housing bottom surface.

### 414 type/low profile

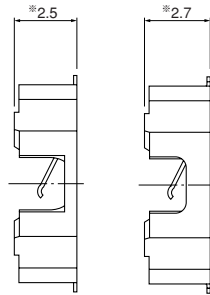


### 518 type

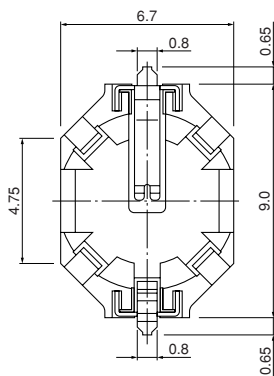


※ The dimension should be measured from housing bottom surface.

### bottom covered

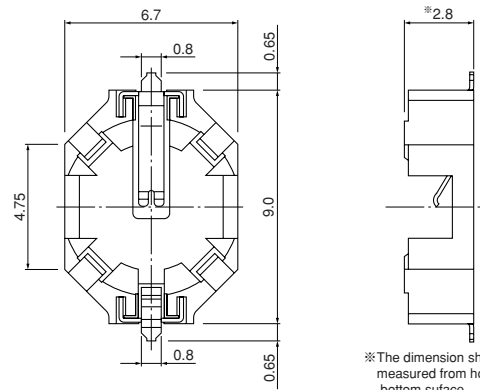


### 614 type



※ The dimension should be measured from housing bottom surface.

### 621 type

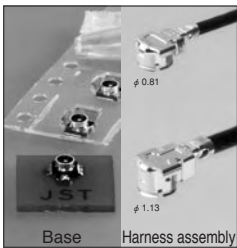


※ The dimension should be measured from housing bottom surface.

Type	Holder part	Model No.	Q'ty/ reel
414	Resin hook	<b>PB-414SR12K-TF</b>	3,000
414/low profile type	Resin hook	<b>PB-414SS12-TF</b>	3,000
518	Resin hook	<b>PB-518SR13-TF</b>	2,000
518/bottom covered	Resin hook	<b>PB-518SW13-TF</b>	2,000
614	Resin hook	<b>PB-614SS13-TF</b>	2,000
621	Resin hook	<b>PB-621SR13-TF</b>	2,000

### Material and Finish

Contact: Copper alloy, nickel-undercoated, gold-plated  
 Housing: Glass-filled LCP, UL94V-0, natural (ivory), black (414 type)  
 Holder contact: Copper alloy, nickel-undercoated, gold-plated (614 type with metal hook)

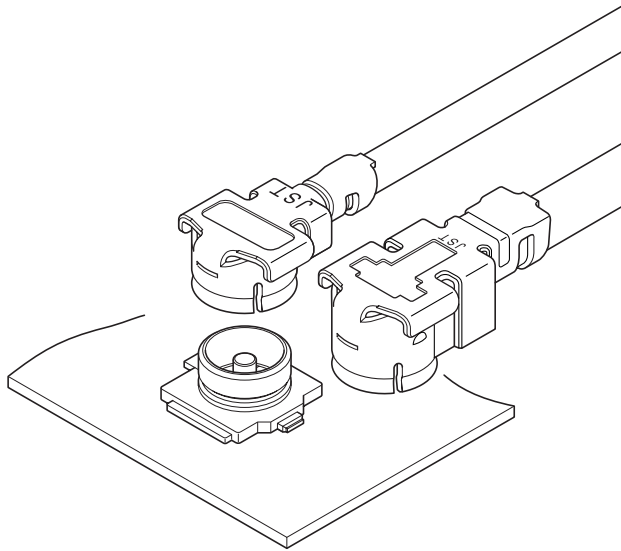


# AYU1 CONNECTOR

## Co-axial connector



### Frequency from DC to 12GHz



**This is SMT type, space saving and co-axial connector, corresponding to notebook PC, thinner and lighter telecommunications apparatus, etc.**

**[Application]**  
**UWB, WiMAX, Wireless LAN, Bluetooth, DSRC, Mobile phones, PDA, GPS, Express, etc.**

- **This connector can also be applicable the frequency of 12GHz or more.**
- **Space saving and low profile design**
- **Easy mating and unmating connector**
- **Adopting extra fine diameter high frequency cable**

### Specifications

- Impedance: 50 Ω
- Frequency range: DC to 12GHz
- Voltage standing wave ratio (V.S.W.R.)

	Cable type	DC to 3GHz	3 to 6GHz	6 to 12GHz
Harness	φ 0.81 (Single shield SA)	1.3max.	1.3max.	1.4max.
	φ 1.13 (Double shields TA)	1.3max.	1.4max.	1.4max.
Base		1.3max.	1.4max.	1.5max.

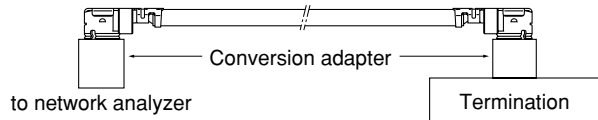
- Insertion loss (dB/m)

	Cable type	3GHz	6GHz	12GHz
Harness	φ 0.81 (Single shield SA)	5.8	9.4	14.9
	φ 1.13 (Double shields TA)	2.9	4.1	6.1
Base		—	—	—

Note: The specified values in above tables were measured by network analyzer as shown in the figure below.

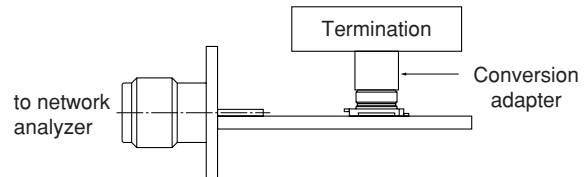
#### [Harness]

Harness: Both end harness assembly with harness of 5,000mm  
 SMA conversion adapter: AYU1-AP-PP



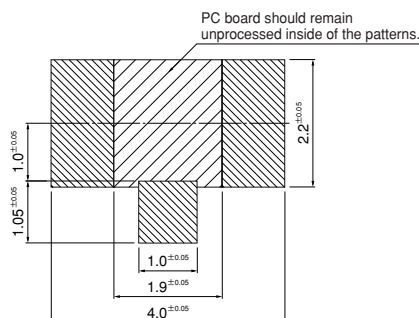
#### [Base]

Base: AYU1-1P-02676-120  
 SMA conversion adapter: AYU1-AP-JJ



- Temperature range: - 25°C to + 85°C  
 (including temperature rise in applying electrical current)
- Withstanding voltage: 200V AC/minute
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

### PC board layout (viewed from component side)



Note: Tolerances are non-cumulative: ±0.05mm for all centers. The dimensions above are our recommendation value.

# AYU1 CONNECTOR

## Socket (Harness assembly)

AYU1 (φ 0.81) Harness	AYU1 (φ 1.13) Harness

### Material and Finish

Contact: Copper alloy, nickel-undercoated, gold-plated  
Housing: Thermoplastic resin, UL94V-0  
Shell: Copper alloy, copper-undercoated, silver-plated

### Harness specifications

Cable type (Specifications for outer diameter and outer conductor)	Overall length L Harness model No. (Single end harness)	Overall length L Harness model No. (Both end harness)
φ 0.81 (Single shielded, SA)	<b>AYU1-1S21-SYYYY-ZZZV (LF)</b>	<b>AYU1-1S21-XXXXX-000V (LF)</b>
φ 1.13 (Double shielded, TA)	<b>AYU1-1S13-SYYYY-ZZZV (LF)</b>	<b>AYU1-1S13-XXXXX-000V (LF)</b>

Note 1) Type of outer conductor SA: Silver-plated annealed copper wire, TA: Tin-plated annealed copper wire

Note 2) The following alphabet and number shall be put in the model No.

X...alphabet denotes cable end treatment (D: Both end harness/same direction, R: Both end harness/reverse direction)

Y...number denotes harness length

Z...number denotes strip length

V...alphabet denotes color identification (Blank: Black, G: Gray, W: White, B: Blue)

Example 1... φ 1.13mm (double shielded, TA) cable, connector end processing: both end harness (same direction), harness length: 251mm, wire color: black  
Model No.: AYU1-1S13-D0251-000(LF)

Example 2... φ 0.81mm (single shielded, SA) cable, connector end processing: single end harness, harness length: 800mm,  
strip length: [inner conductor 2.0mm, insulator 1.0mm, outer conductor 3.0mm], wire color: white  
Model No.: AYU1-1S21-S0800-213W(LF)

Note 3) Contact JST for details about overall length and connector end processing.

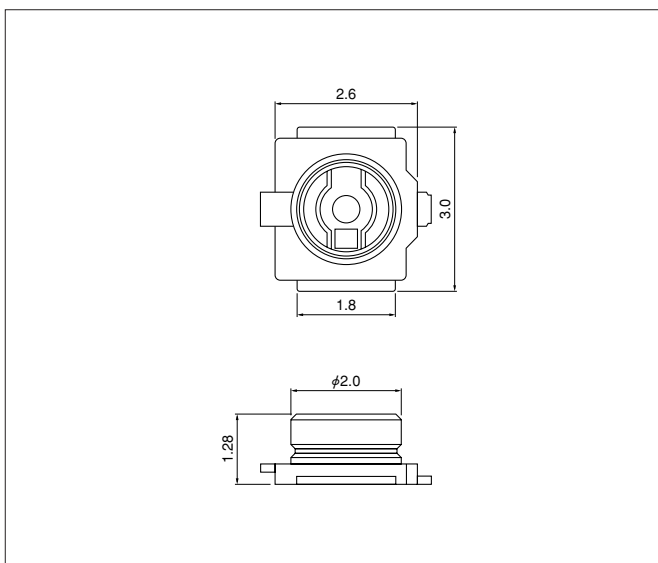
### Harness overall length standard tolerance

Overall length L (mm)	Standard tolerance (mm)
35 ≤ L ≤ 200	±4
200 < L ≤ 500	±8
500 < L ≤ 1000	±12
1000 <	±1.5%

Note: The shortest length L=35mm

# AYU1 CONNECTOR

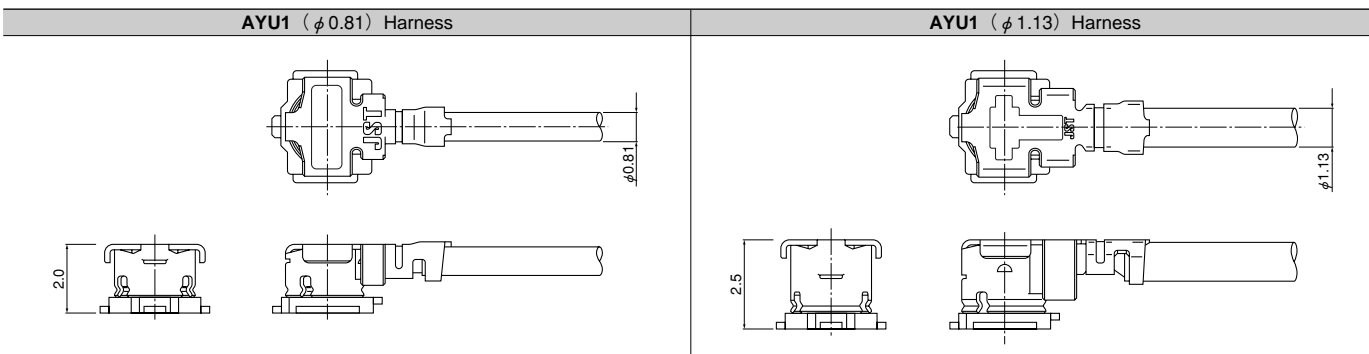
## Base



Model No.	Material and Finish	Qty / reel
AYU1-1P-02676-120	Contact: Copper alloy, nickel-undercoated, selective gold-plated Housing: Heat resisting resin, UL94V-0 Shell: Copper alloy, copper-undercoated, silver-plated	5,000

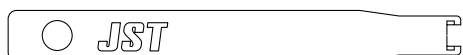
**RoHS compliance**

## Assembly layout



## Insertion and extraction jig

Model No.: EJ-AYU1



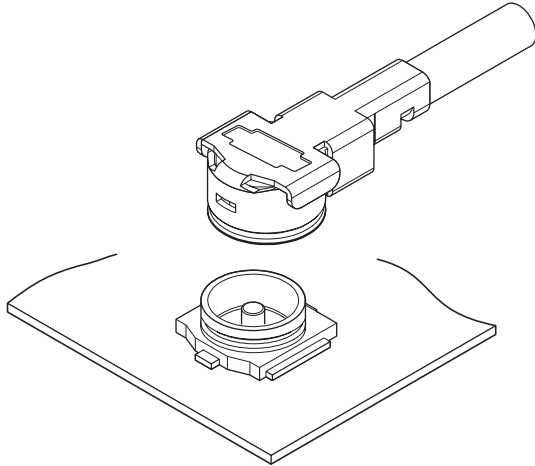


# AYU3 CONNECTOR

**Co-axial connector**



**Frequency up to 6GHz**



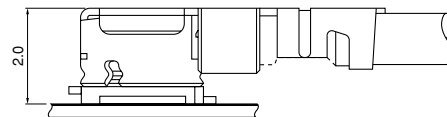
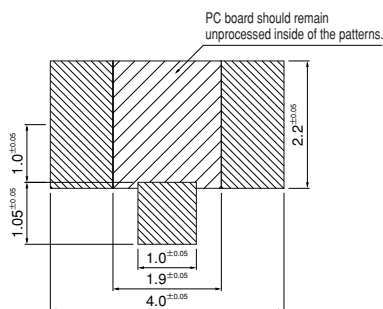
**Miniaturized coaxial connector that responds to miniaturized telecommunications apparatus.**

- **Space saving design**
- **High performance of electrical feature**
- **Embossed taping for automatic mounting**

## Specifications

- Characteristic impedance: 50Ω
- Frequency range: 0.045MHz to 6GHz
- Voltage standing wave ratio: 1.3 max.
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Withstanding voltage: 200V AC/minute
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

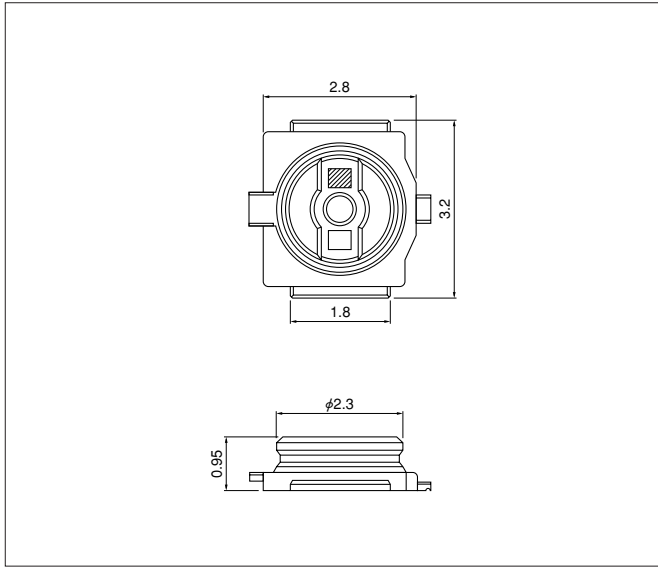
## PC board layout (viewed from component side) and Assembly layout



Note: Tolerances are non-cumulative: ±0.05mm for all centers. The dimensions above should serve as a guideline. Contact JST for details.

# AYU3 CONNECTOR

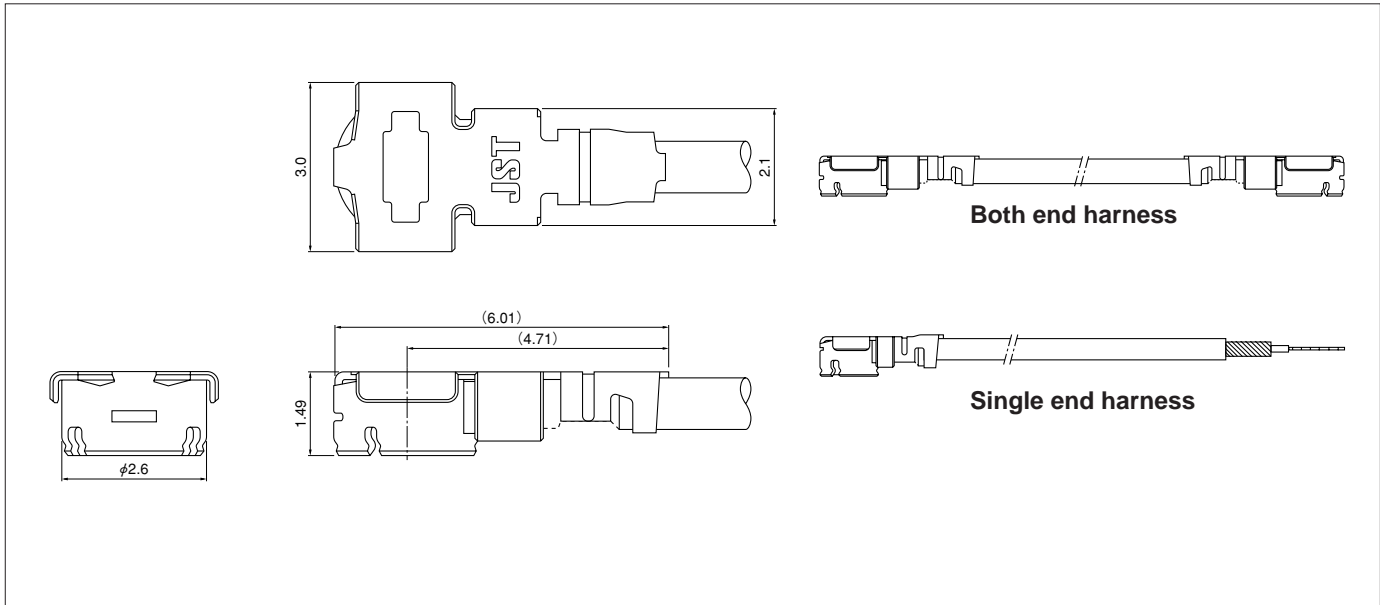
## Base



Model No.	Material and Finish	Qty / reel
AYU3-1P-02271-120	Contact: Copper alloy, nickel-undercoated, gold-plated Housing: Heat resisting resin, UL94V-0 Shell: Copper alloy, copper-undercoated, silver-plated	3,000

RoHS compliance

## Socket (Harness assembly)



Model No.	Material and Finish
AYU3-1S26-XXXXY-000V (Both end harness)	Contact: Copper alloy, nickel-undercoated, gold-plated Housing: Thermoplastic resin, UL94V-0 Shell: Copper alloy, copper-undercoated, silver-plated
AYU3-1S26-SYYYY-ZZZV (Single end harness)	

Note: 1. Contact JST for RoHS compliance of harness assembly.

2. The following alphabet and number shall be put in the model No.

X...alphabet denotes cable end treatment

Y...number denotes harness length

Z...number denotes strip length

V...alphabet denotes color identification

Example 1...Cable end treatment: both end harness, harness length: 251mm, wire color: yellow

Model No.: AYU3-1S26-D0251-000Y

Example 2...Cable end treatment: single end harness, harness length: 200mm, strip length: [conductor 2.0mm, dielectric 1.0mm, braided 1.0mm],

wire color: red

Model No.: AYU3-1S26-S0200-211R

3. Contact JST for details about overall length and cable and treatment.



# 1-G

## Card Connectors

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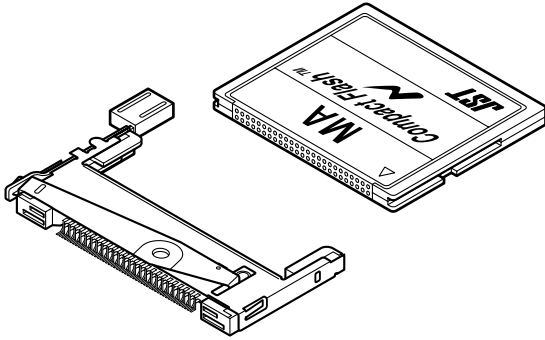
• 1.27mm pitch	CF card CONNECTOR MA type.....	242
• 2.54mm pitch	SCK CONNECTOR .....	257
	SCS CONNECTOR .....	259
	SCX CONNECTOR .....	260
	SD CONNECTOR .....	261
	SDK CONNECTOR.....	262



# CF CARD CONNECTOR MA Type



1.27mm pitch/50-circuit CF card connector



- Socket / Dual-row straddle type, SMT type
- Card frame / for type I cards
- Adapter / for type I, II cards
- Header / for type I, II cards
- Ejector / for type I, II cards

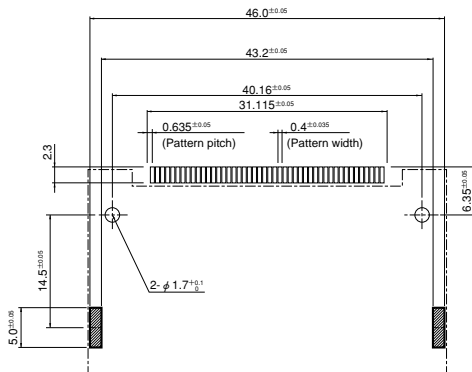
## Specifications

- Pitch: 1.27mm
- Type: Dual-row at mating section
- Current rating: 0.5A AC, DC/line
- Temperature range: -20°C to +60°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/40m Ω max.  
After environmental testing/20m Ωmax.  
(variation from initial value)
- Insulation resistance: 1,000M Ωmin. 500V DC (Except for Adapter cards)
- Withstanding voltage: 500V AC/minute (Except for Adapter cards)
- Mating/unmating life: 10,000 cycles
- Conforms to CFA.
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

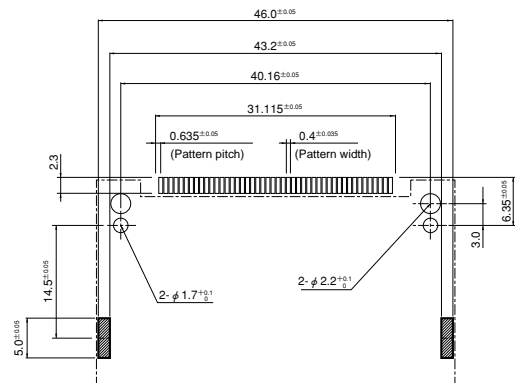
In addition to the connectors applicable to CF type I cards, those for CF type II cards are also available.

### PC board layout (viewed from component side)

For Type I cards/Stand off 0mm  
Normal type/Reverse type

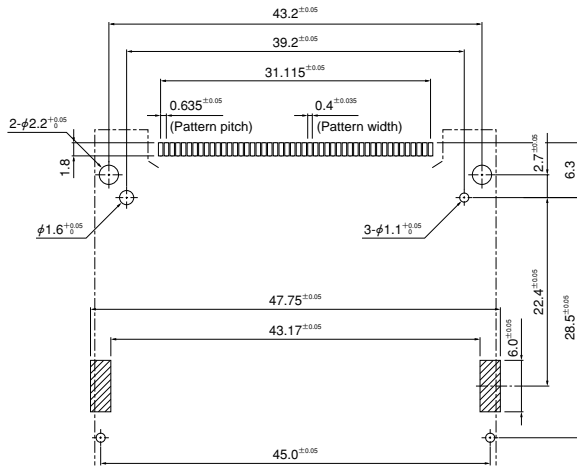


For Type I cards/Stand off 1.64mm  
Normal type/Reverse type

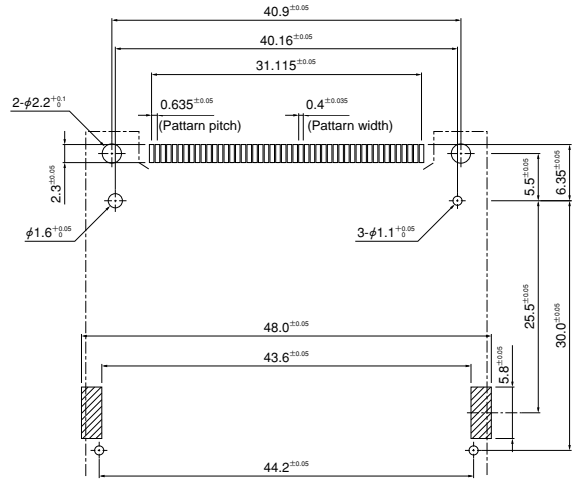


# CF CARD CONNECTOR MA Type

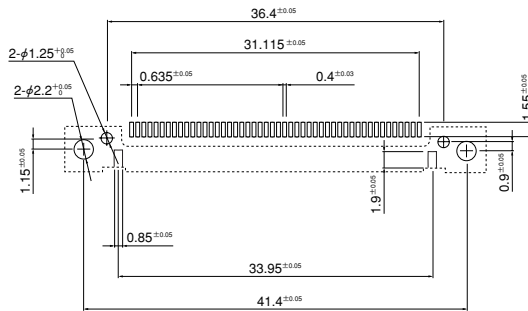
For Type II cards/Stand off 0mm  
Normal type



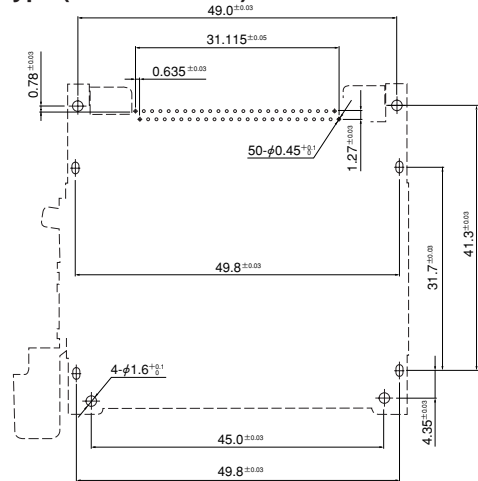
Reverse type



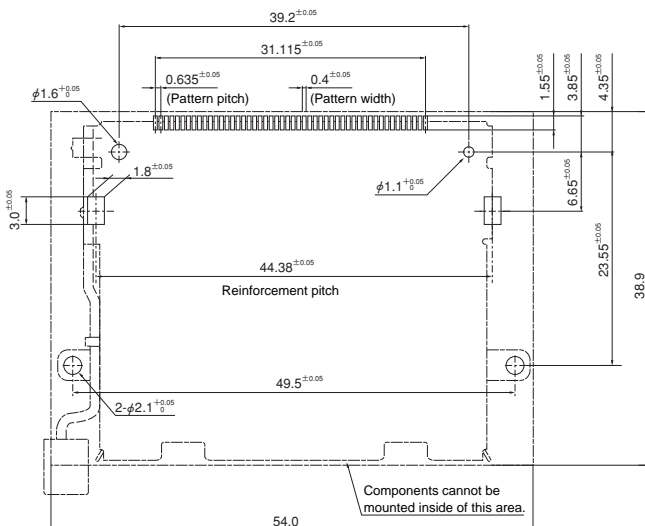
Space-saving type For Type I cards/Stand off 0mm  
Normal type/ Reverse type



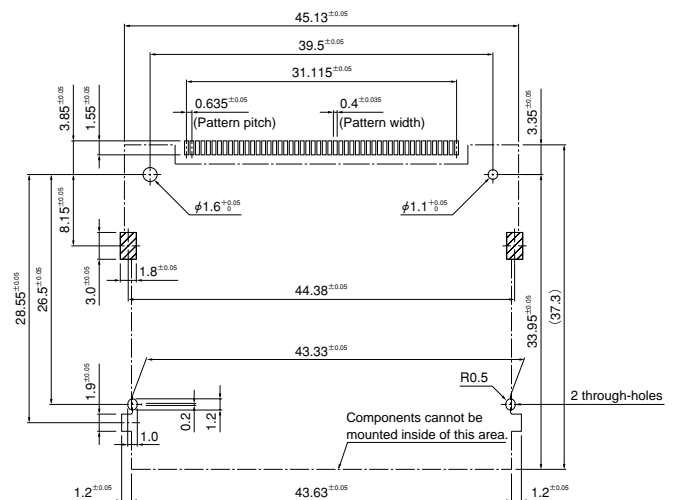
Ejector mounted header with shutter For Type II cards  
Reverse type (Stand off 0mm)



Space-saving type For Type II cards/Stand off 0mm  
Normal type



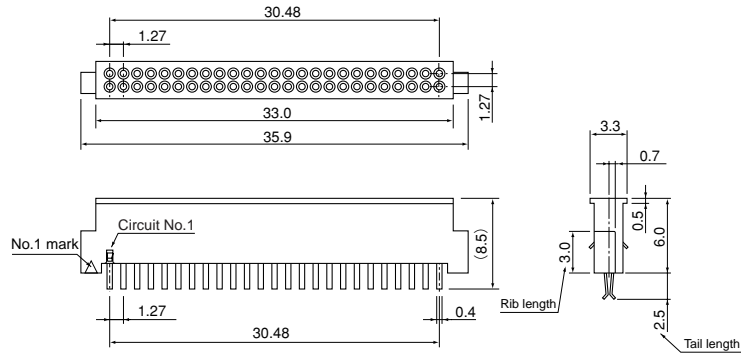
Reverse type



# CF CARD CONNECTOR MA Type

## Socket

### Dual-row straddle type

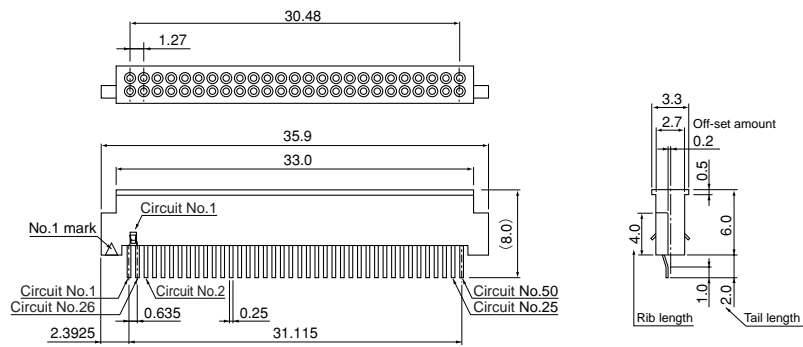


Circuits	Solder tail	Grounding spring	Off-set dimension	Rib length (mm)	Tail length (mm)	Model No.	Q'ty/box	Material and Finish
50	Dual-row straddle type	With (Circuit No.1, No.26)	Center	3.0mm	2.5mm	<b>ICM-MA50S-TS12-3032</b>	600	Contact: Copper-alloy, nickel-undercoated, Mating part; gold-plated Solder tail; tin-plated (reflow treatment) Grounding spring: Copper alloy nickel-undercoated, gold-plated Housing: LCP, UL94V-0, black

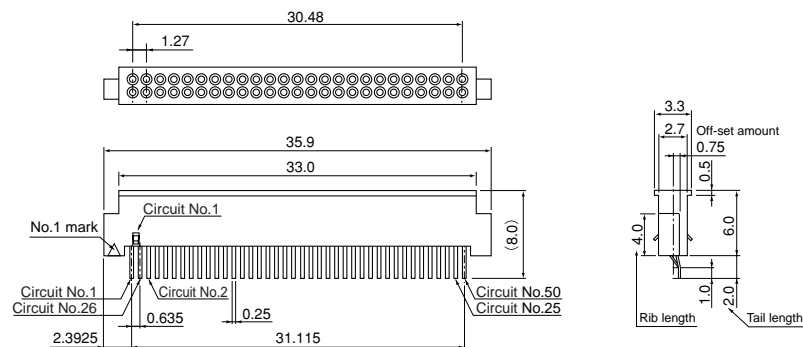
**RoHS compliance** This product displays (LF)(SN) on a label.

### SMT type

#### ICM-MA50S-TS12-3021



#### ICM-MA50S-TS12-3022

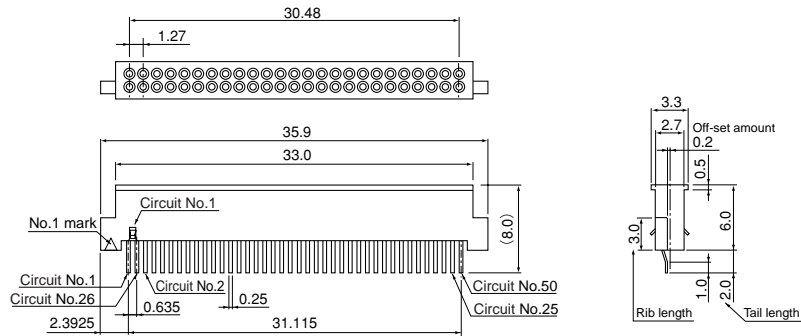


# CF CARD CONNECTOR MA Type

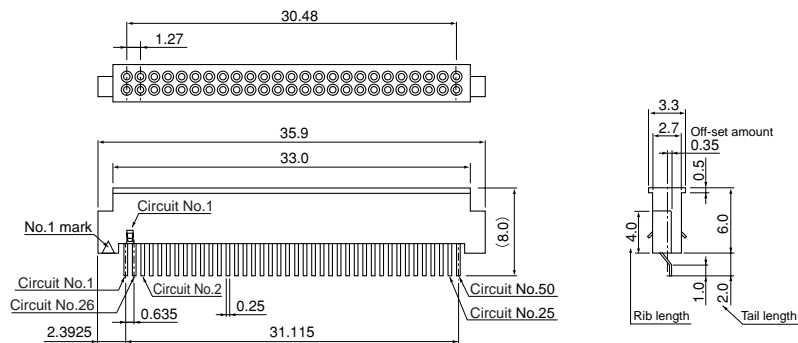
## Socket

### SMT type

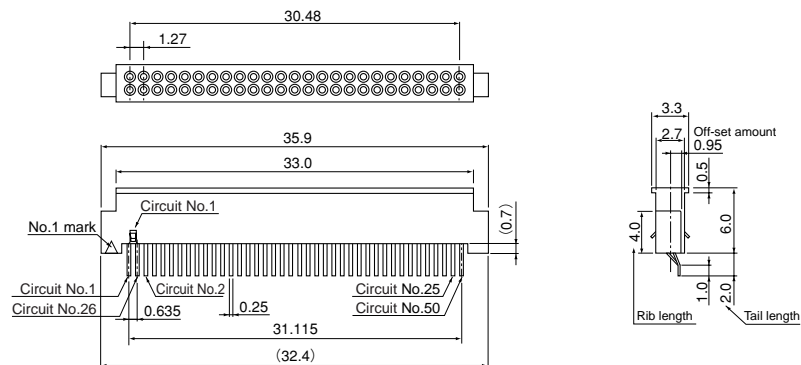
#### ICM-MA50S-TS12-3023



#### ICM-MA50S-TS12-3024



#### ICM-MA50S-TS12-3026



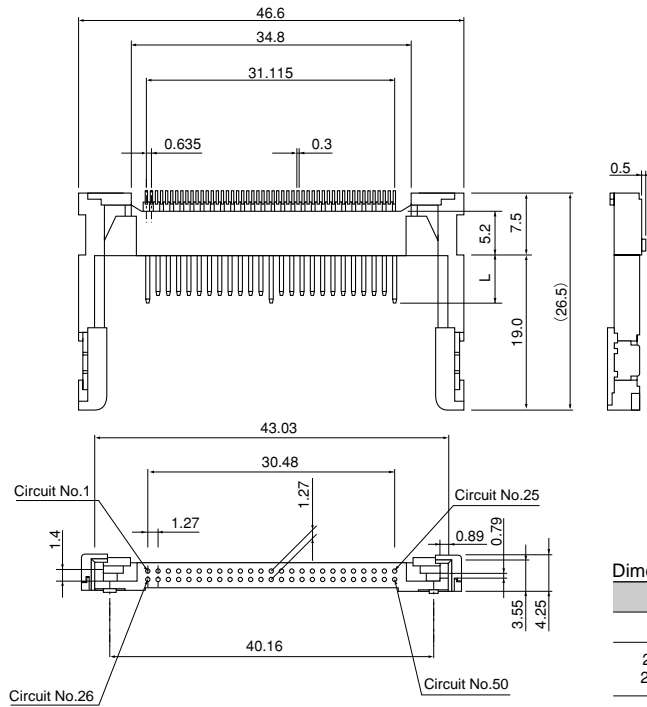
Circuits	Solder tail	Grounding spring	Off-set dimension (mm)	Rib length (mm)	Tail length (mm)	Model No.	Q'ty/reel	Material and Finish
50	SMT type	With (Circuit No.1, No.26)	0.2mm	4.0mm	2.0mm	<b>ICM-MA50S-TS12-3021T</b>	1,500	Contact: Copper alloy, nickel-undercoated, Mating part: gold-plated Solder tail: tin-plated (reflow treatment) Grounding spring: Copper alloy, nickel-undercoated, gold-plated Housing: LCP, UL94V-0, black
			0.75mm	4.0mm	2.0mm	<b>ICM-MA50S-TS12-3022T</b>	1,500	
			0.2mm	3.0mm	2.0mm	<b>ICM-MA50S-TS12-3023T</b>	1,500	
			0.35mm	4.0mm	2.0mm	<b>ICM-MA50S-TS12-3024T</b>	1,500	
			0.95mm	4.0mm	2.0mm	<b>ICM-MA50S-TS12-3026T</b>	1,500	

**RoHS compliance** This product displays (LF)(SN) on a label.

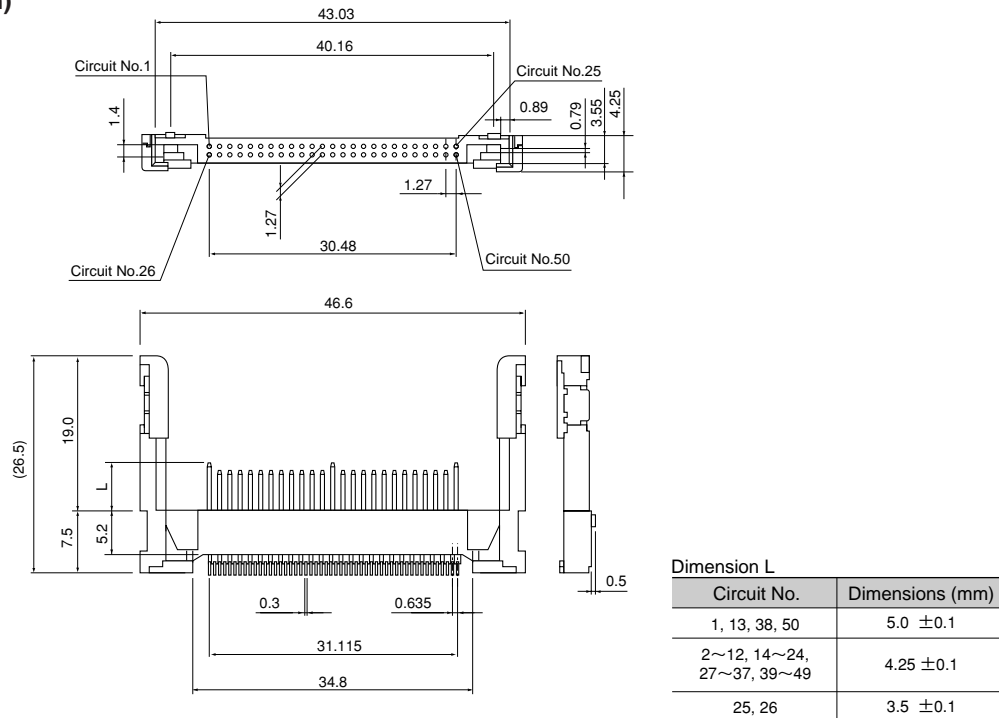
# CF CARD CONNECTOR MA Type

## Header (for Type I cards)

### Normal type (Stand off 0mm)



### Reverse type (Stand off 0mm)



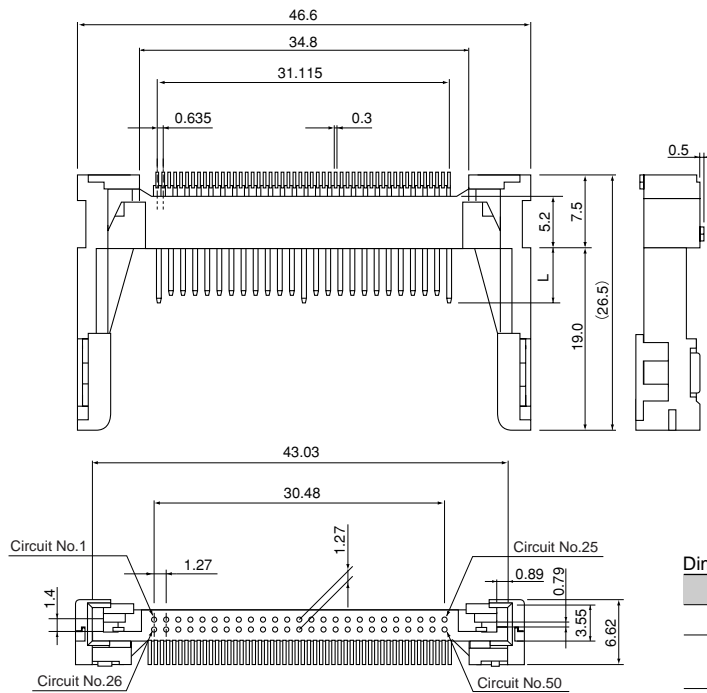
Circuits	Type	Model No.	Qty / box	Material and Finish
50	Normal	ICM-MA50H-SS52-1151	180	Contact: Phosphor bronze, nickel-undercoated, Mating part; gold-plated Solder tail; tin-plated (reflow treatment) Housing: PPS, UL94V-0 Solder tab: Brass, copper-undercoated, tin-plated (reflow treatment)
	Reverse	ICM-MA50H-SS52-1171	180	

RoHS compliance This product displays (LF)(SN) on a label.

# CF CARD CONNECTOR MA Type

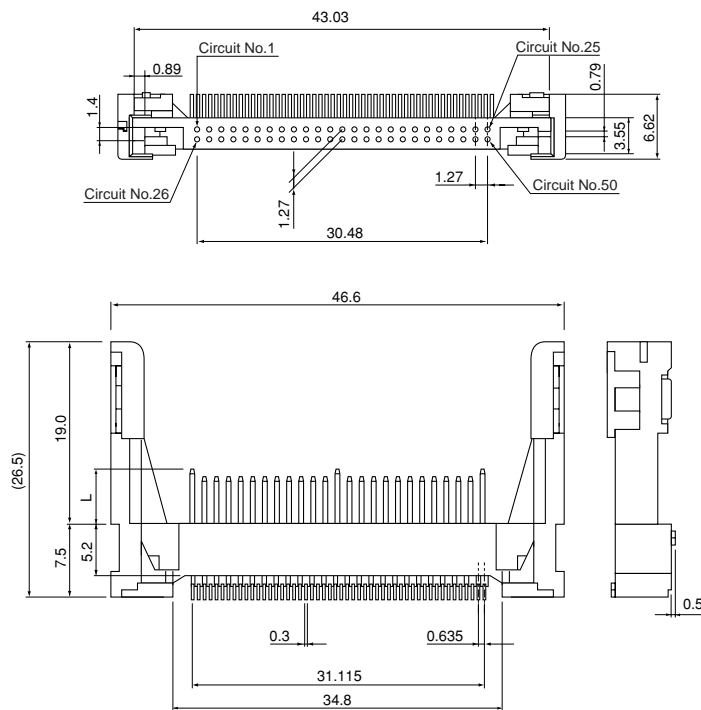
## Header (for Type I cards)

### Normal type (Stand off 1.64mm)



Dimension L	
Circuit No.	Dimensions (mm)
1, 13, 38, 50	5.0 ±0.1
2~12, 14~24, 27~37, 39~49	4.25 ±0.1
25, 26	3.5 ±0.1

### Reverse type (Stand off 1.64mm)



Dimension L	
Circuit No.	Dimensions (mm)
1, 13, 38, 50	5.0 ±0.1
2~12, 14~24, 27~37, 39~49	4.25 ±0.1
25, 26	3.5 ±0.1

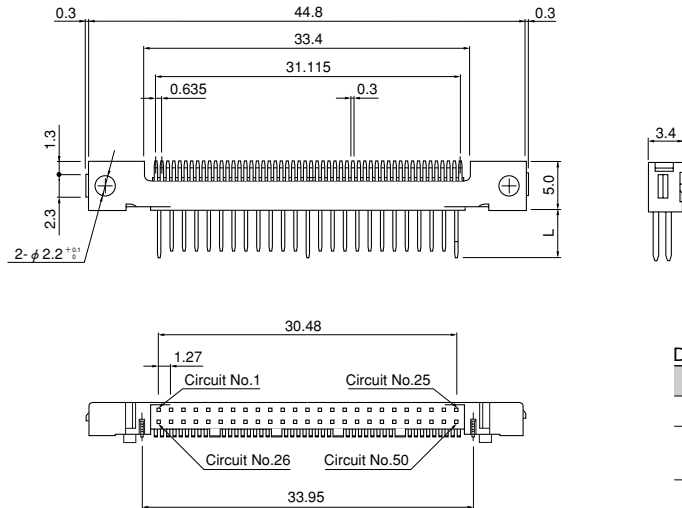
Circuits	Type	Model No.	Q'ty / box	Material and Finish
50	Normal	<b>ICM-MA50H-SS52-1141</b>	140	Contact: Phosphor bronze, nickel-undercoated, Mating part; gold-plated Solder tail; tin-plated (reflow treatment)
	Reverse	<b>ICM-MA50H-SS52-1161</b>	140	Housing: PPS, UL94V-0 Solder tab: Brass, copper-undercoated, tin-plated (reflow treatment)

**RoHS compliance** This product displays (LF)(SN) on a label.

# CF CARD CONNECTOR MA Type

## Header (for Type I cards) / Space-saving type

Normal, Reverse types  
(Stand off 0mm)



Dimension L

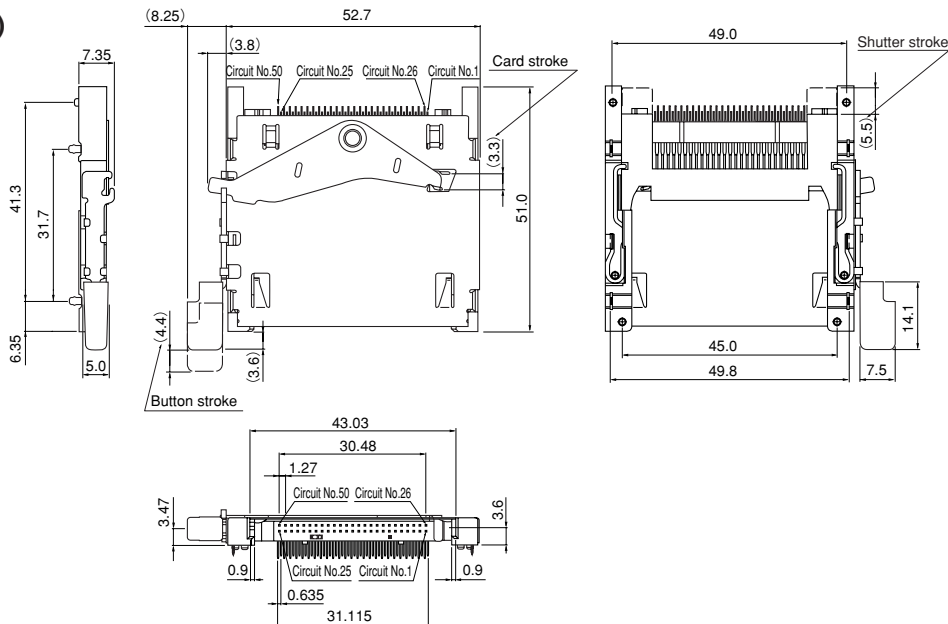
Circuit No.	Dimensions (mm)
1, 13, 38, 50	5.0 ±0.1
2~12, 14~24, 27~37, 39~49	4.25 ±0.1
25, 26	3.5 ±0.1

Circuits	Type	Model No.	Q'ty / box	Material and Finish
50	Normal Reverse	<b>ICM-MA50H-SS52-1184</b>	1,850	Contact: Copper alloy, nickel-undercoated, Mating part: gold-plated Solder tail: tin-plated (reflow treatment) Housing: PPS, UL94V-0, black Solder tab: Copper alloy, nickel-undercoated, tin-plated (reflow treatment)

**RoHS compliance** This product displays (LF)(SN) on a label.

## Ejector mounted header with shutter (for Type II cards)

Reverse type  
(Stand off 0mm)



Circuits	Type	Model No.	Q'ty / box	Material and Finish
50	Reverse	<b>ICM-MA2SL-SD12-RL31</b>	128	Contact: Copper alloy, nickel-undercoated, Mating part: gold-plated Solder tail: tin-plated (reflow treatment) Housing/ Guide bar/ Push button: PPS, UL94V-0, black Lock/ Rotation arm/ Push bar: Stainless Frame: Stainless, selective nickel-undercoated, tin/copper alloy-plated

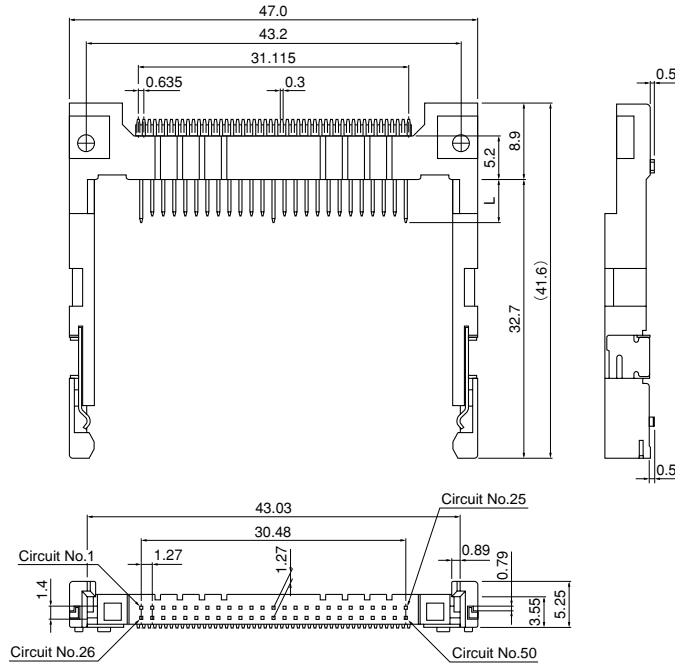
**RoHS compliance** This product displays (LF)(SN) on a label.



# CF CARD CONNECTOR MA Type

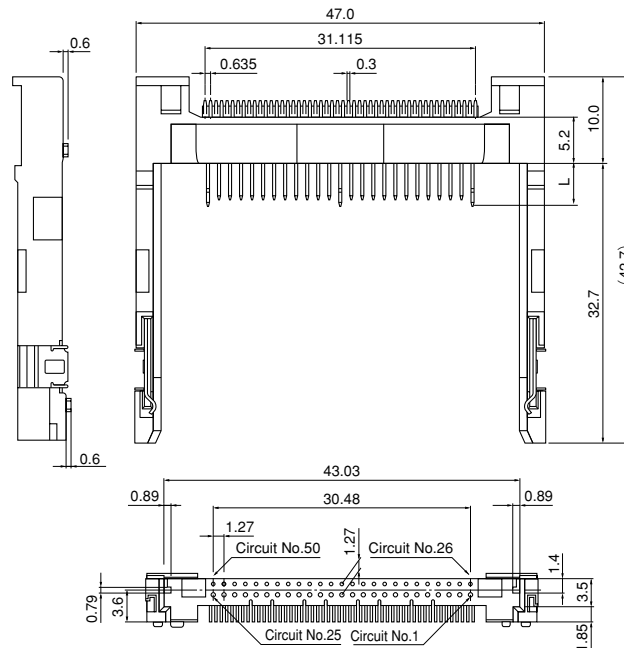
## Header (for Type II cards)

### Normal type (Stand off 0mm)



Dimension L	
Circuit No.	Dimensions (mm)
1, 13, 38, 50	5.0 ±0.1
2~12, 14~24, 27~37, 39~49	4.25 ±0.1
25, 26	3.5 ±0.1

### Reverse type (Stand off 0mm)



Dimension L	
Circuit No.	Dimensions (mm)
1, 13, 38, 50	5.0 ±0.1
2~12, 14~24, 27~37, 39~49	4.25 ±0.1
25, 26	3.5 ±0.1

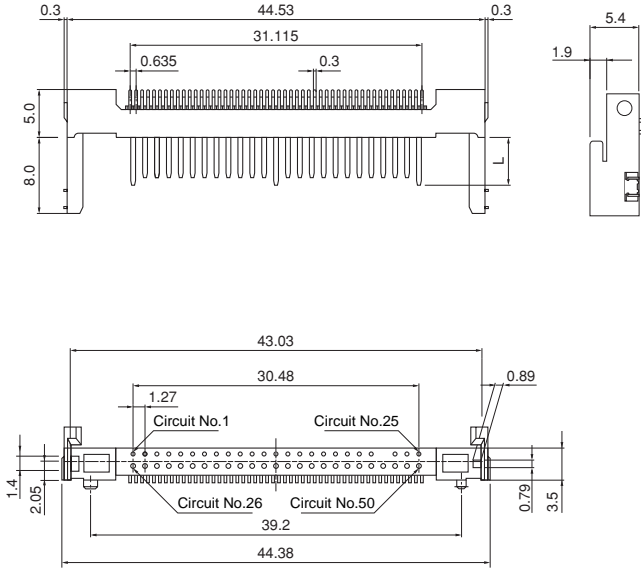
Circuits	Type	Model No.	Qty / box	Material and Finish
50	Normal	<b>ICM-MA2H-SS52-N11B</b>	84	Contact: Phosphor bronze, nickel-undercoated, Mating part; gold-plated Solder tail; tin-plated (reflow treatment) Housing: PPS, UL94V-0, black Solder tab: Phosphor bronze, copper-undercoated, tin-plated (reflow treatment)
	Reverse	<b>ICM-MA2H-SS52-R21A</b>	84	Contact: Phosphor bronze, nickel-undercoated, Mating part; gold-plated Solder tail; tin-plated (reflow treatment) Housing: LCP, UL94V-0, black Solder tab: Phosphor bronze, copper-undercoated, tin-plated (reflow treatment)

RoHS compliance This product displays (LF)(SN) on a label.

# CF CARD CONNECTOR MA Type

## Header (for Type II cards) / Space-saving type

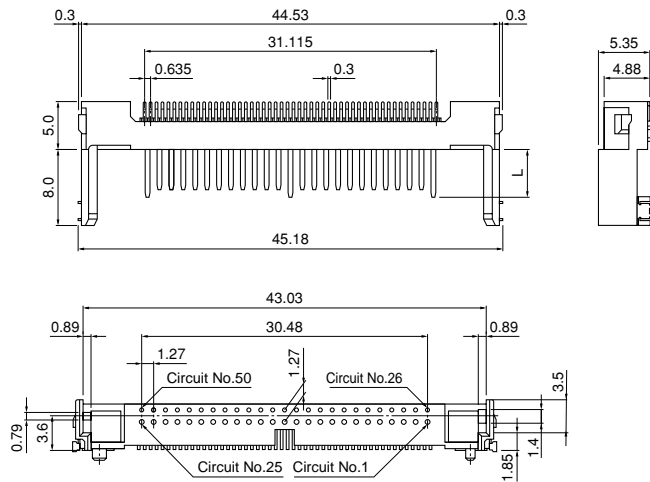
### Normal type (Stand off 0mm)



Dimension L

Circuit No.	Dimensions (mm)
1, 13, 38, 50	5.0 ±0.1
2~12, 14~24, 27~37, 39~49	4.25 ±0.1
25, 26	3.5 ±0.1

### Reverse type (Stand off 0mm)



Dimension L

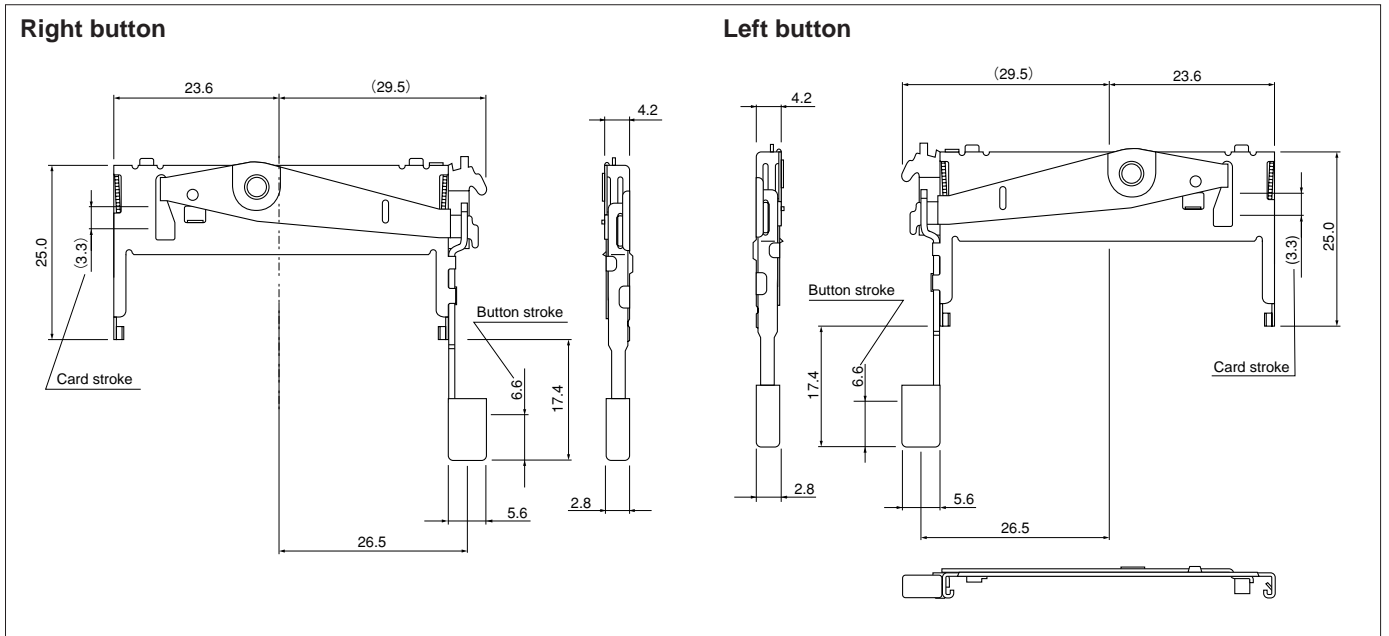
Circuit No.	Dimensions (mm)
1, 13, 38, 50	5.0 ±0.1
2~12, 14~24, 27~37, 39~49	4.25 ±0.1
25, 26	3.5 ±0.1

Circuits	Type	Model No.	Q'ty / reel	Material and Finish
50	Normal	ICM-MA2H-SS52-N13LT	750	Contact: Phosphor bronze, nickel-undercoated, Mating part: gold-plated Solder tail: tin-plated (reflow treatment)
	Reverse	ICM-MA2H-SS52-R13HT	750	Housing: PPS, UL94V-0 Solder tab: Brass, copper-undercoated, tin-plated (reflow treatment)

**RoHS compliance** This product displays (LF)(SN) on a label.  
This products listed above are supplied on embossed-tape.

# CF CARD CONNECTOR MA Type

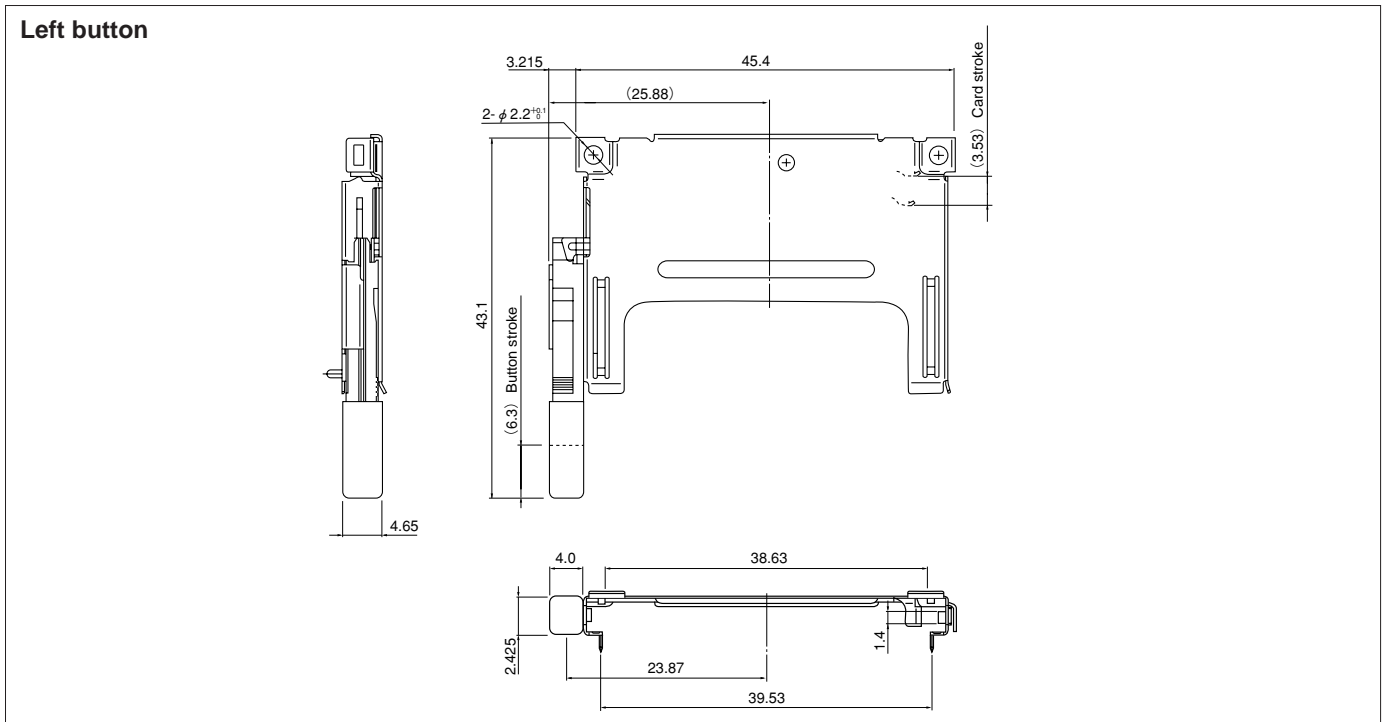
## Ejector (for Type I Header)



Type	Model No.	Q'ty / box	Material	Applicable header
Right button	<b>ICM-MAE-R01</b>	100	Frame/ Rotation arm : Stainless Push button: PPS, UL94V-0, black	ICM-MA50H-SS52-1141 ICM-MA50H-SS52-1151 ICM-MA50H-SS52-1161 ICM-MA50H-SS52-1171
Left button	<b>ICM-MAE-L01</b>	100		

**RoHS compliance** Applicable headers display (LF)(SN) on a label.

## Ejector mounted header (for Type I Header) / Space-saving type



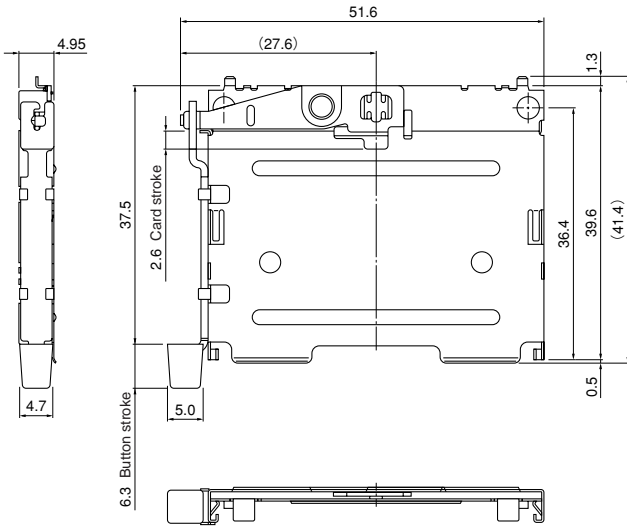
Type	Model No.	Q'ty / box	Material and Finish	Applicable header
Reverse (Left button)	<b>ICM-MAE-L91ND</b>	252	Frame: Stainless, nickel-undercoated, tin/copper alloy-plated Rotation arm: Stainless Push button: Synthetic resin, UL94V-0, gray	ICM-MA50H-SS52-1184

**RoHS compliance** This product displays (LF) on a label.  
An applicable header displays (LF)(SN) on a label.

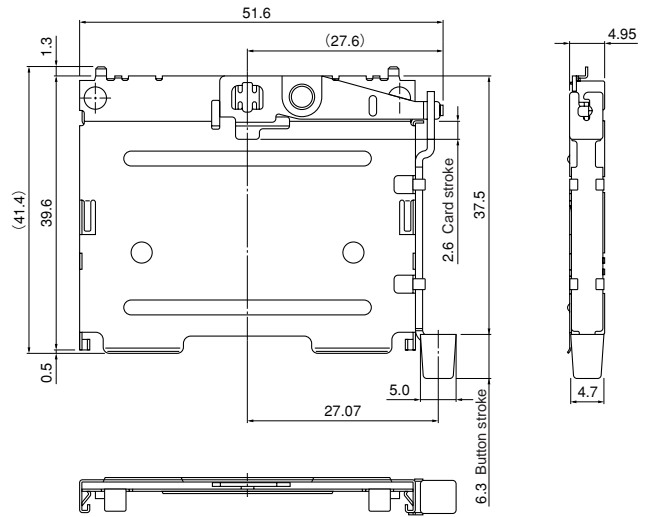
# CF CARD CONNECTOR MA Type

## Ejector (for Type II header)

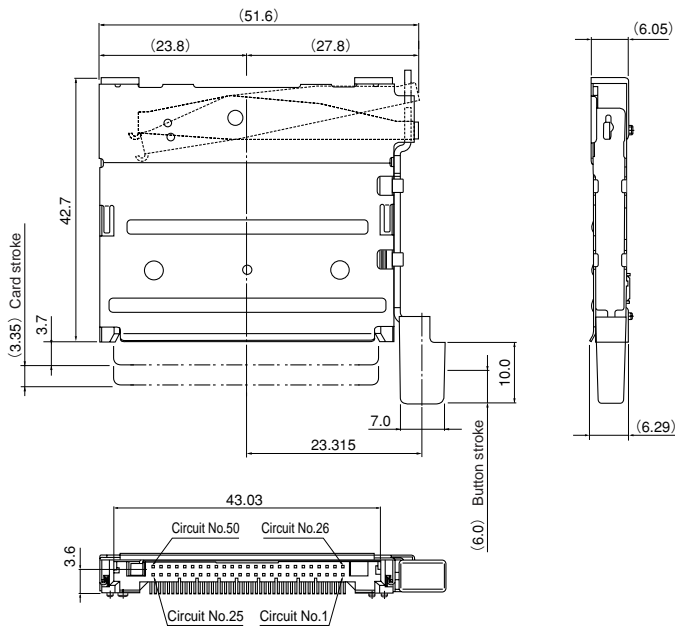
### For Normal type header (Left button)



### For Normal type header (Right button)



### For Reverse type header (Right button)



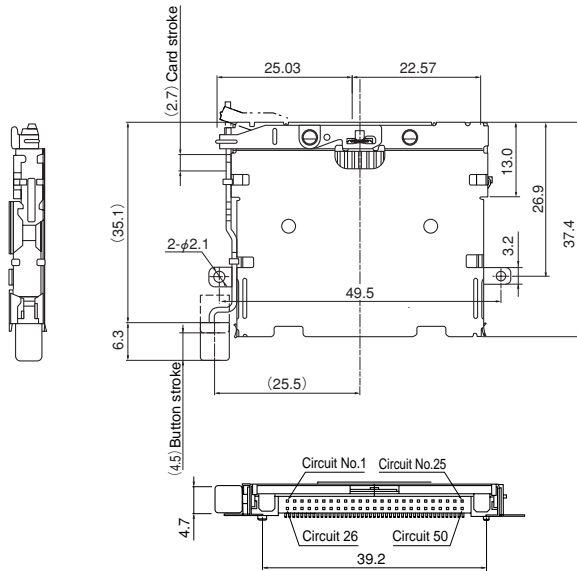
Type	Model No.	Qty / box	Material	Applicable header
For Normal type header (Left button)	<b>ICM-MAE-L33</b>	48	Frame/ Rotation arm/ Push bar/ Push plate/ Button shaft: Stainless Push button: PBT, UL94-0, black(R32), gray(L33)	ICM-MA2H-SS52-N11B
For Normal type header (Right button)	<b>ICM-MAE-R32</b>	48		
For Reverse type header (Right button)	<b>ICM-MAE-R21A</b>	48	Frame/ Rotation arm/ Push bar: Stainless Push button: PPS, UL94-0, black	ICM-MA2H-SS52-R21A

**RoHS compliance** ICM-MAE-L33/ICM-MAE-R32 display (N) on a label.  
Applicable headers display (LF)(SN) on a label.

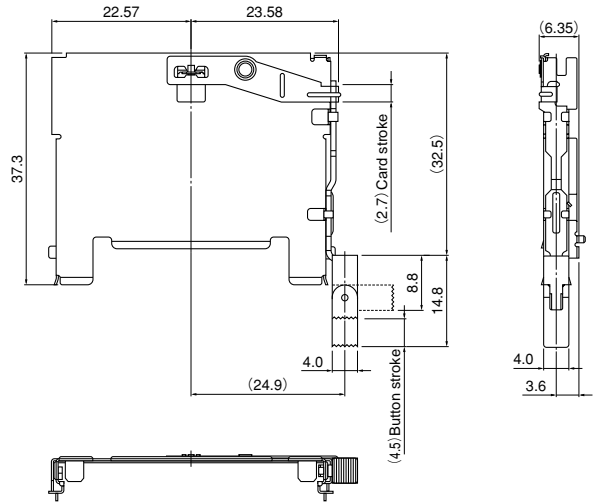
# CF CARD CONNECTOR MA Type

## Ejector (for Type II header) / Space-saving type

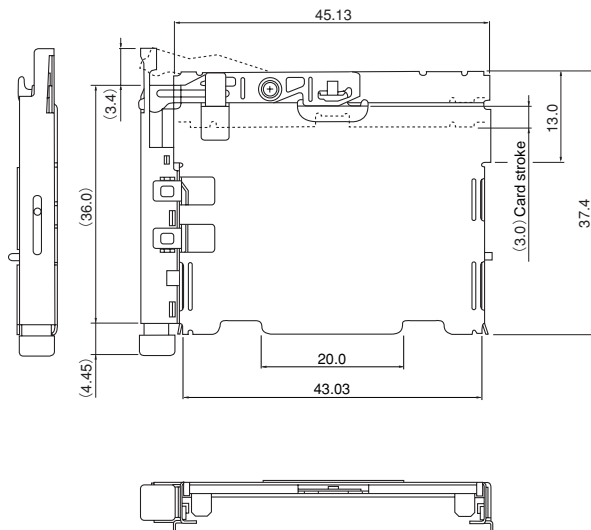
For Normal type header  
(Stand off 0mm) Left button



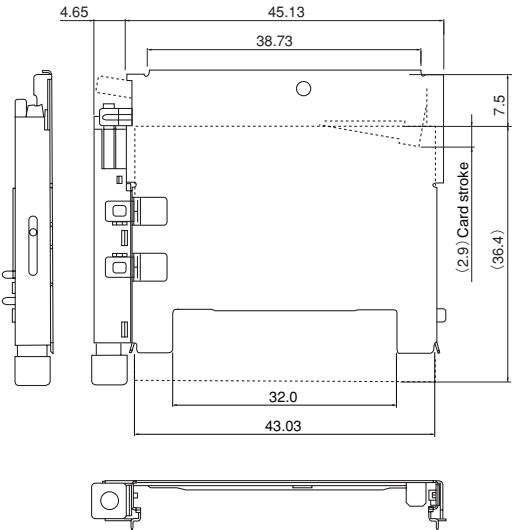
For Reverse type header  
(Stand off 0mm) Right button



For Normal type header  
(Stand off 0mm) Left button/Push-push type



For Reverse type header  
(Stand off 0mm) Left button/Push-push type



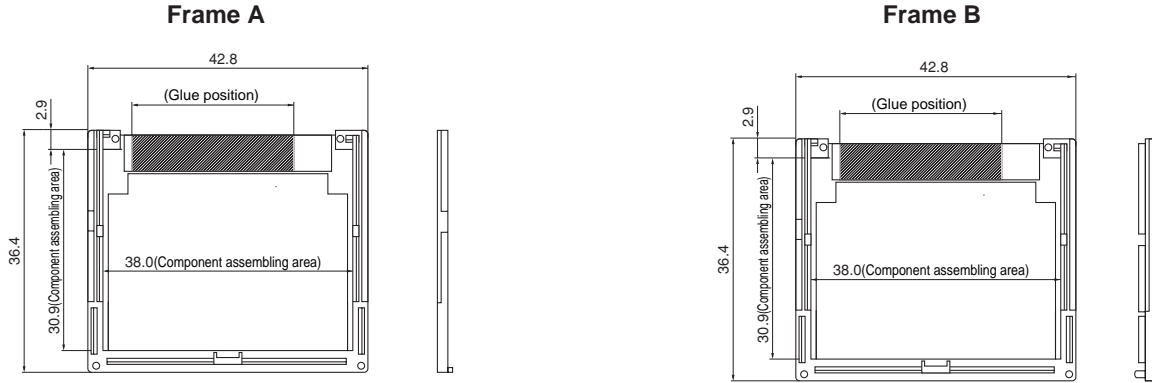
Type	Model No.	Q'ty / box	Material and Finish	Applicable header
For Normal type header (Stand off 0mm) Left button	<b>ICM-MAE-L73FA</b>	36	Rotation arm/Push bar/Push plate/ Frame: Stainless Button: PBT, UL94V-0, gray	ICM-MA2H-SS52-N13L ICM-MA2H-SS52-N13LT
For Normal type header (Stand off 0mm) Left button, Push-push	<b>ICM-MA2EP-L520A</b>	36	Rotation arm/Push plate: Stainless Button: PBT, UL94V-0, black Frame: Stainless, selective nickel-undercoated, tin/copper alloy-plated	
For Reverse type header (Stand off 0mm) Right button	<b>ICM-MAE-R66C3</b>	36	Rotation arm/Push bar/Push plate/ Frame: Stainless Clinched button: Synthetic resin, black Frame: Stainless, selective nickel-undercoated, tin/copper alloy-plated	ICM-MA2H-SS52-R13HT
For Reverse type header (Stand off 0mm) Left button, Push-push	<b>ICM-MA2EP-L810E</b>	36	Arm: Stainless Push button: Synthetic resin, UL94V-0, black Frame: Stainless, selective nickel-undercoated, tin/copper alloy-plated	

**RoHS compliance** ICM-MAE-R66C3 display (LF) on a label.  
ICM-MA2EP-L520A/ICM-MA2EP-L810E display (LF) on a label.  
Applicable headers display (LF)(SN) on a label.

# CF CARD CONNECTOR MA Type

## Card frame (for Type I cards)

### ICM-MA50F-A/B-FB-C



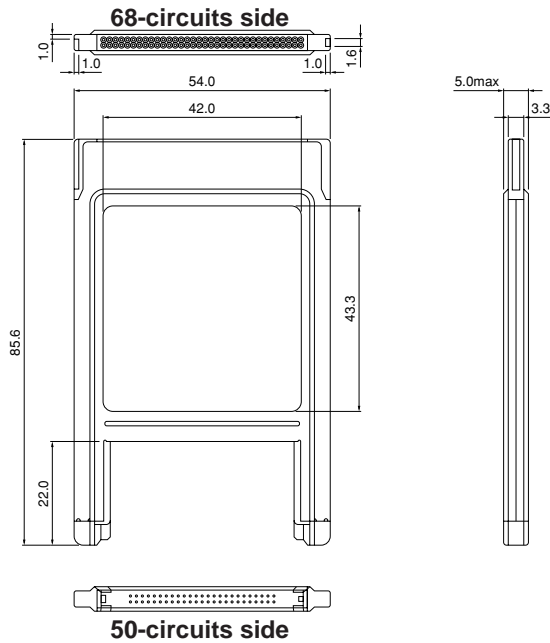
Circuits	Model No. as a set (Frame A + Frame B)	Applicable socket	Qty / box	Material
50	ICM-MA50F-A/B-FB-CA	ICM-MA50S-TS12-3032	150	Frame: Glass-filled PBT, UL94V-0 Cover: Stainless
		ICM-MA50S-TS12-3023T		

RoHS compliance

# CF CARD CONNECTOR MA Type

## Adapter card

For CF Type I cards  
(PC card 5V key)



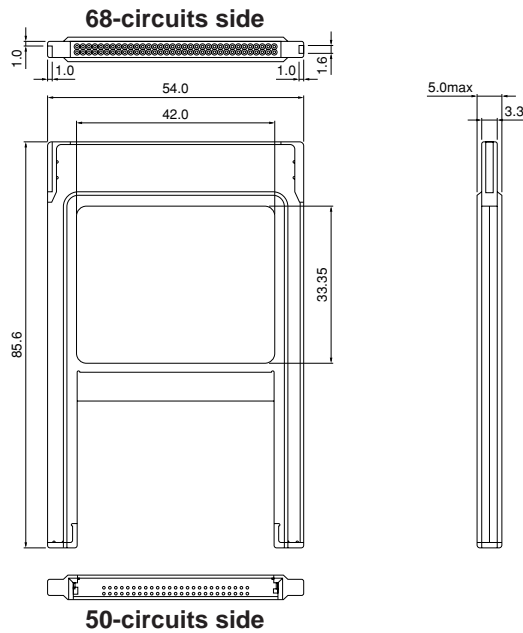
Model No.	Q'ty / box	Material and Finish		
ICM-MA50A-C441N	48	50-circuits side Header	Contact: Copper alloy, nickel-undercoated, Mating part; gold-plated Solder tail; tin-plated (reflow treatment) Housing: PPS, UL94V-0	Cover: Stainless Frame: PBT, UL94V-0 PC board: Glass-epoxy, UL94V-0
		68-circuits side Socket	Contact: Copper alloy, nickel-undercoated, Mating part; gold-plated Solder tail; tin-plated (reflow treatment) Housing: LCP, UL94V-0 Grounding spring: Copper alloy, nickel-undercoated, gold-plated	

**RoHS compliance** This product displays (LF)(SN) on a label.

# CF CARD CONNECTOR MA Type

## Adapter card

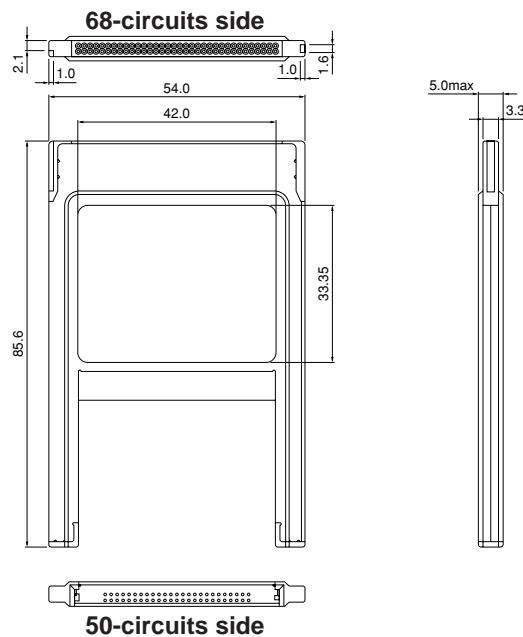
For CF Type II cards  
(PC card 5V key  
with grounding clip spring)



Model No.	Qty / box	Material and Finish	
ICM-MA2A-C454N	48	50-circuits side Header	Contact: Copper alloy, nickel-undercoated, Mating part: gold-plated Solder tail: tin-plated (reflow treatment) Housing: PPS, UL94V-0
		68-circuits side Socket	Contact: Copper alloy, nickel-undercoated, Mating part: gold-plated Solder tail: tin-plated (reflow treatment) Housing: LCP, UL94V-0 Grounding spring: Copper alloy, nickel-undercoated, gold-plated
		Cover: Stainless Frame: PBT, UL94V-0 PC board: Glass-epoxy, UL94V-0 Contact spring: Copper alloy Shutter: PPS, UL94V-0 Spring: Stainless Lock: Stainless	

RoHS compliance This product displays (LF)(SN) on a label.

For CF Type II cards  
(PC card 3.3V key  
with grounding clip spring)



Model No.	Qty / box	Material and Finish	
ICM-MA2A-CL454N	48	50-circuits side Header	Contact: Copper alloy, nickel-undercoated, Mating part: gold-plated Solder tail: tin-plated (reflow treatment) Housing: PPS, UL94V-0
		68-circuits side Socket	Contact: Copper alloy, nickel-undercoated, Mating part: gold-plated Solder tail: tin-plated (reflow treatment) Housing: LCP, UL94V-0 Grounding spring: Copper alloy, nickel-undercoated, gold-plated
		Cover: Stainless Frame: PBT, UL94V-0 PC board: Glass-epoxy, UL94V-0 Contact spring: Copper alloy Shutter: PPS, UL94V-0 Spring: Stainless Lock: Stainless	

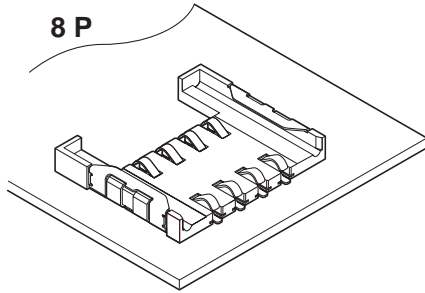
RoHS compliance This product displays (LF)(SN) on a label.



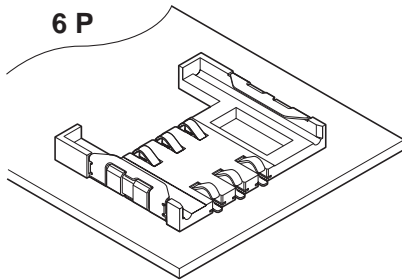


# SCK CONNECTOR

2.54mm pitch



8 P



6 P

**The connector is designed for the SIM Card, complying with the GSM11.11 standard, which will be used in the European digital GSM mobile phones. This connector is also suitable for the USIM Card to be used in the Third Generation (3G) mobile network (W-CDMA).**

- **Durability**
- **Abundant variations**
- **Embossed tape for automatic mounting**

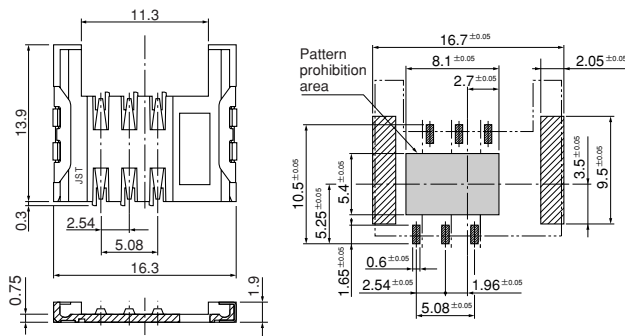
## Specifications

- Current rating: 1.0A AC, DC
- Voltage rating: 30V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/40m Ω max.  
After environmental testing/60m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 500V AC/minute
- \* Evaluate connector in actual equipment before use.
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

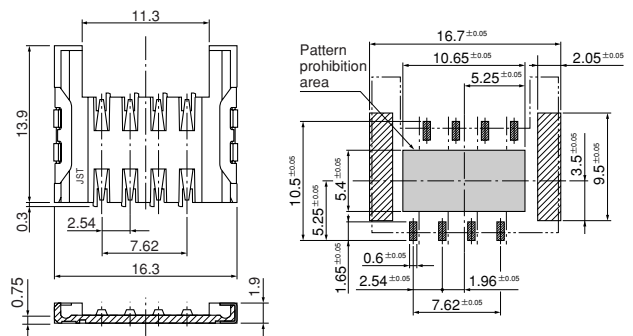
## Connector and PC board layout (viewed from component side)

1.9mm height

<6 circuits>



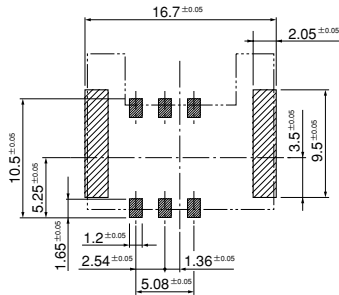
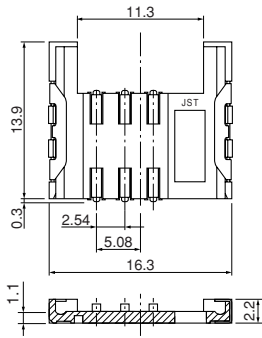
<8 circuits>



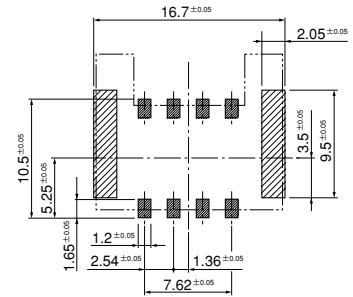
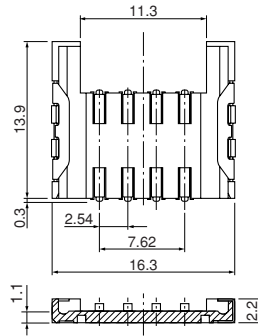
# SCK CONNECTOR

## Connector

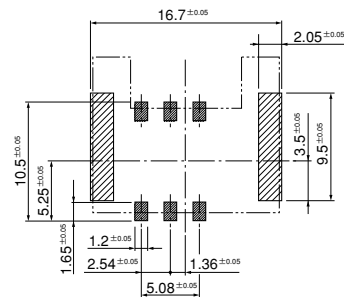
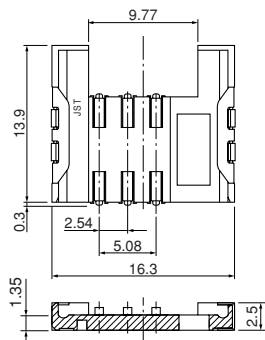
2.2mm height  
<6 circuits>



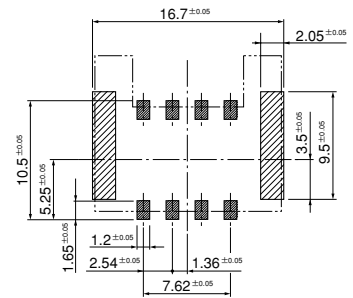
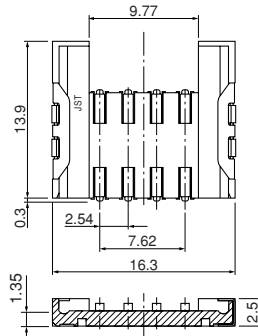
<8 circuits>



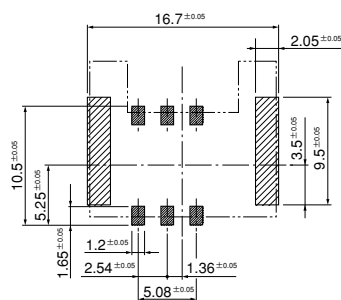
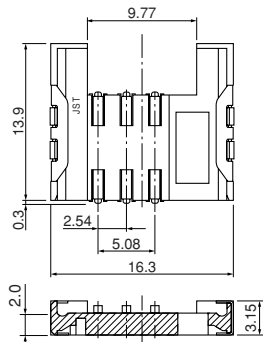
2.5mm height  
<6 circuits>



<8 circuits>



3.2mm height  
<6 circuits>

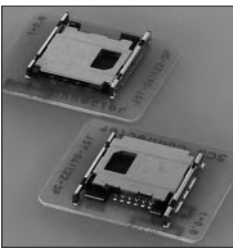


Circuits	Model No.			
	Height (mm)			
	1.9	2.2	2.5	3.2
6	SCK-6C-02PT-TF	SCK-6S-02PT-TF	SCK-6A-02PT-TF	SCK-6B-02PT-TF
8	SCK-8C-02PT-TF	SCK-8S-02PT-TF	SCK-8A-02PT-TF	—
Q'ty/ reel	1,200	1,000	1,000	500

### Material and Finish

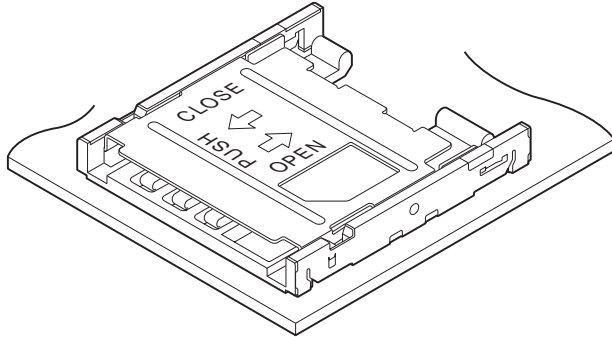
Contact: Copper alloy, nickel-undercoated, gold-plated  
Housing: LCP, UL94V-0, black  
Solder tab: Copper alloy, tin-plated (reflow treatment)

RoHS compliance



# SCS CONNECTOR

## 2.54mm pitch



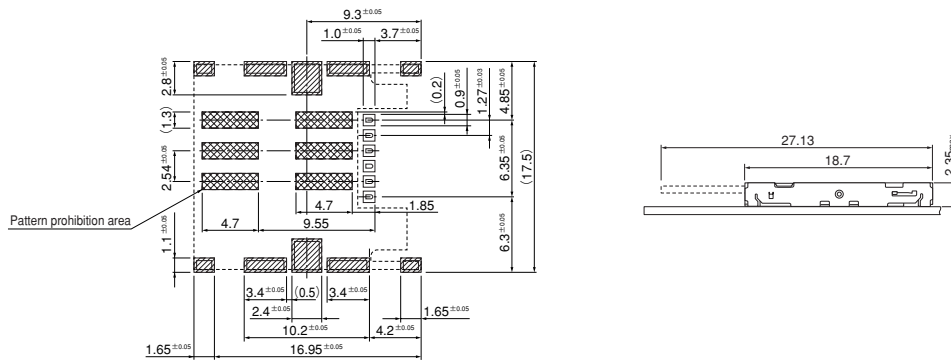
The 2.54mm SCS connector is designed for the Plug-in SIM Card, complying with the GSM 11.11 standard.

- Open tray type design
- Slide lock mechanism design
- Reducing the load given to contacts
- Embossed tape for automatic mounting

### Specifications

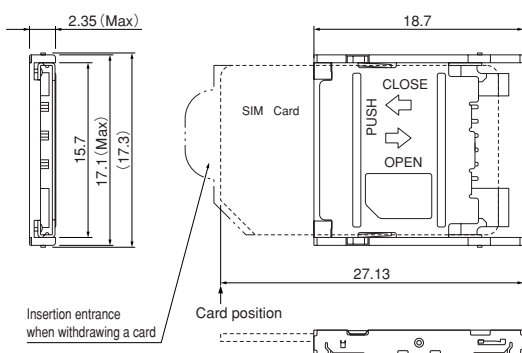
- Current rating: 0.7A AC, DC
- Voltage rating: 30V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/50m Ω max.  
After environmental testing/60m Ω max.  
(variation from initial value)
- Insulation resistance: 500M Ω min.
- Withstanding voltage: 500V AC/minute
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

### PC board layout (viewed from component side) and Assembly layout



Note: 1. Tolerances are non-cumulative:  $\pm 0.03\text{mm}$  for all centers.  
2. The dimensions above should serve as a guideline. Contact JST for details.

### Connector

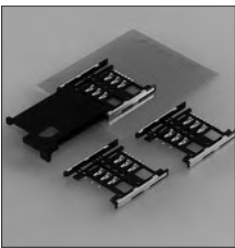


Circuits	Model No.	Q'ty / reel
6	<b>SCS-6S-1K-ST03-T-TB</b>	1,000

#### Material and Finish

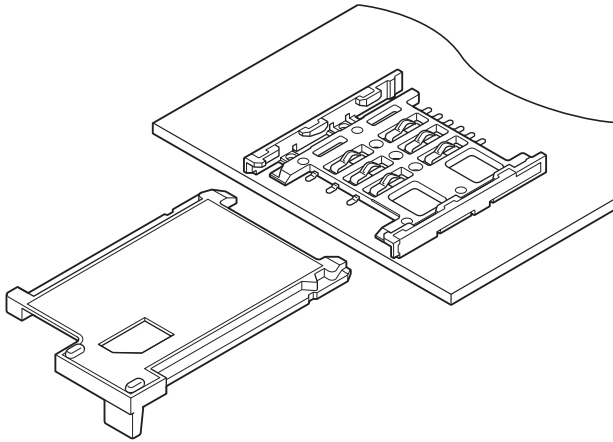
Contact: Copper alloy, nickel-undercoated, gold-plated  
Housing: Heat resisting resin, UL94V-0  
Solder tab: Copper alloy, nickel-undercoated, gold-plated  
Tray: Stainless

**RoHS compliance** This product displays (LF)(SN) on a label.  
This products listed above are supplied on embossed-tape.



# SCX CONNECTOR

2.54mm pitch



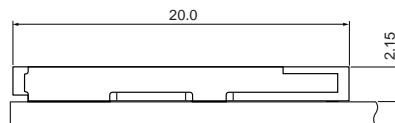
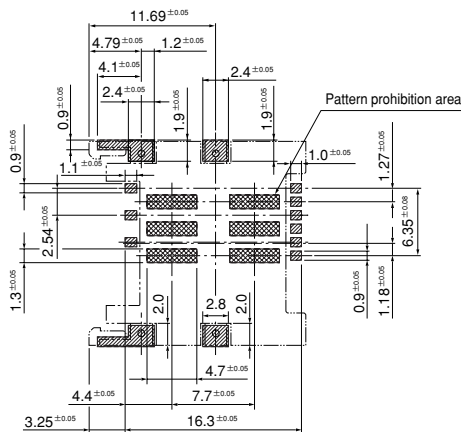
The SCX connector is for SIM Card and USIM(UIM) of the 3rd generation mobile phone, complying with the GSM11.11 standard that is a general standard for the digital mobile phone in Europe.

- Slide tray design
- High reliability for the electrical contact
- Light weight and low-profile
- The Knob of the tray
- The package with the carrier tape for an automatic mounting machine (Socket only)

## Specifications

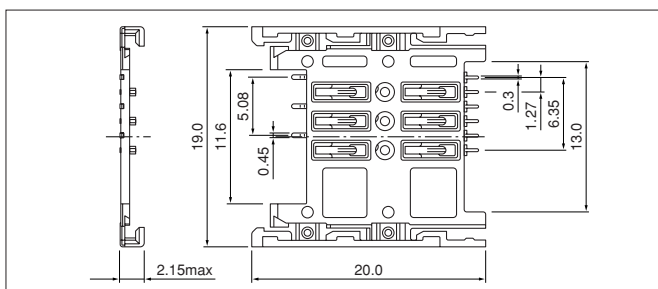
- Current rating: 1.0A AC, DC
- Voltage rating: 30V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/50m Ω max.  
After environmental testing/100m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 500V AC/minute
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## PC board layout (viewed from component side) and Assembly layout



- Note: 1. Tolerances are non-cumulative: ±0.03mm for all centers.  
2. The dimensions above should serve as a guideline. Contact JST for details.

## Connector



Circuits	Model No.	Q'ty / reel
6	SCX-6S-1K-ST23-TB	1,000

### Material and Finish

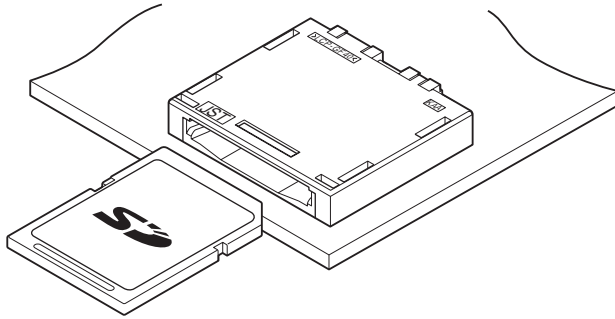
Contact: Copper alloy, nickel-undercoated, gold-plated  
Housing: Heat resisting resin, UL94V-0  
Solder tab: Copper alloy, nickel-undercoated, gold-plated

### RoHS compliance

This products listed above are supplied on embossed-tape.



# SD CONNECTOR



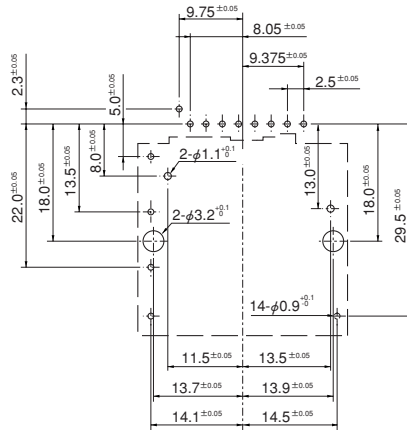
**Designed for the SD (secure digital) memory card. Also applicable to the MMC (multi-media card).**

- Push-push mechanism
- Card-detection switch
- Static electricity shielding

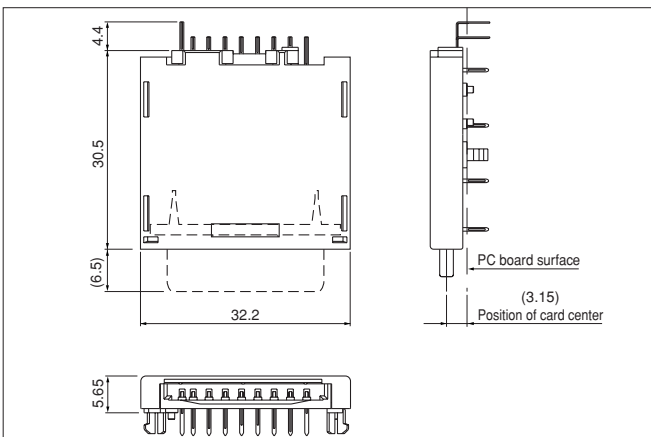
## Specifications

- Current rating: 0.5A AC, DC
- Voltage rating: 5V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/50m Ω max. (signal part)  
After environmental testing/80m Ω max. (signal part)
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 500V AC/minute
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## PC board layout



## Connector



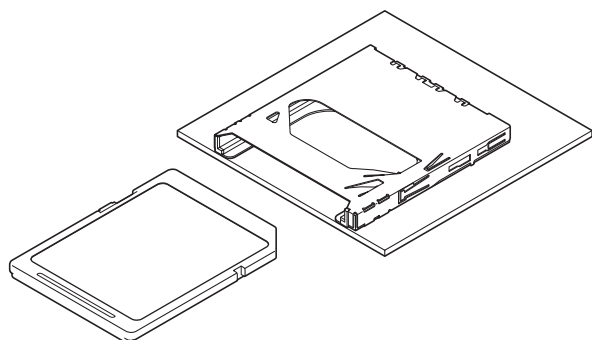
Model No.	Q'ty / box
SD-C-9BND-P23-332	60

Material and Finish
Housing: LCP, UL94V-0
Cover: LCP, UL94V-0
Guide: LCP, UL94V-0
Signal contact: Phosphor bronze, nickel-undercoated, gold-plated
Write protect switch: Phosphor bronze, nickel-undercoated, gold-plated
Terminal: Phosphor bronze, nickel-undercoated, gold-plated
Card detection switch: Phosphor bronze, nickel-undercoated, gold-plated
Joint rod: Kovar
Spring: SWPB, nickel-plated
GND contact: Phosphor bronze, tin-plated (reflow treatment)
Shaft: Brass

**RoHS compliance**



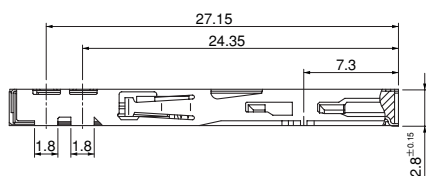
# SDK CONNECTOR



**This connector is designed for SD Card & MMC (Multi media card), complying with the SD Card Association standard, and is with the switch for Write-protection & Card-detection. And due to Push-push mechanism design, its card can be easily ejected by push-push operation.**

- Space saving design
- The amount of card ejection
- Outstanding durability
- Prevention of reverse card insertion

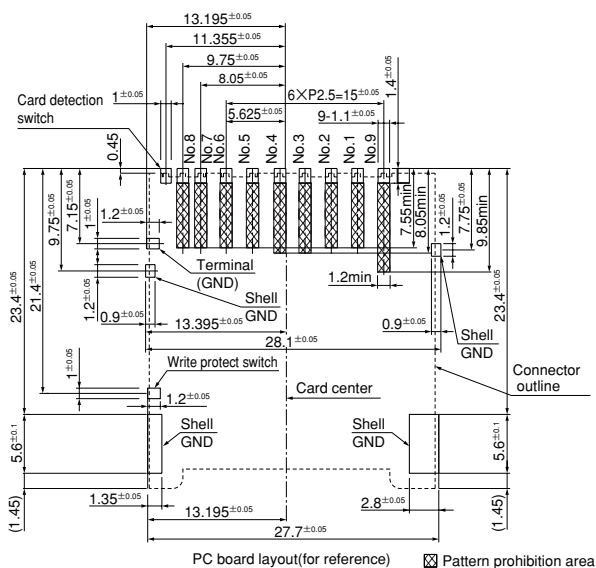
**PC board layout (viewed from component side) and Assembly layout**



Note: 1. Tolerances are non-cumulative:  $\pm 0.05\text{mm}$  for all centers.  
2. The dimensions above should serve as a guideline. Contact JST for details.

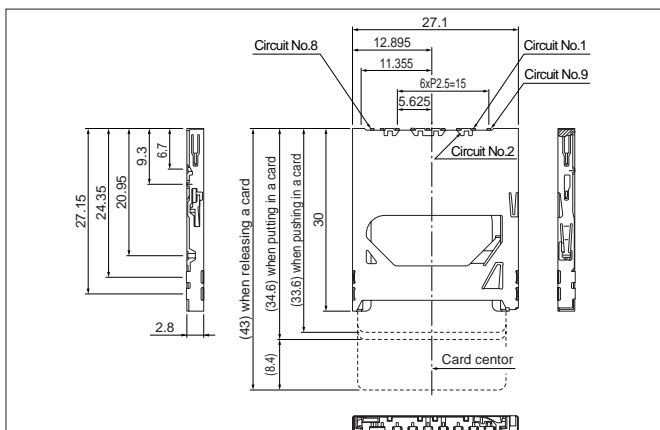
## Specifications

- Current rating: 0.5A AC, DC
- Voltage rating: 5V AC, DC
- Temperature range:  $-25^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$   
(including temperature rise in applying electrical current)
- Recommendatory PC board thickness: 0.6mm to 1.0mm  
[When it is mounted on the FPC, recommendable reinforcing layer thickness is 0.6mm min.]
- Contact resistance:
  - (Signal part) Initial value/30m  $\Omega$  max.  
After environmental testing/60m  $\Omega$  max.
  - (Switch part) Initial value/100m  $\Omega$  max.  
After environmental testing/100m  $\Omega$  max.
- Insulation resistance: 1,000M  $\Omega$  min. at 500V DC
- Withstanding voltage: 500V AC/minute
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.



PC board layout(for reference) Pattern prohibition area

## Connector



Model No.	Q'ty / reel
<b>SDK-9BNS-K13-GN-TB</b>	450

### Material and Finish

Housing, Guide: Heat resisting resin, UL94V-0  
 Contact: Copper alloy, nickel-undercoated, selective gold-plated, selective tin-plated (reflow treatment)  
 Terminal: Copper alloy, nickel-undercoated, gold-plated  
 Card detection switch: Copper alloy, nickel-undercoated, gold-plated  
 Write protect switch: Copper alloy, nickel-undercoated, selective gold-plated, selective tin-plated (reflow treatment)  
 Card lock: Copper alloy, tin-plated  
 Joint rod, Spring: SUS  
 Shell: SUS, Solder tail/ selective nickel-undercoated, tin-plated (reflow treatment)

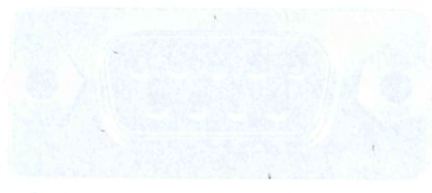
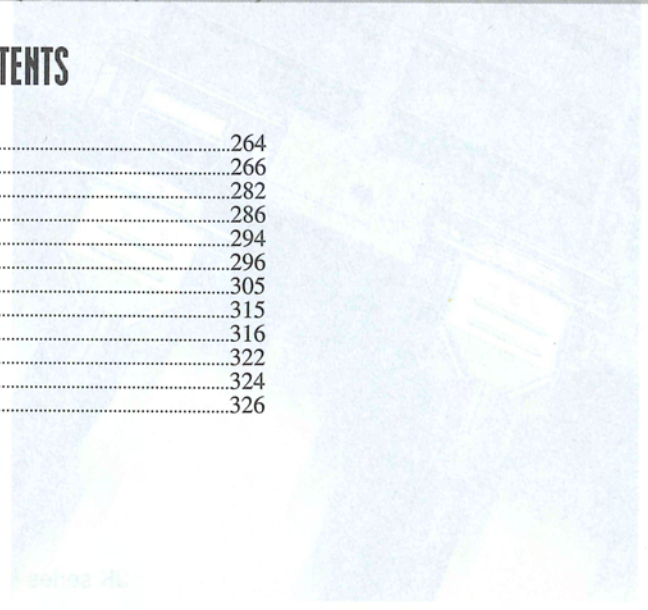
**RoHS compliance** This product displays (LF)(SN) on a label.  
This products listed above are supplied on embossed-tape.

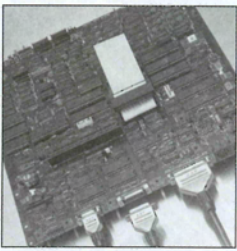
# 2

## Interface Connection Connectors

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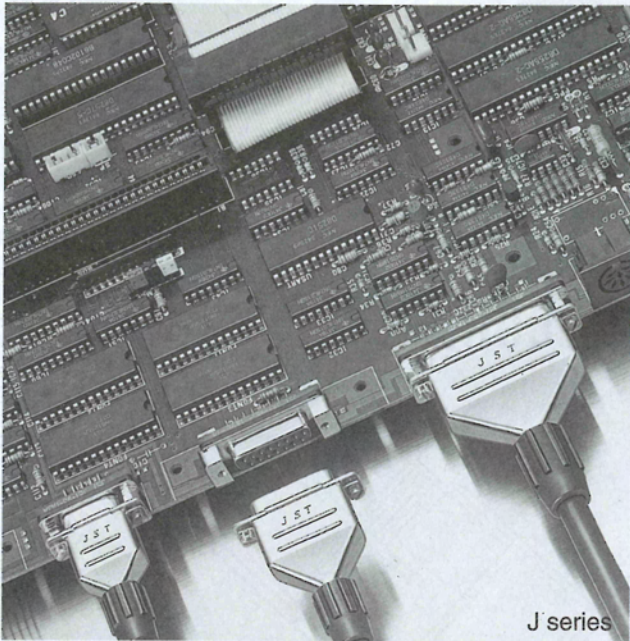
D SUBMINIATURE CONNECTOR.....	264
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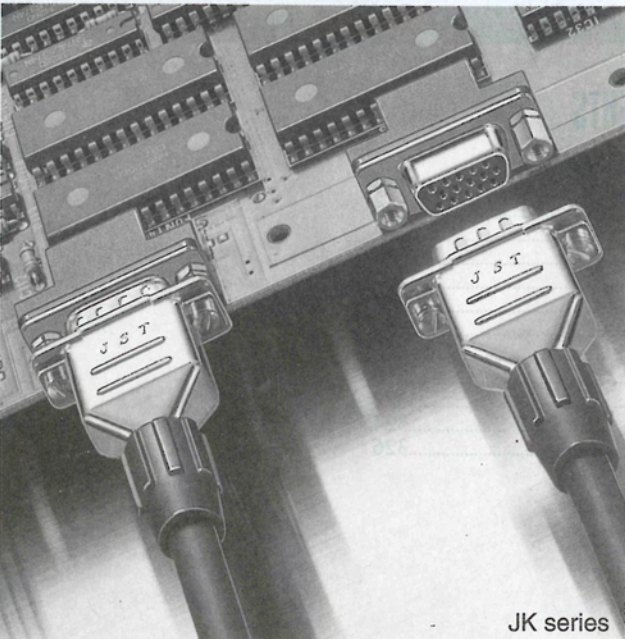


# D SUBMINIATURE CONNECTOR

## D-Sub Connector series



J series



JK series



J series



JK series

### Features

#### • **Reliable**

The contacts are made by high-speed stamping presses that provide superior dimensional accuracy. The performance of the mating surfaces is equal to that of machined contacts, while the cold working provided by the stamping process provides a superior spring.

#### • **Economical**

The contacts for these connectors are made by high-speed stamping presses, and only the mating portion of each contact is gold-plated. Moreover, the production process is fully rationalized to assure quality and optimize the use of resources. Labor saving, crimp style contacts suited for efficient assembly of round cables are also available.

#### • **Application**

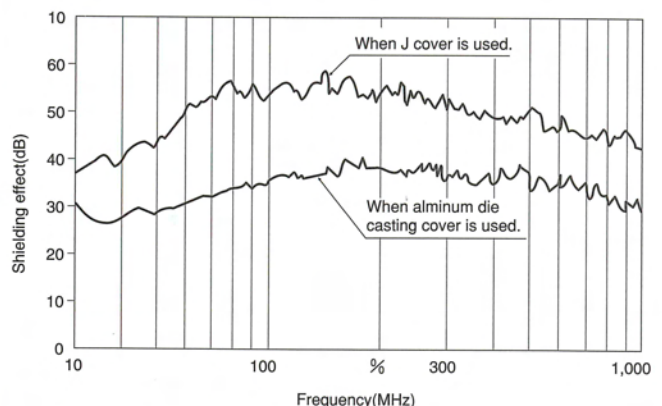
The D subminiature J/JH/JK & KH series connectors are ideal for internal connections and for the interconnections of various electronic products such as minicomputers, personal computers, word processors, factory automation equipments, measuring instruments, and medical instrumentation.

#### • **1.7 times higher density JK/KH series**

The JK/KH series of D subminiature connectors have 15 circuits in a standard 9 circuit shell by virtue of its 3-row, 2.286mm pitch construction, 1.7 times as dense as the J series.

#### • **Countermeasures against electromagnetic interference**

Regulations to prevent electromagnetic interference from electronic equipment have become general practice throughout the world. Therefore, shielding external I/O interconnections to prevent electromagnetic interference has become increasingly important. At the same time, interconnection devices have become smaller, lighter, and stronger. To meet these needs, we have developed the J covers, which have a superior shielding effect without proportional bulk.

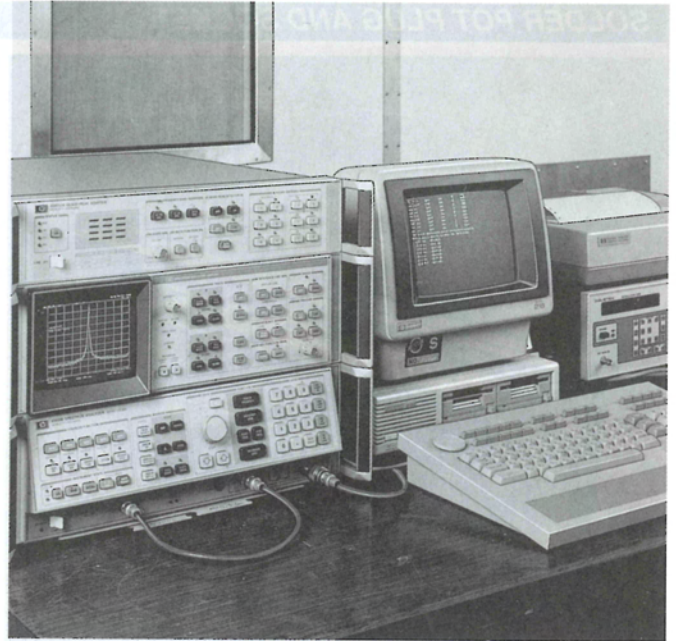
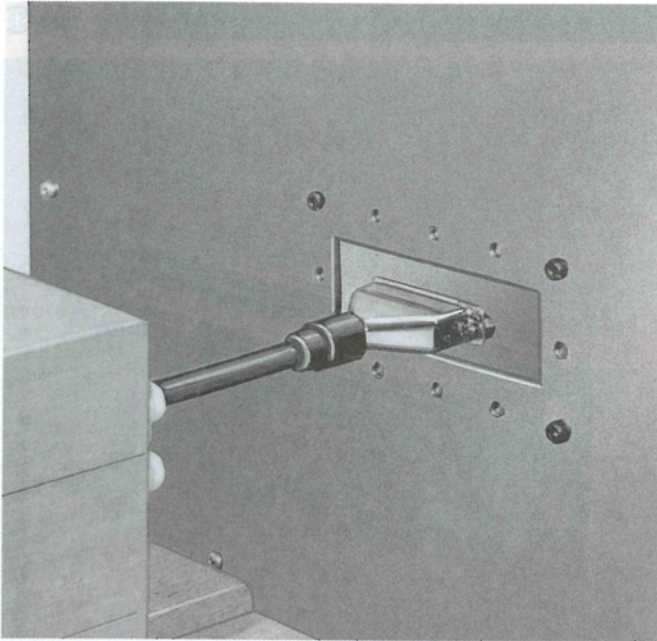


#### Shielding effect measurement data

The shielding effect of the J cover was compared with that of our conventional aluminum die casting cover.



# D SUBMINIATURE CONNECTOR



To ensure reliable EMC performance, JST is studying shielding measures from various angles, including introduction of numerous measuring instruments.

## • Available styles and sizes

Style	Circuits											
	J Series				JS Series		JH Series		JK Series	KS Series	KH Series	
	9	15	25	37	9	25	9	25	15	15	15	
Connector	Solder pot plug	○	○	○	○							
	Solder pot socket	○	○	○	○							
	Right angle through-hole plug	○	○	○		○		○	○			
	Right angle through-hole socket	○	○	○	○		○	○	○	○	○	○
	Straight through-hole plug	○		○								
	Straight through-hole socket	○		○						○		
	Crimp style plug	○	○	○	○						○	
Cover	Crimp style socket	○	○	○						○		
	J cover	○	○	○	○					○		
	Mold cover	○	○	○						○		
	Aluminum die-cast cover			○								
	JIS plastic cover			○								

## Standards

Recognized E60389

Certified LR20812

\* RoHS compliant products are published.

\* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.

\* Contact JST for details.



# D SUBMINIATURE CONNECTOR J SERIES

## Solder pot plug and socket

### SOLDER POT PLUG AND SOCKET



Solder pot plug



Solder pot socket

### Features

- The socket contacts are formed by high-speed stamping presses to obtain the advantages of cold working. They are therefore highly elastic, which in turn ensures reliable connection even after many mating cycles.
- The dimples in the plug shell ensure continuity between it and the socket shell, thus providing complete shielding.
- Costs are kept low by selective gold plating the contacts.
- The solder cup portions of the contacts are tin-plated for easy soldering.
- Insulator housings are made of a heat-resistant glass-filled PBT resin.

### Standards

UL Recognized E60389 CE Certified LR20812

- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

### Specifications

#### Materials

Connector	Part name	Material and Finish
Plug	Contact	Brass, gold-plated product: Nickel-undercoated, Mating part: gold-plated Solder tail: tin-plated (reflow treatment) tin-plated product: Copper-undercoated, tin-plated (reflow treatment)
	Insulator	Glass-filled PBT, UL94V-0, black
	Shell	Steel, copper-undercoated, nickel-plated
Socket	Contact	Phosphor bronze, gold-plated product: Nickel-undercoated, Mating part: gold-plated Solder tail: tin-plated (reflow treatment) tin-plated product: Copper-undercoated, tin-plated (reflow treatment)
	Insulator	Glass-filled PBT, UL94V-0, black
	Shell	Steel, copper-undercoated, nickel-plated

#### Characteristics

Current rating	3A, AC, DC (2A for 37-circuits)
Voltage rating	250V AC, DC
Temperature range	-40°C to +85°C (including temperature rise in applying electrical current)
Contact resistance	Initial value/15mΩ max. After environmental testing/30mΩ max.
Insulation resistance	5,000MΩ min.
Withstanding voltage	1,000V AC/minute

Note: Contact JST for details.

#### Model number identification

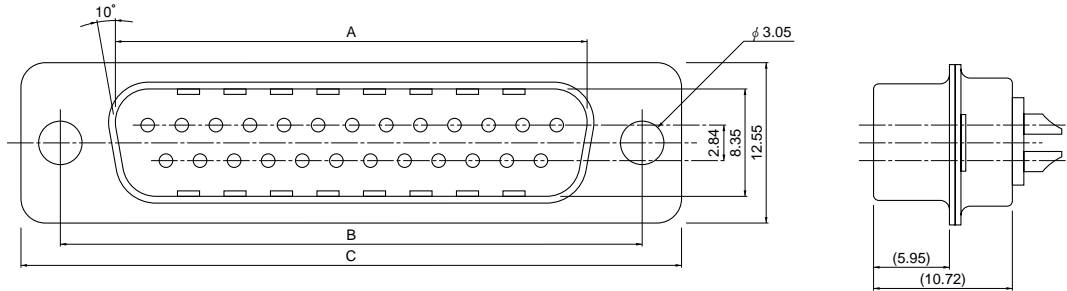
**J E Z - 9 P - 12 - 3**

• Series name	J E Z
• Shell size: E, A, B, C	E
• Wire connection style: Z ... Solder pot type	Z
• Number of circuits: 9, 15, 25, 37	9
• Connector style: P ... Plug, S ... Socket	P
• Finish Blank ... Gold-plated (flash)                      12 ... 0.2micron gold-plated 13 ... 0.4micron gold-plated                      14 ... 0.76micron gold-plated 90 ... Tin-plated (reflow treatment)	12
• Plating specification of shell: 3 ... Copper-undercoated, nickel-plated	3

Note: 1. The relationship between number of circuits and shell size is shown below.  
9: E, 15: A, 25: B, 37: C  
2. Contact JST for special plating requirements.

# D SUBMINIATURE CONNECTOR J SERIES

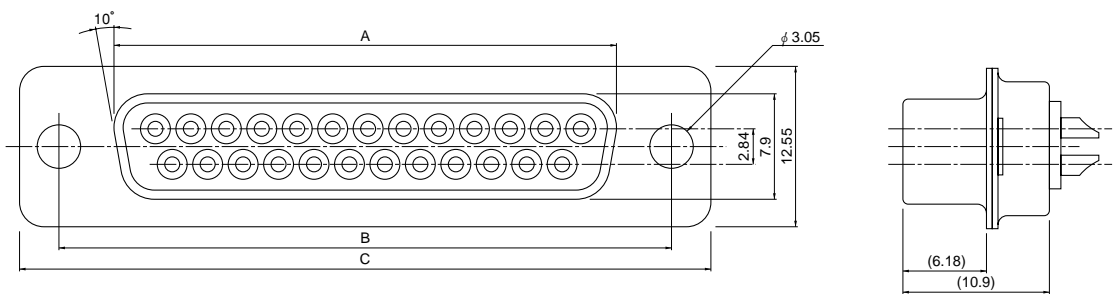
## Plug



Circuits	Model No.		Dimensions (mm)			Q'ty / box
	Gold-plated	Tin-plated	A	B	C	
9	<b>JEZ-9P-3</b>	<b>JEZ-9P-90-3</b>	16.92	24.99	30.80	100
15	<b>JAZ-15P-3</b>	<b>JAZ-15P-90-3</b>	25.25	33.32	39.14	100
25	<b>JBZ-25P-3</b>	<b>JBZ-25P-90-3</b>	38.97	47.04	53.04	50
37	<b>JCZ-37P-3</b>	<b>JCZ-37P-90-3</b>	55.43	63.50	69.32	50

**RoHS compliance** Gold-plated products display (LF)(SN) on a label.

## Socket



Circuits	Model No.		Dimensions (mm)			Q'ty / box
	Gold-plated	Tin-plated	A	B	C	
9	<b>JEZ-9S-3</b>	<b>JEZ-9S-90-3</b>	16.34	24.99	30.80	100
15	<b>JAZ-15S-3</b>	<b>JAZ-15S-90-3</b>	24.67	33.33	39.14	100
25	<b>JBZ-25S-3</b>	<b>JBZ-25S-90-3</b>	38.38	47.04	53.04	50
37	<b>JCZ-37S-3</b>	<b>JCZ-37S-90-3</b>	54.84	63.50	69.32	50

**RoHS compliance** Gold-plated products display (LF)(SN) on a label.



# D SUBMINIATURE CONNECTOR J SERIES

*Right angle through-hole plug and socket*

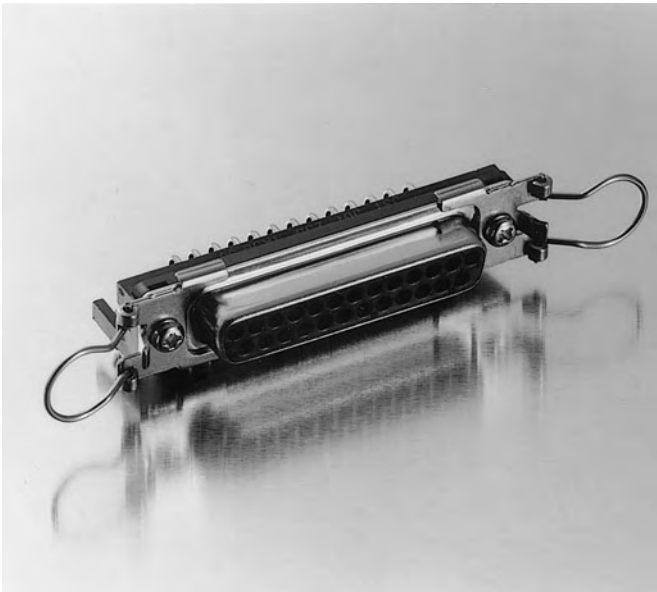
RIGHT ANGLE THROUGH-HOLE PLUG AND SOCKET



Right angle through-hole plug  
(with hexagonal lock screw blocks)



Right angle through-hole socket  
(with rectangular lock screw blocks)



Right angle through-hole socket  
(with bail lock)

## Features

- The socket contacts are made by high-speed stamping presses. This promotes the uniform elasticity of the twin-contact mating sections and therefore ensures reliable contact even after repeated mating cycles. The solder tails are U-shaped for extra strength.
- Costs are minimized by selective gold plating, high speed stamping presses, and completely automated assembly.
- To ensure complete shielding, a wide variety of grounding adapters are available so that the sockets can be grounded to different kinds of supporting structures.
- Metric, inch or other lock screw blocks are available for fastening mating plugs.

# D SUBMINIATURE CONNECTOR J SERIES

## Specifications

### Materials

Part name	Material and Finish
Contact	Plug Brass, gold-plated product: Nickel-undercoated, Mating part: gold-plated Solder tail; tin-plated (reflow treatment) tin-plated product: Copper-undercoated, tin-plated (reflow treatment)
	Socket Phosphor bronze, gold-plated product: Nickel-undercoated, Mating part: gold-plated Solder tail; tin-plated (reflow treatment) tin-plated product: Copper-undercoated, tin-plated (reflow treatment)
Insulator	Glass-filled PBT, UL94V-0, black
Shell	Steel, copper-undercoated, nickel-plated
Hexagonal lock screw block	Steel, copper-undercoated, nickel-plated
Rectangular lock screw block	Zinc, copper-undercoated, nickel-plated
Grounding adapter having a 3.2mm dia. hole	Steel, copper-undercoated, nickel-plated
Grounding adapter having an M3 tapped hole	
Grounding adapter having a spring lock lever	Brass, nickel-undercoated, tin/copper alloy-plated
Spring locks	Bail lock
	Accepts bail locks
	Stainless steel

### Characteristics

Current rating	3A, AC, DC (2.0A AC, DC for 37-circuits)
Voltage rating	250V AC, DC
Temperature range	-40°C to +85°C (including temperature rise in applying electrical current)
Contact resistance	Initial value/15mΩ max. After environmental testing/30mΩ max.
Insulation resistance	5,000MΩ min.
Withstanding voltage	1,000V AC/minute
Applicable PC board thickness	1.6mm

Note: Contact JST for details.

## Standards

Recognized E60389 Certified LR20812

- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.







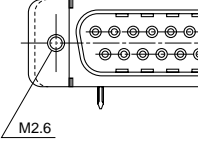
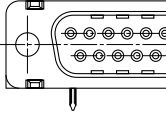
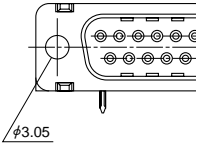
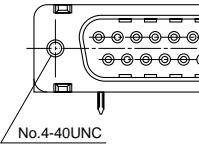
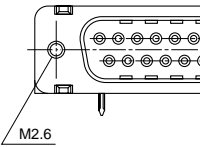
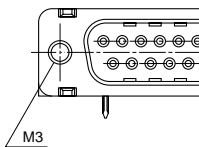
### Model number identification

	J	E	Y	-	9	S	-	1A	3	A	12	S1
• Series name												
• Shell size: E, A, B, C												
• Wire connection style: Y... Right angle through-hole style												
• Number of circuits: 9, 15, 25, 37												
• Connector style: P ... Plug, S ... Socket												
• Connector construction/Dimensions: Standard J series												
• Types of grounding adapters 0 ... Without grounding adapters 1 ... With grounding adapters having a 3.2mm dia. hole 2 ... With grounding adapters having an M3 thread 3 ... With grounding adapters having a spring lock device (1) 4 ... With grounding adapters having a spring lock device (2)												
• Types of lock screw blocks A ... With hexagonal lock screw blocks having a No. 4-40 UNC inch thread B ... With hexagonal lock screw blocks having an M2.6 thread C ... With rectangular lock screw blocks having an M2.6 thread D ... Without lock screw blocks E ... Without lock screw blocks, but with grounding adapters having a 3.05mm dia. hole F ... Without lock screw blocks, but with grounding adapters having a No. 4-40UNC inch thread G ... Without lock screw blocks, but with grounding adapters having an M2.6 thread H ... Without lock screw blocks, but with grounding adapters having an M3 thread												
• Finish Blank ... Gold-plated (flash)                      12 ... 0.2micron gold-plated 13 ... 0.4micron gold-plated                      14 ... 0.76micron gold-plated 90 ... Tin-plated (reflow treatment)												
• Bail locks Blank...Without bail locks S or S1...With bail locks S2...With bail locks (with addition of spring characteristic)												
<p>Note: 1. The relationship between number of circuits and shell size is shown below. 9: E, 15: A, 25: B, 37: C 2. Contact JST for special plating requirements. 3. Contact JST for the Socket with bail locks. (Not UL/CSA approved.)</p>												

# D SUBMINIATURE CONNECTOR J SERIES

Right angle through-hole plug		Type A	Type B																																											
<p>H: Height of the lock screw block (for Types A, B &amp; C)</p> <table border="1"> <thead> <tr> <th rowspan="2">Cir- cuits</th> <th colspan="2">Model No.</th> <th colspan="5">Dimensions (mm)</th> <th rowspan="2">Q'ty / box</th> </tr> <tr> <th>gold-plated plug</th> <th>tin-plated plug</th> <th>A</th> <th>B</th> <th>C</th> <th>D</th> <th>E</th> </tr> </thead> <tbody> <tr> <td>9</td> <td><b>JEY-9P-1A**</b></td> <td><b>JEY-9P-1A**90</b></td> <td>16.90</td> <td>24.99</td> <td>30.80</td> <td>8.1</td> <td>9.52</td> <td>100</td> </tr> <tr> <td>15</td> <td><b>JAY-15P-1A**</b></td> <td><b>JAY-15P-1A**90</b></td> <td>25.25</td> <td>33.33</td> <td>39.14</td> <td>8.1</td> <td>9.52</td> <td>100</td> </tr> <tr> <td>25</td> <td><b>JBV-25P-1A**</b></td> <td><b>JBV-25P-1A**90</b></td> <td>38.97</td> <td>47.04</td> <td>53.00</td> <td>8.2</td> <td>9.62</td> <td>50</td> </tr> </tbody> </table> <p>&lt;Gold-plated product&gt; <b>RoHS compliance</b> This product displays (LF)(SN) on a label.            &lt;Tin-plated product&gt; *1, 2, 3 ... <b>RoHS compliance</b> *4, 5 ... <b>RoHS compliance</b> This product displays (LF) on a label.            Note: ** shows the location where a two-digit code (see the table below for codes) should be entered.            For example, if a 9-circuit gold-plated (flash) plug with hexagonal lock screw blocks having a No.4-40UNC inch thread and without grounding adapters is required, specify the model number as JEY-9P-1A0A.</p>		Cir- cuits	Model No.		Dimensions (mm)					Q'ty / box	gold-plated plug	tin-plated plug	A	B	C	D	E	9	<b>JEY-9P-1A**</b>	<b>JEY-9P-1A**90</b>	16.90	24.99	30.80	8.1	9.52	100	15	<b>JAY-15P-1A**</b>	<b>JAY-15P-1A**90</b>	25.25	33.33	39.14	8.1	9.52	100	25	<b>JBV-25P-1A**</b>	<b>JBV-25P-1A**90</b>	38.97	47.04	53.00	8.2	9.62	50	<p>With hexagonal lock screw blocks(H:6.3mm) having a No.4-40UNC inch thread</p>	<p>With hexagonal lock screw blocks(H:6.3mm) having an M2.6 thread</p>
Cir- cuits	Model No.		Dimensions (mm)					Q'ty / box																																						
	gold-plated plug	tin-plated plug	A	B	C	D	E																																							
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*1 Without grounding adapters			<p>0A</p> <p>0B</p>																																											
*2 With grounding adapters with a 3.2mm dia. hole			<p>1A</p> <p>1B</p>																																											
*3 With grounding adapters with an M3 thread			<p>2A</p> <p>2B</p>																																											
*4 With grounding adapters with a spring lock device (1)			<p>3A</p> <p>3B</p>																																											
*5 With grounding adapters with a spring lock device (2)			<p>—</p> <p>—</p>																																											

# D SUBMINIATURE CONNECTOR J SERIES







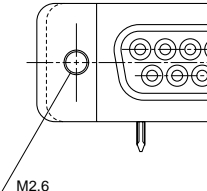
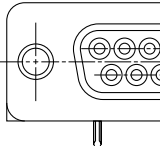
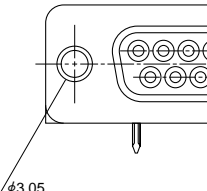
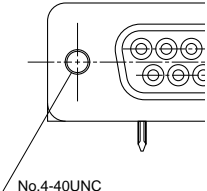
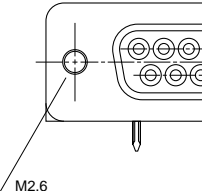
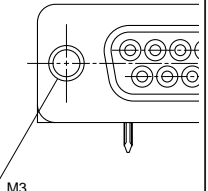
Type C	Type D	Type E	Type F	Type G	Type H
					
With rectangular lock screw blocks (H: 6.2mm) having an M2.6 thread	Without lock screw blocks	Without lock screw blocks E: Grounding adapter has no thread. F, G, H: Grounding adapters have a thread (*1) for securing separately-purchased lock screw blocks (*2)			
		Use a lock screw block of Model number JFS-( )S-C1N.	*1: No.4-40UNC inch thread *2: Model number JFS-4S-( )1W(M)	*1: M2.6 thread *2: Model number JFS-2.6S-( )1W(M)	*1: M3 thread *2: Model number JFS-3S-( )1W(M)
					
0C	0D	—	—	—	—
1C	1D	1E	1F	1G	—
2C	2D	2E	2F	2G	—
3C	3D	3E	3F	3G	—
—	—	—	—	—	4H

# D SUBMINIATURE CONNECTOR J SERIES

Right angle through-hole socket		Type A	Type B																																																				
<p>H: Height of the lock screw block (for Types A, B &amp; C)</p> <table border="1"> <thead> <tr> <th rowspan="2">Cir- cuits</th> <th colspan="2">Model No.</th> <th colspan="5">Dimensions (mm)</th> <th rowspan="2">Q'ty / box</th> </tr> <tr> <th>gold-plated socket</th> <th>tin-plated socket</th> <th>A</th> <th>B</th> <th>C</th> <th>D</th> <th>E</th> </tr> </thead> <tbody> <tr> <td>9</td> <td><b>JEY-9S-1A**</b></td> <td><b>JEY-9S-1A**90</b></td> <td>16.34</td> <td>24.99</td> <td>30.81</td> <td>8.1</td> <td>9.52</td> <td>100</td> </tr> <tr> <td>15</td> <td><b>JAY-15S-1A**</b></td> <td><b>JAY-15S-1A**90</b></td> <td>24.67</td> <td>33.32</td> <td>39.14</td> <td>8.1</td> <td>9.52</td> <td>100</td> </tr> <tr> <td>25</td> <td><b>JBY-25S-1A**</b></td> <td><b>JBY-25S-1A**90</b></td> <td>38.38</td> <td>47.04</td> <td>53.04</td> <td>8.2</td> <td>9.62</td> <td>50</td> </tr> <tr> <td>37</td> <td><b>JCY-37S-1A**</b></td> <td><b>JCY-37S-1A**90</b></td> <td>54.84</td> <td>63.50</td> <td>69.32</td> <td>8.2</td> <td>9.62</td> <td>50</td> </tr> </tbody> </table> <p>&lt;Gold-plated product&gt; <b>RoHS compliance</b> This product displays (LF)(SN) on a label.            &lt;Tin-plated product&gt; *1, 2, 3... <b>RoHS compliance</b>            *4, 5... <b>RoHS compliance</b> This product displays (LF) on a label.</p> <p>Note: ** shows the location where a two-digit code (see the table below for codes) should be entered. For example, if a 9-circuit gold-plated (flash) socket with hexagonal lock screw blocks having a No.4-40UNC inch thread and without grounding adapters is required, specify the model number as JEY-9S-1A0A.</p>		Cir- cuits	Model No.		Dimensions (mm)					Q'ty / box	gold-plated socket	tin-plated socket	A	B	C	D	E	9	<b>JEY-9S-1A**</b>	<b>JEY-9S-1A**90</b>	16.34	24.99	30.81	8.1	9.52	100	15	<b>JAY-15S-1A**</b>	<b>JAY-15S-1A**90</b>	24.67	33.32	39.14	8.1	9.52	100	25	<b>JBY-25S-1A**</b>	<b>JBY-25S-1A**90</b>	38.38	47.04	53.04	8.2	9.62	50	37	<b>JCY-37S-1A**</b>	<b>JCY-37S-1A**90</b>	54.84	63.50	69.32	8.2	9.62	50	<p>With hexagonal lock screw blocks(H: 6.3mm) having a No.4-40UNC inch thread</p>	<p>With hexagonal lock screw blocks(H: 6.3mm) having an M2.6 thread</p>
Cir- cuits	Model No.		Dimensions (mm)					Q'ty / box																																															
	gold-plated socket	tin-plated socket	A	B	C	D	E																																																
9	<b>JEY-9S-1A**</b>	<b>JEY-9S-1A**90</b>	16.34	24.99	30.81	8.1	9.52	100																																															
15	<b>JAY-15S-1A**</b>	<b>JAY-15S-1A**90</b>	24.67	33.32	39.14	8.1	9.52	100																																															
25	<b>JBY-25S-1A**</b>	<b>JBY-25S-1A**90</b>	38.38	47.04	53.04	8.2	9.62	50																																															
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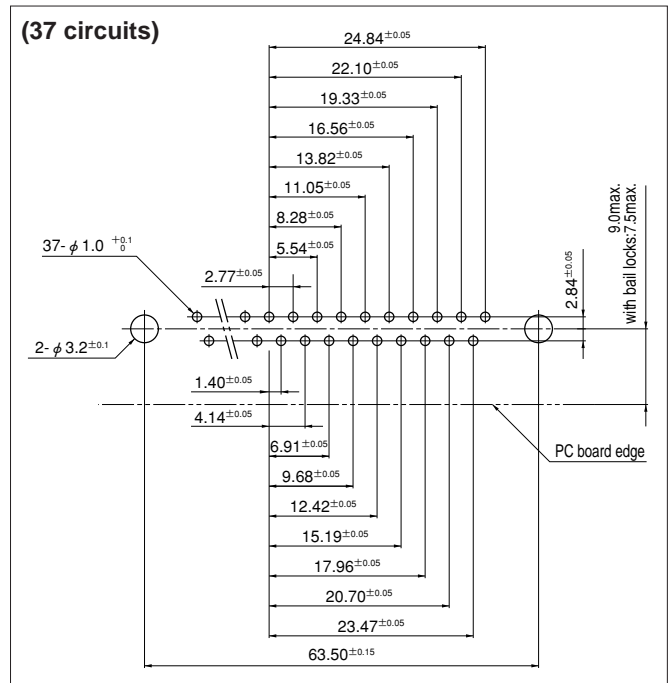
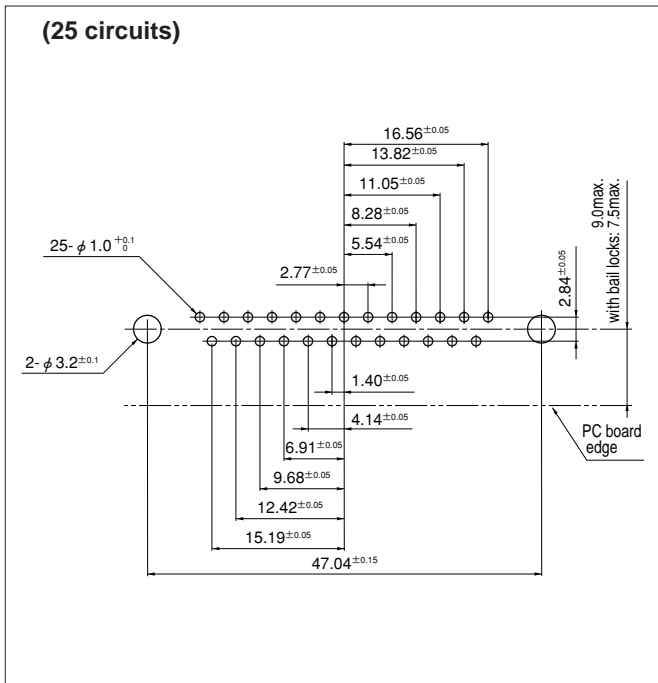
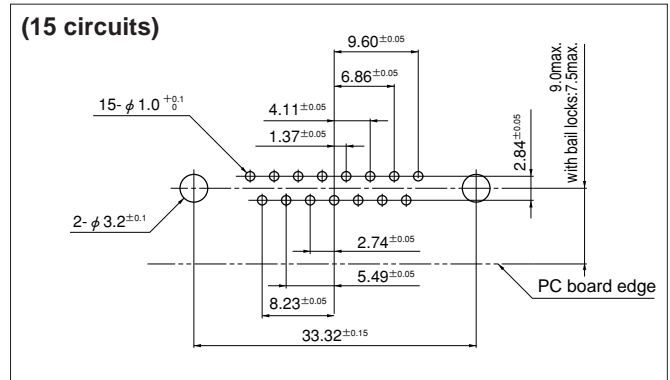
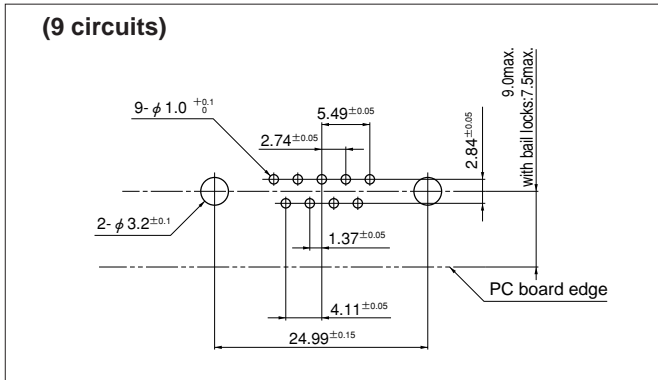


# D SUBMINIATURE CONNECTOR J SERIES

Type C	Type D	Type E	Type F	Type G	Type H
					
With rectangular lock screw blocks (H: 6.2mm) having an M2.6 thread	Without lock screw blocks	Without lock screw blocks E: Grounding adapter has no thread. F, G, H: Grounding adapters have a thread (*1) for securing separately-purchased lock screw blocks (*2)			
		Used a lock screw block [model number JFS-( )S-C1N]	*1: No.4-40UNC inch thread *2: Model number JFS-4S-( )1W(M)	*1: M2.6 thread *2: Model number JFS-2.6S-( )1W(M)	*1: M3 thread *2: Model number JFS-3S-( )1W(M)
					
0C	0D	—	—	—	—
1C	1D	1E	1F	1G	—
2C	2D	2E	2F	2G	—
3C	3D	3E	3F	3G	—
—	—	—	—	—	4H

# D SUBMINIATURE CONNECTOR J SERIES

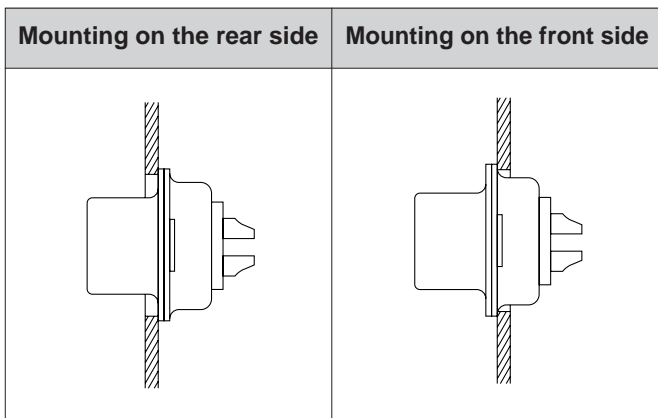
## PC board layout (viewed from component side)



Note: 1. Tolerances are non-cumulative:  $\pm 0.05\text{mm}$  for all centers.

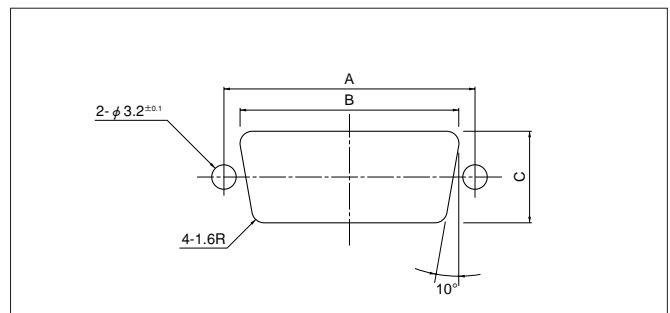
2. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.

## Panel layout



The connector can be mounted either on the front side or on the rear side of the panel as shown above.

Use M2.5 or M2.6 screws for installation.



Circuits	A $\pm 0.15$	B $\pm 0.2$	C $\pm 0.2$
9	24.99	20.6	12.0
15	33.32	28.8	12.0
25	47.04	42.6	12.0
37	63.50	59.0	12.0

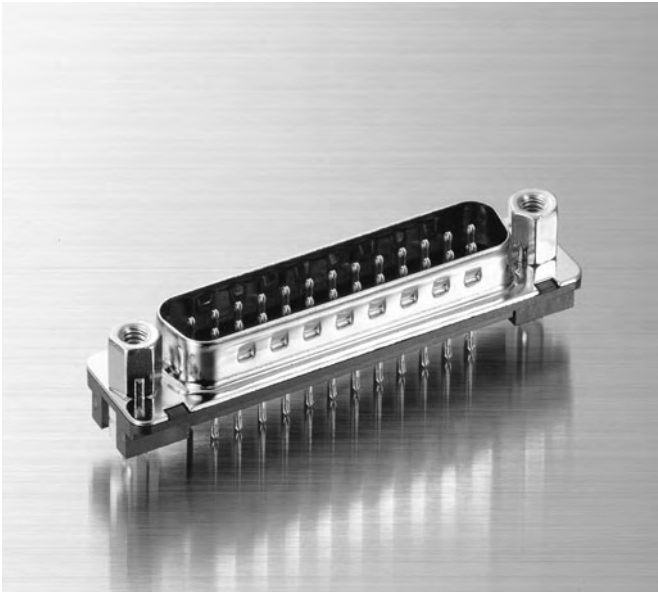
Note: The dimensions above should serve as a guideline. Contact JST for details.



# D SUBMINIATURE CONNECTOR J SERIES

*Straight through-hole plug and socket*

STRAIGHT THROUGH-HOLE PLUG AND SOCKET



Straight through-hole plug  
(with hexagonal lock screw blocks)



Straight through-hole socket (without lock screw blocks, but with  
grounding adapters having a No.4-40UNC inch thread)

## Features

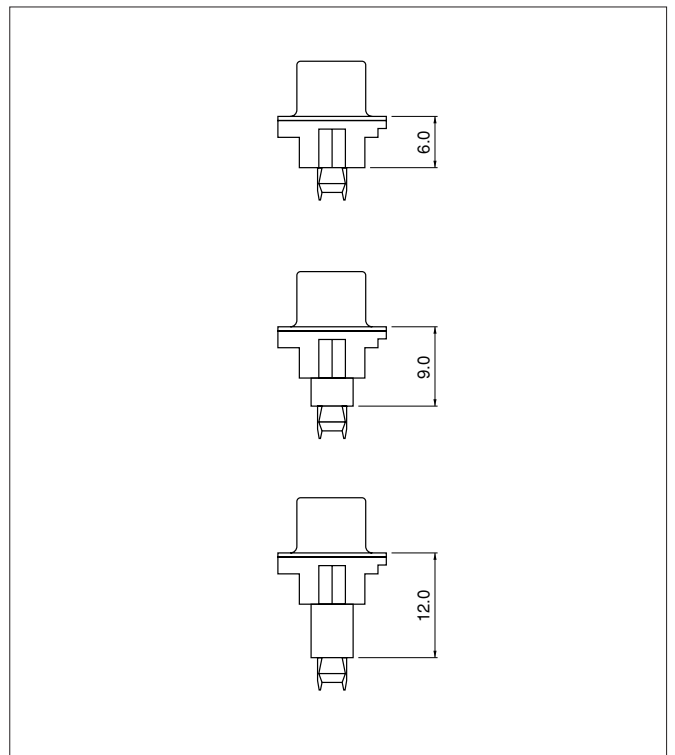
- Three standard types are available with different dimensions between the flange and solder tail: 6mm, 9mm, and 12mm.
- The roots of the contact leads are covered to prevent flux from rising into the connector during soldering.
- A grounding adapter with a spring lock device allows the connector to be temporarily secured onto the printed circuit board so that the connector can be soldered easily.

## Standards

 Recognized E60389

 Certified LR20812

- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.



# D SUBMINIATURE CONNECTOR J SERIES

## Specifications

### Materials

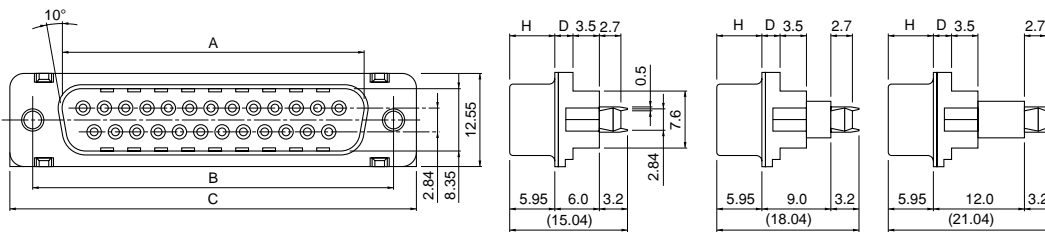
Part name		Material and Finish
Contact	Plug	Brass, gold-plated product: Nickel-undercoated, Mating part: gold-plated Solder tail: tin-plated (reflow treatment)
	Socket	Phosphor bronze, gold-plated product: Nickel-undercoated, Mating part: gold-plated Solder tail: tin-plated (reflow treatment)
Insulator		Glass-filled PBT, UL94V-0, black
Shell		Steel, copper-undercoated, nickel-plated
Hexagonal lock screw block		Steel, copper-undercoated, nickel-plated
Grounding adapter with spring lock device	Cutting product	Brass, nickel-undercoated, tin/copper alloy-plated
	Stamping product	Brass, tin-plated (reflow treatment)
Spring lock	Bail locks	Stainless steel
	Accepts bail locks	

### Characteristics

Current rating	3A AC, DC
Voltage rating	250V AC, DC
Temperature range	-40°C to +85°C (including temperature rise in applying electrical current)
Contact resistance	Initial value/15mΩ max. After environmental testing/30mΩ max.
Insulation resistance	5,000MΩ min.
Withstanding voltage	1,000V AC/minute
Applicable PC board thickness	1.6mm

\*Contact JST for details.

### Straight through-hole plug



H: Height of the lock screw block (for Types A, B & J)

Cir- cuits	Dimension between flange and solder tail (mm)	Model No.		Dimensions (mm)				Q'ty / box
		Gold-plated (flash) Plug	Gold-plated 0.76micron	A	B	C	D	
9	6	<b>JES-9P-2A**</b>	<b>JES-9P-2A**14</b>	16.90	24.99	30.8	2.4	100
	9	<b>JES-9P-3A**</b>	<b>JES-9P-3A**14</b>					
	12	<b>JES-9P-4A**</b>	<b>JES-9P-4A**14</b>					
25	6	<b>JBS-25P-2A**</b>	<b>JBS-25P-2A**14</b>	38.97	47.04	53.0	2.5	50
	9	<b>JBS-25P-3A**</b>	<b>JBS-25P-3A**14</b>					
	12	<b>JBS-25P-4A**</b>	<b>JBS-25P-4A**14</b>					

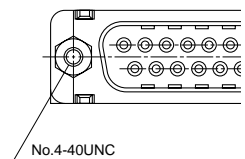
**RoHS compliance** This product displays (LF)(SN) A on a label.

Note: \*\* shows the location where a two-digit code (see the table below for codes) should be entered. For example, if a 9-circuit gold-plated (flash) plug with hexagonal lock screw blocks having a No. 4-40UNC inch thread and with grounding adapters whose dimension between flange and solder tail is 6.0mm is required, specify the model number as JES-9P-3A3A.

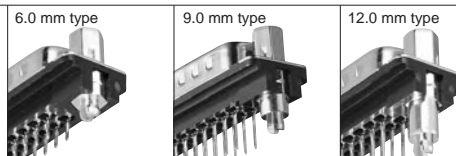
### Type A



With hexagonal lock screw blocks(H:6.3mm) having a No.4-40UNC inch thread



With grounding adapters with a spring lock device



3A

# D SUBMINIATURE CONNECTOR J SERIES

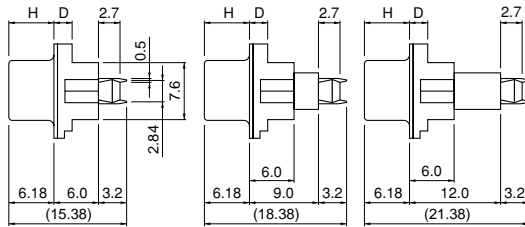
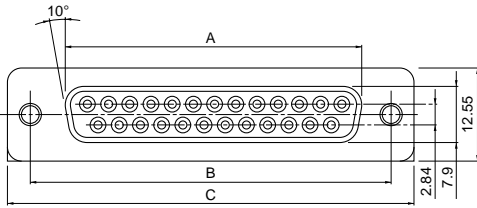
## Model number identification

	J		B		S		- 25		P		- 2A		3		F		14		S1
<ul style="list-style-type: none"> <li>• Series name</li> <li>• Shell size: B, E</li> <li>• Wire connection type: S ... Straight through-hole type</li> <li>• Number of circuits: 9, 25</li> <li>• Connector type: P ... Plug S ... Socket</li> <li>• Connector construction/dimensions: 2A ... 6.0 mm from flange to solder tail 3A ... 9.0 mm from flange to solder tail 4A ... 12.0mm from flange to solder tail</li> <li>• Types of grounding adapter: 3 ... Grounding adapter with a spring lock device (Cutting product), 7 ... Grounding adapter with a spring lock device (Stamping product)</li> <li>• Types of lock screw block: A ... With hexagonal lock screw blocks having a No. 4-40UNC inch thread      G ... Without lock screw blocks, but with grounding adapters having an M2.6 thread B ... With hexagonal lock screw blocks having an M2.6 thread      H ... Without lock screw blocks, but with grounding adapters having an M3 thread F ... Without lock screw blocks, but with grounding adapters having an No.4-40UNC inch thread      J ... With hexagonal lock screw block having an M3 thread</li> <li>• Finish of mating part Blank ... Gold-plated (flash)      12 ... 0.2micron gold-plated      13 ... 0.4micron gold-plated      14 ... 0.76micron gold-plated      90 ... Tin-plated (reflow treatment)</li> <li>• Bail locks Blank...Without bail locks S or S1...With bail locks (bent oval type), S2...With bail locks (with addition of spring characteristic, bent oval type) S3...With bail locks (with addition of spring characteristic, Diamond type), S5...With bail locks (with addition of spring characteristic, straight oval type)</li> </ul> <p><i>Note: 1. In the J Series, the number of circuits is determined by the shell size: 9 circuits for E and 25 circuits for B. 2. Contact JST for special plating requirements. 3. Contact JST for the dimensions between the flange and solder tail other than those listed above. 4. Grounding adapters that can secure printed circuit boards are also available. 5. Contact JST for the Receptacle with spring lock devices. (Not UL/CSA approved.)</i></p>																			

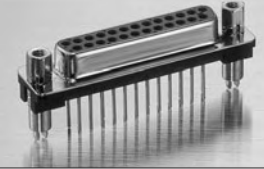
Type B	Type F	Type G	Type H	Type J			
<p>With hexagonal lock screw blocks (H: 6.3mm) having an M2.6 thread</p> <div style="text-align: center;"></div>	<p>Without lock screw blocks F, G, H: Grounding adapters have a thread (*1) for securing separately-purchased lock screw blocks (*2)</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 33%; border: none;"> <p>*1: No.4-40UNC inch thread *2: Model number SFS-4S-( )1W(M)</p> </td> <td style="width: 33%; border: none;"> <p>*1: M2.6 thread *2: Model number SFS-2.6S-( )1W(M)</p> </td> <td style="width: 33%; border: none;"> <p>*1: M3 thread *2: Model number SFS-3S-( )1W(M)</p> </td> </tr> </table>			<p>*1: No.4-40UNC inch thread *2: Model number SFS-4S-( )1W(M)</p>	<p>*1: M2.6 thread *2: Model number SFS-2.6S-( )1W(M)</p>	<p>*1: M3 thread *2: Model number SFS-3S-( )1W(M)</p>	<p>With hexagonal lock screw blocks (H: 6.3mm) having an M3 thread</p> <div style="text-align: center;"></div>
<p>*1: No.4-40UNC inch thread *2: Model number SFS-4S-( )1W(M)</p>	<p>*1: M2.6 thread *2: Model number SFS-2.6S-( )1W(M)</p>	<p>*1: M3 thread *2: Model number SFS-3S-( )1W(M)</p>					
<b>3B</b>	<b>3F</b>	<b>3G</b>	<b>3H</b>	<b>3J</b>			

# D SUBMINIATURE CONNECTOR J SERIES

## Straight through-hole socket



## Type A



With hexagonal lock screw blocks(H:6.3mm) having a No.4-40UNC inch thread

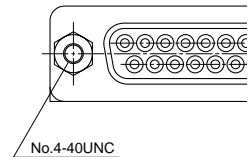
H: Height of the lock screw block (for Types A, B & J)

Circuits	Dimension between flange and solder tail (mm)	Model No.			Dimensions (mm)				Q'ty / box
		Gold-plated (flash) socket	Gold-plated 0.76micron	Tin-plated	A	B	C	D	
9	6	<b>JES-9S-2A**</b>	<b>JES-9S-2A**14</b>	—	16.34	24.99	30.8	2.4	100
	9	<b>JES-9S-3A**</b>	<b>JES-9S-3A**14</b>	—					
	12	<b>JES-9S-4A**</b>	<b>JES-9S-4A**14</b>	—					
25	6	<b>JBS-25S-2A**</b>	<b>JBS-25S-2A**14</b>	<b>JBS-25S-2A**90</b>	38.38	47.04	53.0	2.5	50
	9	<b>JBS-25S-3A**</b>	<b>JBS-25S-3A**14</b>	<b>JBS-25S-3A**90</b>					
	12	<b>JBS-25S-4A**</b>	<b>JBS-25S-4A**14</b>	—					

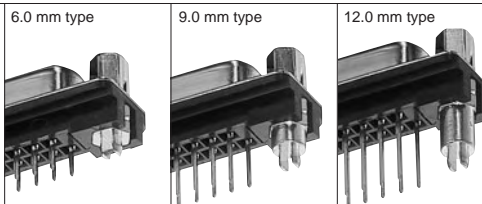
<Gold-plated product> **RoHS compliance** This product displays (LF)(SN) A on a label.

<Tin-plated product> **RoHS compliance** This product displays (LF) A on a label.

Note: \*\* shows the location where a two-digit code (see the table below for codes) should be entered. For example, if a 9-circuit gold-plated (flash) socket with hexagonal lock screw blocks having a No. 4-40UNC inch thread and with grounding adapters whose dimension between flange and solder tail is 6.0mm is required, specify the model number as JES-9S-3A3A.



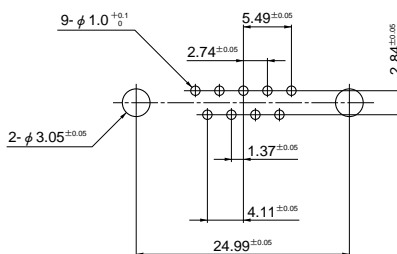
With grounding adapters with a spring lock device



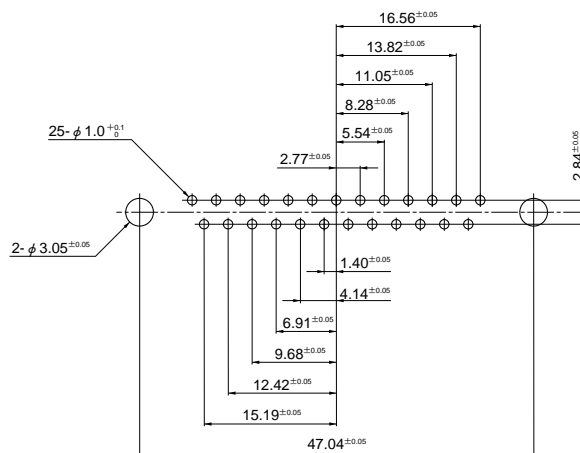
3A

## PC board layout (viewed from component side)

### (9-circuits)








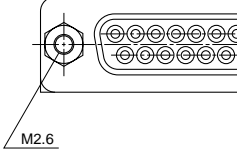
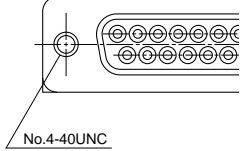
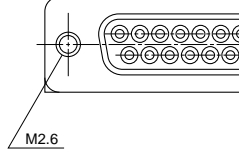
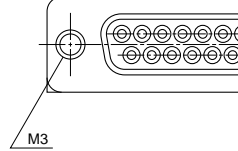
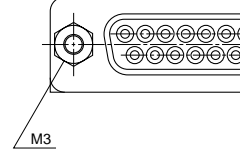
### (25-circuits)



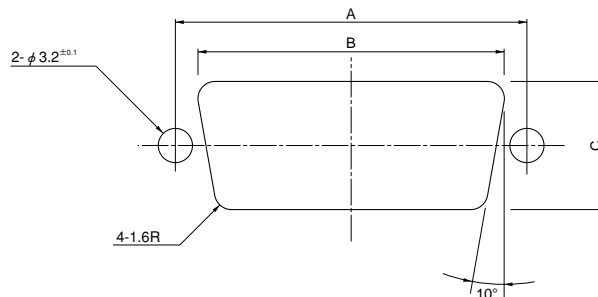
Note: 1. Tolerances are non-cumulative:  $\pm 0.05$ mm for all centers.

2. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.

# D SUBMINIATURE CONNECTOR J SERIES

Type B	Type F	Type G	Type H	Type J
				
With hexagonal lock screw blocks (H: 6.3mm) having an M2.6 thread	Without lock screw blocks F, G, H: Grounding adapters have a thread (*1) for securing separately-purchased lock screw blocks (*2)			With hexagonal lock screw blocks (H: 6.3mm) having an M3 thread
	*1: No.4-40UNC inch thread *2: Model number SFS-4S-( )1W(M)	*1: M2.6 thread *2: Model number SFS-2.6S-( )1W(M)	*1: M3 thread *2: Model number SFS-3S-( )1W(M)	
				
M2.6	No.4-40UNC	M2.6	M3	M3
3B	3F	3G	3H	3J

## Panel layout



Circuits	A $\pm 0.15$	B $\pm 0.2$	C $\pm 0.2$
9	24.99	20.6	12.0
25	47.04	42.6	12.0

Note: The dimensions above should serve as a guideline. Contact JST for details.



# D SUBMINIATURE CONNECTOR J SERIES

## Crimp style plug and socket

### CRIMP STYLE PLUG AND SOCKET



## Features

- The contacts of this plug are formed by high-speed stamping presses into continuous strips that can be automatically fed into our compact crimping machines. Much less time is required to assemble CRT and RS-232C round cables using this plug than when soldering connections.
- The contacts in this connector are selectively gold-plated. Moreover, JST's advanced technological knowledge and

experience are fully utilized to significantly reduce production costs.

- The dimples in the connector shell provide the ground connection and are important factors in preventing electromagnetic interference. The contact has a lance that can be visually checked during assembly. This assures accurate assembly and reduces defects.

## Specifications

### Materials

Connector	Part name	Material and Finish
Plug	Contact	Brass, gold-plated product: Nickel-undercoated, Mating part: gold-plated Crimping part: tin-plated (reflow treatment) tin-plated product: tin-plated (reflow treatment)
	Insulator	Glass-filled PBT, UL94V-0, black
	Shell	Steel, copper-undercoated, nickel-plated
Socket	Contact	Phosphor bronze, nickel-undercoated, Mating part: gold-plated Crimping part: tin-plated (reflow treatment)
	Insulator	Glass-filled PBT, UL94-0, black
	Shell	Steel, copper-undercoated, nickel-plated

### Characteristics

Current rating	3A, AC, DC (2A for 37-circuits)(AWG #20)
Voltage rating	250V AC, DC
Temperature range	-40°C to +85°C (including temperature rise in applying electrical current)
Contact resistance	Initial value/15mΩ max. After environmental testing/30mΩ max.
Insulation resistance	5,000MΩ min.
Withstanding voltage	1,000V AC/minute

Note: Contact JST for details.

### Model number identification

<p><b>Contact</b></p> <p>• Series name <b>J - S P 2 1 40</b></p> <p>• Product shape: S ... Chain, B ... Loose piece</p> <p>• Type of contact: P ... Pin contact, S ... Socket contact</p> <p>• Applicable wire: 1 ... AWG #24 to #20, 2 ... AWG #28 to #24</p> <p>• Material: 1 ... Brass(Pin contact), 3 ... Phosphor bronze(Socket contact)</p> <p>• Finish 40 ... Gold-plated (flash), 42 ... 0.2micron gold-plated 43 ... 0.4micron gold-plated, 44 ... 0.76micron gold-plated, 90 ... Tin-plated (reflow treatment)</p> <p>Note: Contact JST for special plating requirements.</p>
<p><b>Housing</b></p> <p>• Series name <b>J E C - 9 P - 3</b></p> <p>• Shell size: E, A, B, C</p> <p>• Wire connection style: C ... crimp style</p> <p>• Number of circuits: 9, 15, 25, 37</p> <p>• Connector style: P ... Plug, S ... Socket</p> <p>• Plating specification of shell: 3 ... nickel-plated</p> <p>Note: The relationship between number of circuits and shell size is shown below. 9: E, 15: A, 25: B, 37: C</p>

## Standards

Recognized E60389

Certified LR20812

\* RoHS compliant products are published.

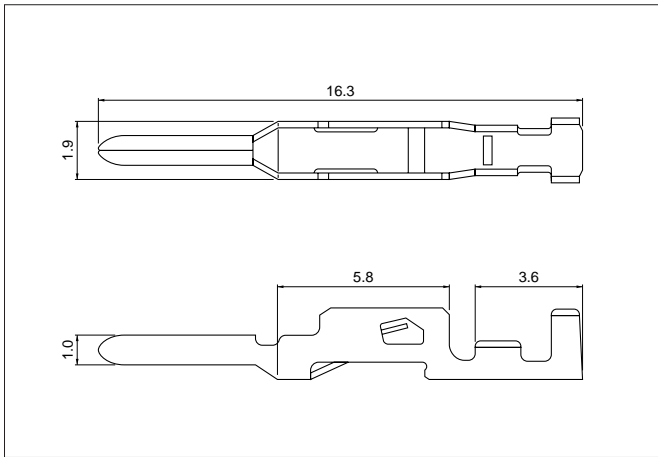
\* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.

\* Contact JST for details.

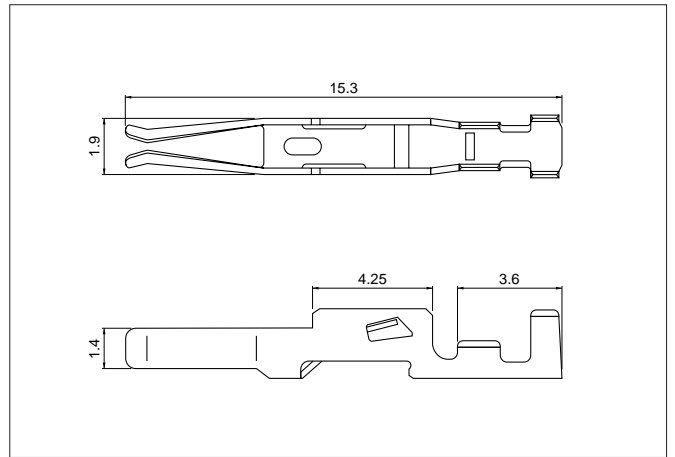


# D SUBMINIATURE CONNECTOR J SERIES

## Pin contact (for plug housing)



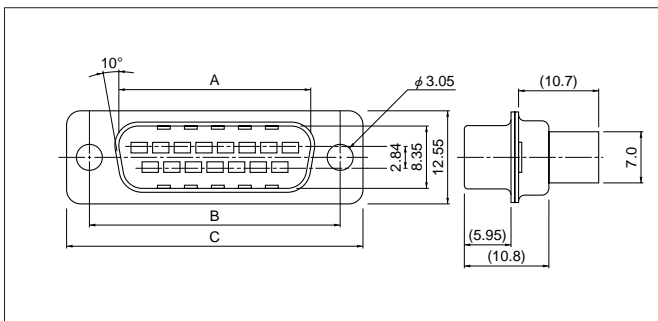
## Socket contact (for socket housing)



Model No.			Applicable wire		Q'ty / reel
Pin contact		Socket contact	AWG #	Insulation O.D. (mm)	
Gold-plated	Tin-plated	Gold-plated			
<b>J-SP1140</b>	<b>J-SP1190</b>	<b>J-SS1340</b>	# 24 ~ # 20	1.1 ~ 1.8	
<b>J-SP2140</b>	<b>J-SP2190</b>	<b>J-SS2340</b>	# 28 ~ # 24	0.9 ~ 1.3	

**RoHS compliance** Gold-plated products display (LF)(SN) on a label.

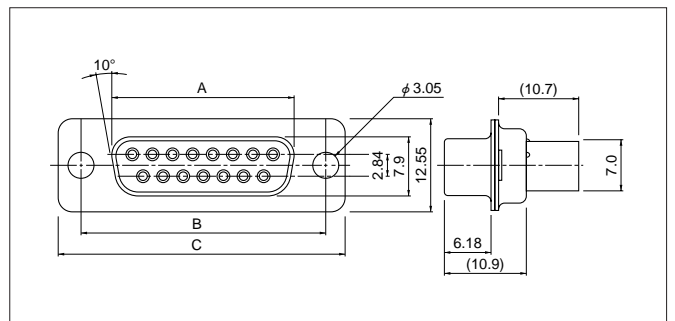
## Plug housing



Cir- cuits	Model No.	Dimensions (mm)			Q'ty / box
		A	B	C	
9	<b>JEC-9P-3</b>	16.92	24.99	30.80	100
15	<b>JAC-15P-3</b>	25.25	33.32	39.14	100
25	<b>JBC-25P-3</b>	38.97	47.04	53.04	50
37	<b>JCC-37P-3</b>	55.43	63.50	69.32	50

**RoHS compliance**

## Socket housing



Cir- cuits	Model No.	Dimensions (mm)			Q'ty / box
		A	B	C	
9	<b>JEC-9S-3</b>	16.34	24.99	30.80	100
15	<b>JAC-15S-3</b>	24.67	33.33	39.14	100
25	<b>JBC-25S-3</b>	38.38	47.04	53.04	50

**RoHS compliance**

## Crimping machine, Applicator

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>J-SP1***</b>	AP-K2N	MKS-L	MK/J-SP/SS1	APLMK J-SP/SS1
		*MKS-SC	SC/J-SP/SS1	APLSC J-SP/SS1
<b>J-SS1***</b>		MKS-L	MK/J-SP/SS1	APLMK J-SP/SS1
		*MKS-SC	SC/J-SP/SS1	APLSC J-SP/SS1
<b>J-SP2***</b>		MKS-L	MK/J-SP/SS2	APLMK J-SP/SS2
		*MKS-SC	SC/J-SP/SS2	APLSC J-SP/SS2
<b>J-SS2***</b>		MKS-L	MK/J-SP/SS2	APLMK J-SP/SS2
		*MKS-SC	SC/J-SP/SS2	APLSC J-SP/SS2

Note: \*Strip-crimp applicator



# D SUBMINIATURE JH SERIES

Right angle through-hole plug and socket

RIGHT ANGLE THROUGH-HOLE PLUG AND SOCKET



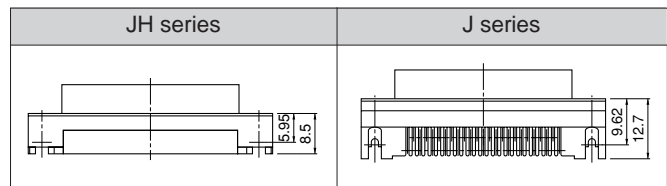
Right angle through-hole plug (with hexagonal lock screw blocks)



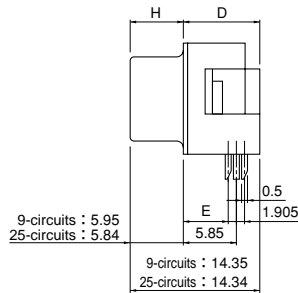
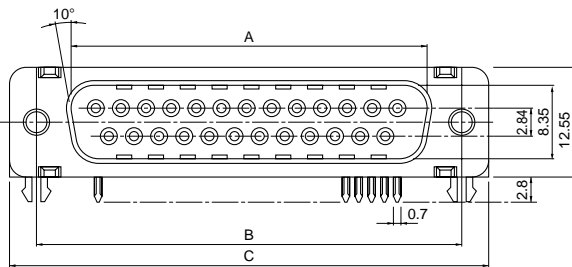
Right angle through-hole socket (without lock screw blocks, but with grounding adapters having a No.4-40UNC inch thread)

## Features

- The depth is trimmed to 8.5mm, reducing the surface mounting area by 33% compared with our J series subminiature connectors.
- The weight of the JH series is 10% lighter than our J series.
- EJH series D subminiature connectors with noise filters are available.



## Right angle through-hole plug



H: Height of the lock screw block (for Types A, B & J)

Cir-cuits	Model No.		Dimensions (mm)					Q'ty / box
	Gold-plated (flash) plug	Gold-plated 0.76micron	A	B	C	D	E	
9	<b>JHEY-9P-1A**</b>	<b>JHEY-9P-1A**14</b>	16.90	24.99	30.8	8.4	4.9	100
25	<b>JHBY-25P-1A**</b>	<b>JHBY-25P-1A**14</b>	38.97	47.04	53.0	8.5	5.0	40

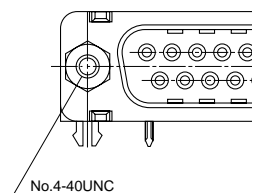
**RoHS compliance** This product displays (LF)(SN) on a label.

Note: \*\* shows the location where a two-digit code (see the table below for codes) should be entered. For example, if a gold-plated (flash) receptacle with hexagonal lock screw blocks having a No. 4-40UNC inch thread and with grounding adapters having a spring lock device is required, specify the model number as JHEY-9P-1A3A.

## Type A



With hexagonal lock screw blocks (H: 6.3mm) having a No.4-40UNC inch thread



With grounding adapters with a spring lock device



3A

# D SUBMINIATURE CONNECTOR JH SERIES

## Specifications

### Materials

Part name		Material and Finish
Contact	Plug	Brass, nickel-undercoated, Mating part: gold-plated Solder tail; tin-plated (reflow treatment)
	Socket	Phosphor bronze, nickel-undercoated, Mating part: gold-plated Solder tail; tin-plated (reflow treatment)
Insulator		Glass-filled PBT, UL94V-0, black
Shell		Steel, copper-undercoated, nickel-plated
Hexagonal lock screw block		Steel, copper-undercoated, nickel-plated
Grounding adapter with spring lock device		Brass, nickel-undercoated, tin/copper alloy-plated

### Characteristics

Current rating	3A AC, DC
Voltage rating	250V AC, DC
Temperature range	-40°C to +85°C (including temperature rise in applying electrical current)
Contact resistance	Initial value/15mΩ max. After environmental testing/30mΩ max.
Insulation resistance	5,000MΩ min.
Withstanding voltage	1,000V AC/minute
Applicable PC board thickness	1.6mm

Note: Contact JST for details.

## Standards

Recognized E60389 Certified LR20812

### Model number identification

	JH	B	Y	-	25	P	-	1A	3	F	14
• Series name	JH B		Y		25	P	-	1A		3	F 14
• Shell size: E, B	B										
• Wire connection type: Y ... Right angle through-hole type	Y										
• Number of circuits: 9,25	25										
• Connector type: P ... Plug, S ... Socket	P										
• Connector construction/dimensions: Standard of the JH series right angle through-hole type											
• Types of grounding adapter: 3 ... With grounding adapters having a spring lock device	3										
• Type of lock screw block: A ... With hexagonal lock screw blocks having a No. 4-40UNC inch thread B ... With hexagonal lock screw blocks having an M2.6 thread F ... Without lock screw blocks, but with grounding adapters having a No.4-40UNC inch thread G ... Without lock screw blocks, but with grounding adapters having an M2.6 thread H ... Without lock screw blocks, but with grounding adapters having an M3 thread J ... With hexagonal lock screw blocks having an M3 thread	F										
• Finish of mating part Blank ... Gold-plated (flash) 12 ... 0.2micron gold-plated 13 ... 0.4micron gold-plated 14 ... 0.76micron gold-plated	14										

Note: Contact JST for special plating requirements.

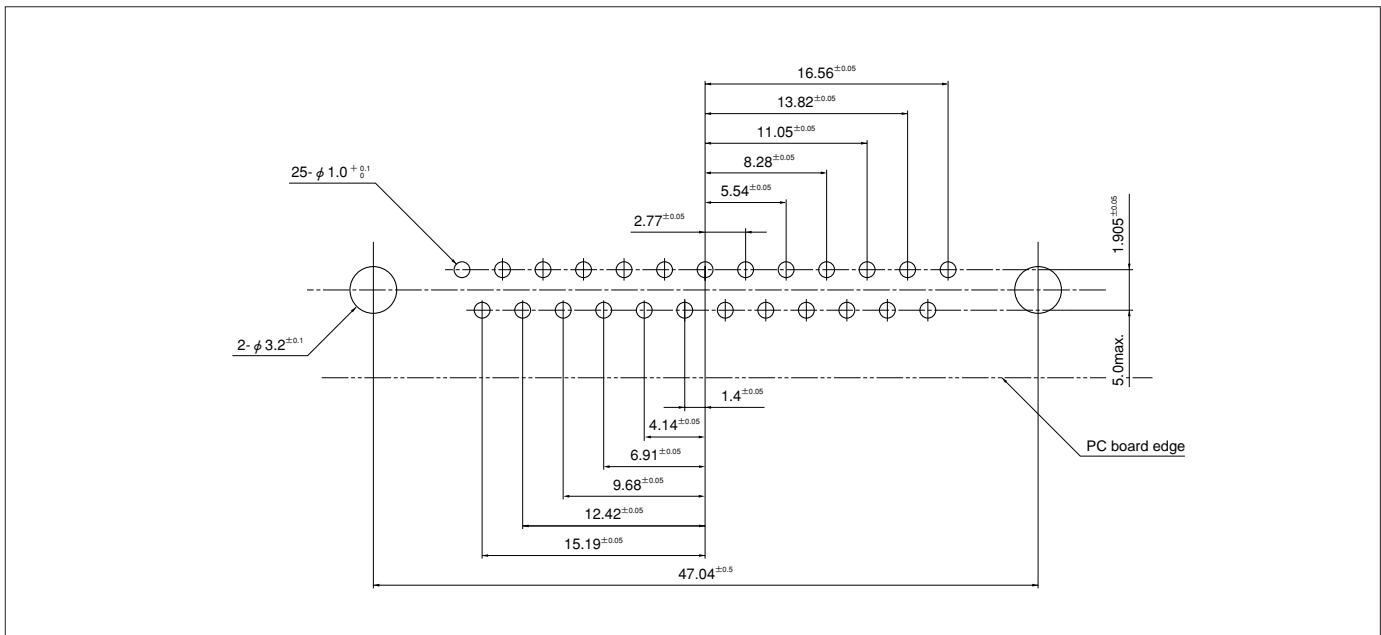
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

Type B	Type F	Type G	Type H	Type J
With hexagonal lock screw blocks (H: 6.3mm) having an M2.6 thread	Without lock screw blocks F, G, H: Grounding adapters have a thread (*1) for securing separately-purchased lock screw blocks (*2)			With hexagonal lock screw blocks (H: 6.3mm) having an M3 thread
	*1: No.4-40UNC inch thread *2: Model number HFS-4S-( )1W(M)	*1: M2.6 thread *2: Model number HFS-2.6S-( )1W(M)	*1: M3 thread *2: Model number HFS-3S-( )1W(M)	
<b>3B</b>	<b>3F</b>	<b>3G</b>	<b>3H</b>	<b>3J</b>

# D SUBMINIATURE CONNECTOR JH SERIES






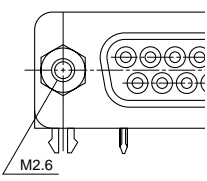
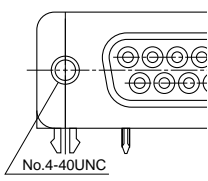
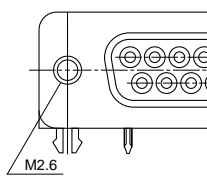
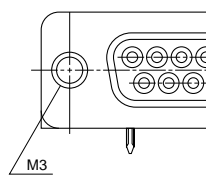
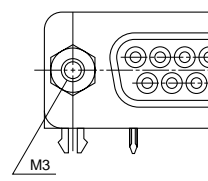
Right angle through-hole socket		Type A						
		<p>With hexagonal lock screw blocks (H: 6.3mm) having a No.4-40UNC inch thread</p>						
<p>H: Height of the lock screw block (for Types A, B &amp; J)</p>								
Cir- cuits	Model No.		Dimensions (mm)					Q'ty / box
	Gold-plated (flash) socket	Gold-plated [0.76micron] socket	A	B	C	D	E	
9	<b>JHEY-9S-1A**</b>	<b>JHEY-9S-1A**14</b>	16.34	24.99	30.8	8.4	4.9	100
25	<b>JHBY-25S-1A**</b>	<b>JHBY-25S-1A**14</b>	38.38	47.04	53.0	8.5	5.0	40
<p><b>RoHS compliance</b> This product displays (LF)(SN) on a label.            Note: ** shows the location where a two-digit code (see the table below for codes) should be entered. For example, if a 9-circuit gold-plated (flash) socket with hexagonal lock screw blocks having a No. 4-40UNC inch thread and with grounding adapters having a spring lock device is required, specify the model number as JHEY-9S-1A3A.</p>								
<p>With grounding adapters with a spring lock device</p>			<h2>3A</h2>					

## PC board layout (viewed from component side)

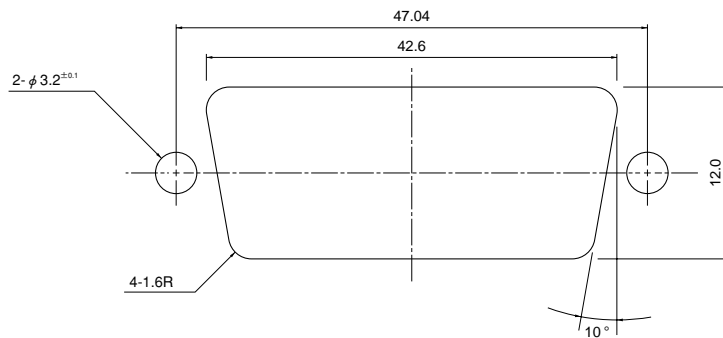


Note: 1. Tolerances are non-cumulative:  $\pm 0.05\text{mm}$  for all centers.  
 2. Hole dimensions differ according to the kind of PC board and piercing method.  
 The dimensions above should serve as a guideline. Contact JST for details.

# D SUBMINIATURE CONNECTOR JH SERIES

Type B	Type F	Type G	Type H	Type J
				
With hexagonal lock screw blocks (H: 6.3mm) having an M2.6 thread	Without lock screw blocks F, G, H: Grounding adapters have a thread (*1) for securing separately-purchased lock screw blocks (*2)			With hexagonal lock screw blocks (H: 6.3mm) having an M3 thread
	*1: No.4-40UNC inch thread *2: Model number HFS-4S-( )1W(M) 	*1: M2.6 thread *2: Model number HFS-2.6S-( )1W(M) 	*1: M3 thread *2: Model number HFS-3S-( )1W(M) 	
3B	3F	3G	3H	3J

## Panel layout



Note: The dimensions above should serve as a guideline. Contact JST for details.



# D SUBMINIATURE JK SERIES

**Crimp style plug and socket**

## CRIMP STYLE PLUG AND SOCKET



Crimp style plug

Pin contact



Crimp style socket

Socket contact

## Features

- The dimples in the shell provide the ground connection and are an important factor in preventing electromagnetic interference.
- The contact has a retention lance that makes assembly to the housing smooth and secure.

## Standards

UL Recognized E60389    CE Certified LR20812

- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Specifications

### Materials

Connector	Part name	Material and Finish
Plug	Contact	Brass, nickel-undercoated, Mating part; gold-plated Crimping part; tin-plated (reflow treatment)
	Insulator	Glass-filled PBT, UL94V-0, black
	Shell	Steel, copper-undercoated, nickel-plated
Socket	Contact	Phosphor bronze, nickel-undercoated, Mating part; gold-plated Crimping part; tin-plated (reflow treatment)
	Insulator	Glass-filled PBT, UL94-0, black
	Shell	Steel, copper-undercoated, nickel-plated

### Characteristics

Current rating	1.0A, AC, DC(AWG #24)
Voltage rating	250V AC, DC
Temperature range	-40°C to +85°C (including temperature rise in applying electrical current)
Contact resistance	Initial value/15mΩ max. After environmental testing/30mΩ max.
Insulation resistance	5,000MΩ min.
Withstanding voltage	1,000V AC/minute

Note: Contact JST for details.

### Model number identification

#### Contact

- JK - S P 2 1 40**
- Series name
  - Product shape: S ... Chain, B ... Loose piece
  - Type of contact: P ... Pin contact, S ... Socket contact
  - Applicable wire: 2 ... AWG #28 to #24
  - Material: 1 ... Brass(Pin contact), 3 ... Phosphor bronze(Socket contact)
  - Finish of mating part  
40 ... Gold-plated (flash)      42 ... 0.2micron gold-plated  
43 ... 0.4micron gold-plated    43 ... 0.76micron gold-plated

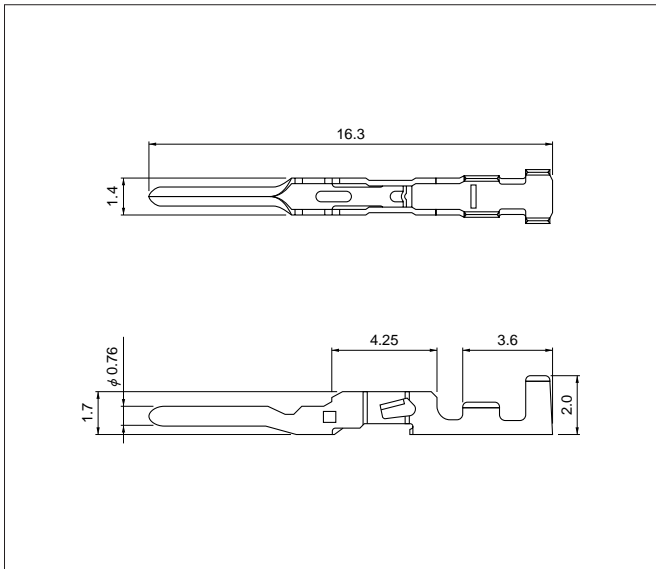
Note: Contact JST for special plating requirements.

#### Housing

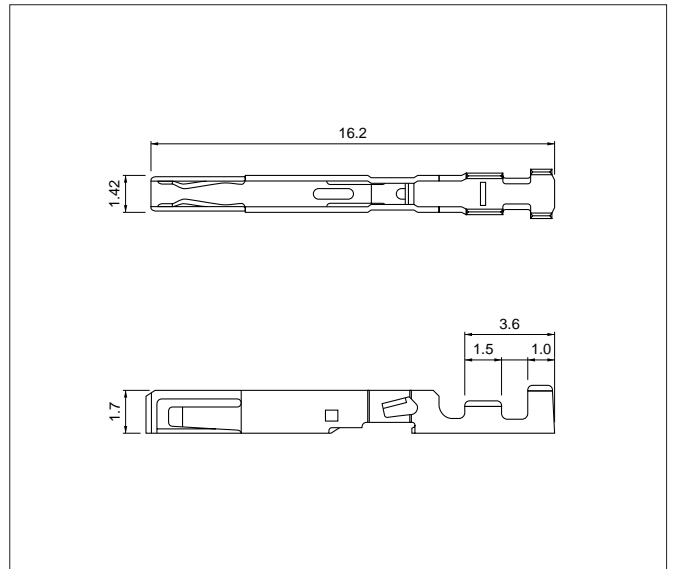
- K E C - 15 P - 3**
- Series name
  - Shell size: E
  - Wire connection style: C ... Crimp style
  - Number of circuits: 15
  - Connector type: P ... Plug, S ... Socket
  - Plating specification of shell: 3 ... Copper-undercoated, nickel-plated

# D SUBMINIATURE CONNECTOR JK SERIES

## Pin contact (for plug housing)



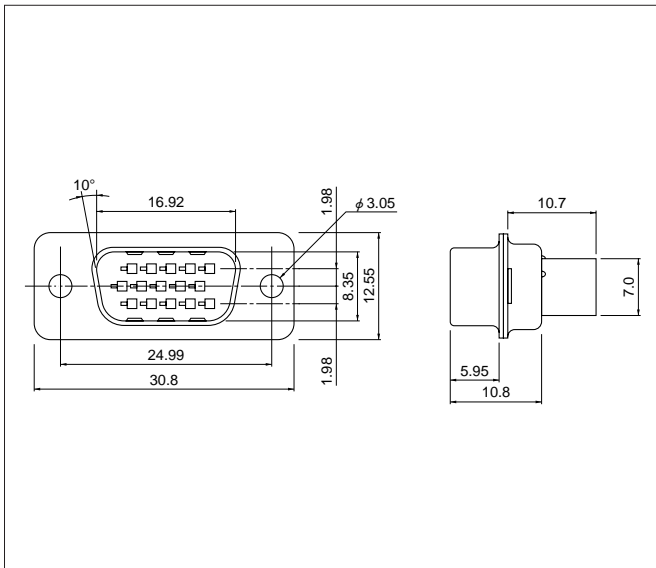
## Socket contact (for socket housing)



Model No.		Finish at mating part	Applicable wire		Q'ty / box
Pin contact	Socket contact		AWG #	Insulation O.D. (mm)	
<b>JK-SP2140</b>	<b>JK-SS2340</b>	Gold-plated (flash)	28 ~ 24	0.9 ~ 1.4	10,000
<b>JK-SP2144</b>	<b>JK-SS2344</b>	Gold-plated 0.76micron			

**RoHS compliance** This product displays (LF)(SN) on a label.

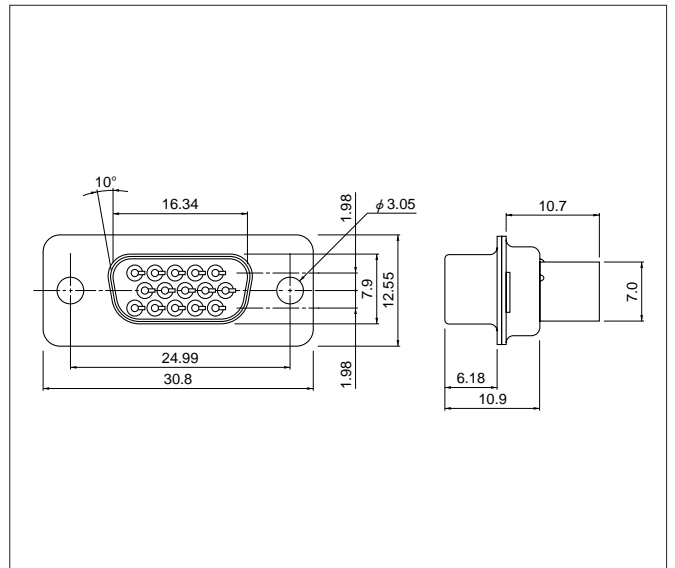
## Plug housing



Circuits	Model No.	Q'ty / box
15	<b>KEC-15P-3</b>	100

**RoHS compliance**

## Receptacle housing



Circuits	Model No.	Q'ty / box
15	<b>KEC-15S-3</b>	100

**RoHS compliance**

## Crimping machine, Applicator

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>J-SP2***</b>	AP-K2N	MKS-L	MK/JK-SP/SS2	APLMK JK-SP/SS2
		*MKS-SC-JK	SC/JK-SP/SS2	APLSC JK-SP/SS2
<b>J-SS2***</b>		MKS-L	MK/JK-SP/SS2	APLMK JK-SP/SS2
		*MKS-SC-JK	SC/JK-SP/SS2	APLSC JK-SP/SS2

Note: \*Strip-crimp applicator



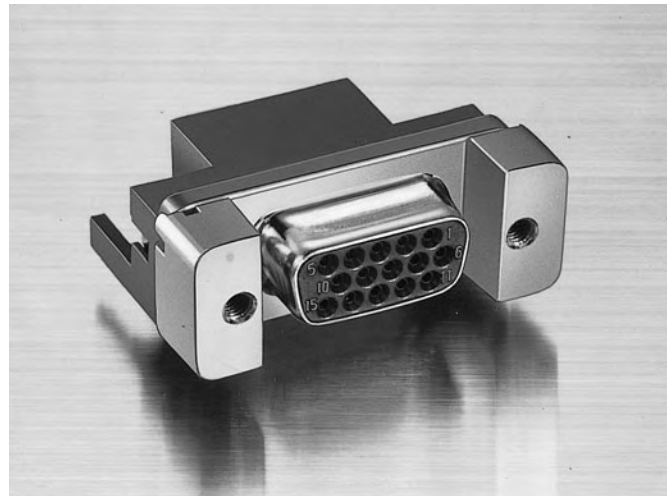
# D SUBMINIATURE JK SERIES

Right angle through-hole plug and socket

## RIGHT ANGLE THROUGH-HOLE SOCKET



(with hexagonal lock screw blocks)



(with rectangular lock screw blocks)

## Features

- The mating section of the contact has a twin-contact style construction with uniform elasticity to ensure a reliable contact even when repeatedly mated and unmated.

- A wide variety of grounding adapters are available so that the receptacle can be grounded to the circuitry of a printed circuit board to prevent electromagnetic interference.

## Standards

Recognized E60389 Certified LR20812

- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Specifications

### Materials

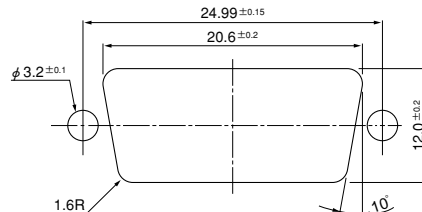
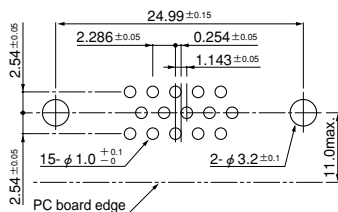
Part name	Material and Finish
Contact	Phosphor bronze, nickel-undercoated, Mating part; gold-plated Solder tail; tin-plated (reflow treatment)
Insulator	Glass-filled PBT, UL94V-0, black
Shell	Steel, copper-undercoated, nickel-plated
Grounding adapter having a 3.2mm dia. hole	Steel, copper-undercoated, nickel-plated
Grounding adapter having an M3 tapped hole	Steel, copper-undercoated, nickel-plated
Grounding adapter having a spring lock device	Brass, nickel-undercoated, tin/copper alloy-plated

### Characteristics

Current rating	1.0A, AC, DC
Voltage rating	250V AC, DC
Temperature range	-40°C to +85°C (including temperature rise in applying electrical current)
Contact resistance	Initial value/15mΩ max. After environmental testing/30mΩ max.
Insulation resistance	5,000MΩ min.
Withstanding voltage	1,000V AC/minute
Applicable PC board thickness	1.6mm

Note: Contact JST for details.

## PC board layout (viewed from component side)



- Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.  
 2. Hole dimensions differ according to the kind of PC board and piercing method.  
 The dimensions above should serve as a guideline. Contact JST for details.



# D SUBMINIATURE CONNECTOR JK SERIES

## Model number identification







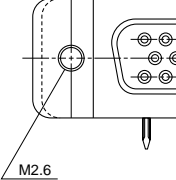
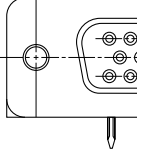
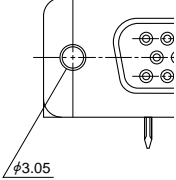
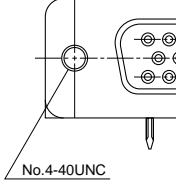
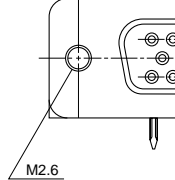
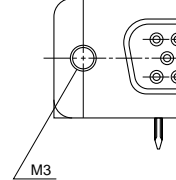
	K	E	Y	-	15	S	-	2A	3	A	14	-	23
• Series name													
• Shell size: E													
• Wire connection type: Y ... Right angle through-hole style													
• Number of circuits: 15													
• Connector type: S ... Socket													
• Connector construction/Dimensions: Standard of the series													
• Types of grounding adapters 0 ... Without grounding adapters 1 ... With grounding adapters having a 3.2mm dia. hole 2 ... With grounding adapters having an M3 thread 3 ... With grounding adapters having a spring lock device (1) 4 ... With grounding adapters having a spring lock device (2)													
• Types of lock screw blocks A ... With hexagonal lock screw blocks having a No. 4-40UNC inch thread B ... With hexagonal lock screw blocks having an M2.6 thread C ... With rectangular lock screw blocks having an M2.6 thread D ... Without lock screw blocks E ... Without lock screw blocks, but with grounding adapters having a 3.05mm dia. hole F ... Without lock screw blocks, but with grounding adapters having a No. 4-40UNC inch thread G ... Without lock screw blocks, but with grounding adapters having an M2.6 thread H ... Without lock screw blocks, but with grounding adapters having an M3 thread													
• Finish of mating part Blank ... Gold-plated (flash)                      12 ... 0.2micron gold-plated 13 ... 0.4micron gold-plated                      14 ... 0.76micron gold-plated													
• Blocked hole for keying ... Blank: all holes open, 23: #9 hole blocked													

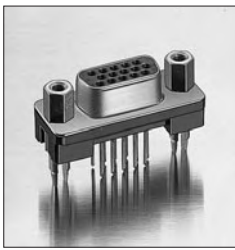
*Note: Contact JST for special plating requirements.*

# D SUBMINIATURE CONNECTOR JK SERIES

Right angle through-hole socket		Type A	Type B										
<p>H: Height of the lock screw block (for Types A, B &amp; C)</p> <table border="1"> <thead> <tr> <th rowspan="2">Cir- cuits</th> <th colspan="2">Model No.</th> <th rowspan="2">Q'ty / box</th> </tr> <tr> <th>Gold-plated (flash) socket</th> <th>Gold-plated (0.76micron) socket with No.9 hole blocked</th> </tr> </thead> <tbody> <tr> <td>15</td> <td><b>KEY-15S-2A**</b></td> <td><b>KEY-15S-2A**14-23</b></td> <td>100 (☆)</td> </tr> </tbody> </table> <p><b>RoHS compliance</b> This product displays (LF)(SN) on a label.            Note: ** shows the location where a two-digit code (see the table below for codes) should be entered. For example, if a 15-circuit gold-plated (flash) socket with hexagonal lock screw blocks having a No. 4-40UNC inch thread and without grounding adapters is required, specify the model number as KEY-15S-2A0A. (☆) Type C...60</p>		Cir- cuits	Model No.		Q'ty / box	Gold-plated (flash) socket	Gold-plated (0.76micron) socket with No.9 hole blocked	15	<b>KEY-15S-2A**</b>	<b>KEY-15S-2A**14-23</b>	100 (☆)		
Cir- cuits	Model No.		Q'ty / box										
	Gold-plated (flash) socket	Gold-plated (0.76micron) socket with No.9 hole blocked											
15	<b>KEY-15S-2A**</b>	<b>KEY-15S-2A**14-23</b>	100 (☆)										
Without grounding adapters		0A	0B										
With grounding adapters with a 3.2mm dia. hole			1A 1B										
With grounding adapters with an M3 thread			2A 2B										
With grounding adapters with a spring lock lever (1)			3A 3B										
With grounding adapters with a spring lock device (2)		—	—										

# D SUBMINIATURE CONNECTOR JK SERIES

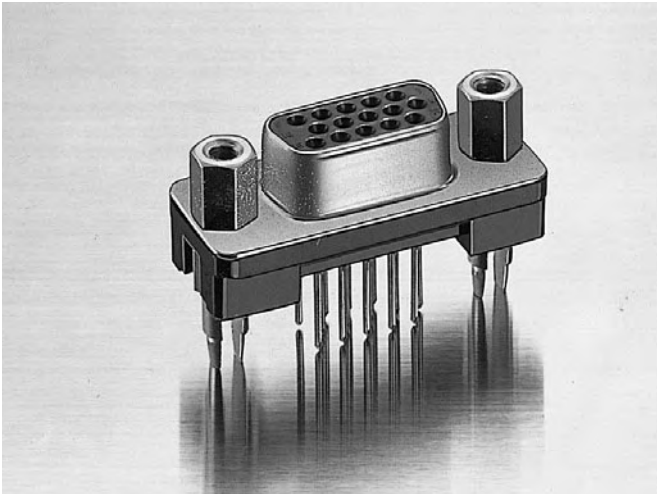
Type C	Type D	Type E	Type F	Type G	Type H
					
With rectangular lock screw blocks (H: 6.2mm) having an M2.6 thread	Without lock screw blocks	Without lock screw blocks E: Grounding adapter has no thread. F, G, H: Grounding adapters have a thread (*1) for securing separately-purchased lock screw blocks (*2)			
		Used a lock screw block [model number KFS-( )S-C1N]	*1: No.4-40UNC inch thread *2: Model number KFS-4S-( )1W(M)	*1: M2.6 thread *2: Model number KFS-2.6S-( )1W(M)	*1: M3 thread *2: Model number KFS-3S-( )1W(M)
					
0C	0D	—	—	—	—
1C	1D	1E	1F	1G	—
2C	2D	2E	2F	2G	—
3C	3D	3E	3F	3G	—
—	—	—	—	—	4H



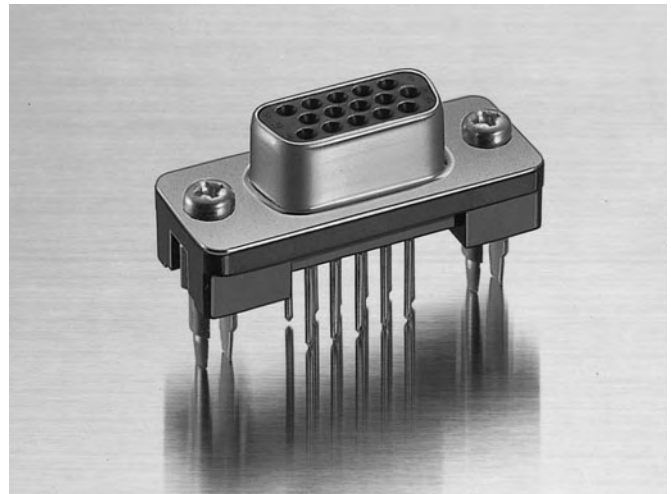
# D SUBMINIATURE JK SERIES

**Straight through-hole socket**

STRAIGHT THROUGH-HOLE SOCKET



(with hexagonal lock screw blocks)

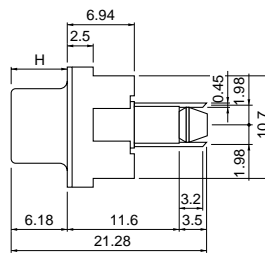
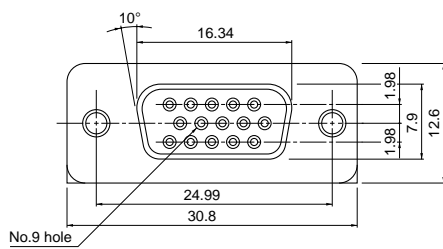


(without lock screw blocks)

## Features

- The mating section of the contact has a twin-contact style construction with uniform elasticity to ensure a reliable contact even when repeatedly mated and unmated.
- A grounding adapter with a spring lock device allows the connector to be temporarily secured on the printed circuit board so that the connector can be soldered easily.

### Straight through-hole socket



H: Height of the lock screw block (for Types A & B)

Cir- cuits	Model No.		Q'ty / box
	Gold-plated (flash) socket	Gold-plated (0.76micron)socket with No.9 hole blocked	
15	<b>KES-15S-2A**</b>	<b>KES-15S-2A**14-23</b>	100

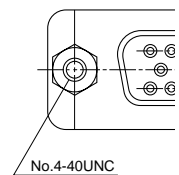
**RoHS compliance** This product displays (LF)(SN) A on a label.

Note: \*\* shows the location where a two-digit code (see the table below for codes) should be entered. For example, if a 15-circuits gold-plated (flash) socket with hexagonal lock screw blocks having a No. 4-40UNC inch thread and with grounding adapters having a spring lock device is required, specify the model number as KES-15S-2A3A.

### Type A



With hexagonal lock screw blocks (H: 6.3mm) having a No.4-40UNC inch thread



With grounding adapters with a spring lock device



3A

# D SUBMINIATURE CONNECTOR JK SERIES

## Standards

Recognized E60389 Certified LR20812

- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Specifications

### Materials

Part name	Material and Finish
Contact	Phosphor bronze, nickel-undercoated, Mating part: gold-plated Solder tail: tin-plated (reflow treatment)
Insulator	Glass-filled PBT, UL94V-0, black
Shell	Steel, copper-undercoated, nickel-plated
Grounding adapter	Brass, nickel-undercoated, tin/copper alloy-plated

### Characteristics

Current rating	1.0A, AC, DC
Voltage rating	250V AC, DC
Temperature range	-40°C to +85°C (including temperature rise in applying electrical current)
Contact resistance	Initial value/15mΩ max. After environmental testing/30mΩ max.
Insulation resistance	5,000MΩ min.
Withstanding voltage	1,000V AC/minute
Applicable PC board thickness	1.6mm

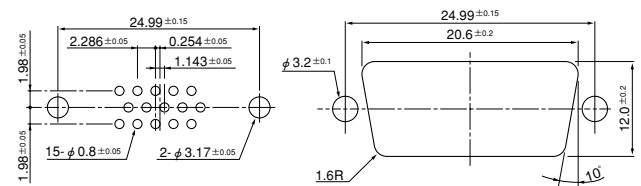
Note: Contact JST for details.

### Model number identification

Series name	K E S - 15 S - 2A 3 A 14 - 23
Shell size: E	
Wire connection type: S ... Straight through-hole type	
Number of circuits: 15	
Connector type: S ... Socket	
Connector construction/dimensions: Standard JK series straight through-hole type	
Type of grounding adapters 3 ... With grounding adapters having a spring lock device	
Type of lock screw blocks	
A ... With hexagonal lock screw blocks having a No. 4-40UNC inch thread	
B ... With hexagonal lock screw blocks having an M2.6 thread	
D ... Without lock screw blocks	
F ... Without lock screw blocks, but with grounding adapters having a No. 4-40UNC inch thread	
G ... Without lock screw blocks, but with grounding adapters having an M2.6 thread	
H ... Without lock screw blocks, but with grounding adapters having an M3 thread	
Finish of mating part	
Blank ... Gold-plated (flash)	12 ... 0.2micron gold-plated
13 ... 0.4micron gold-plated	14 ... 0.76micron gold-plated
Blocked hole for keying ... Blank: all holes open, 23: #9 hole blocked	

Note: Contact JST for special plating requirements.

### PC board layout (viewed from component side) and Panel layout



- Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.  
2. Hole dimensions differ according to the kind of PC board and piercing method.  
The dimensions above should serve as a guideline. Contact JST for details.

Type B	Type D	Type F	Type G	Type H
With hexagonal lock screw blocks (H: 6.3mm) having an M2.6 thread	Without lock screw blocks	Without lock screw blocks F, G, H: Grounding adapters have a thread (*1) for securing separately-purchased lock screw blocks (*2)		
		*1: No.4-40UNC inch thread *2: Model number JFS-4S-( )1W(M)	*1: M2.6 thread *2: Model number JFS-2.6S-( )1W(M)	*1: M3 thread *2: Model number JFS-3S-( )1W(M)
3B	3D	3F	3G	3H



# D SUBMINIATURE KH SERIES

Right angle through-hole socket

RIGHT ANGLE THROUGH-HOLE SOCKET



(with hexagonal lock screw blocks)



(without lock screw blocks, but with grounding adapters having a No.4-40UNC inch thread)

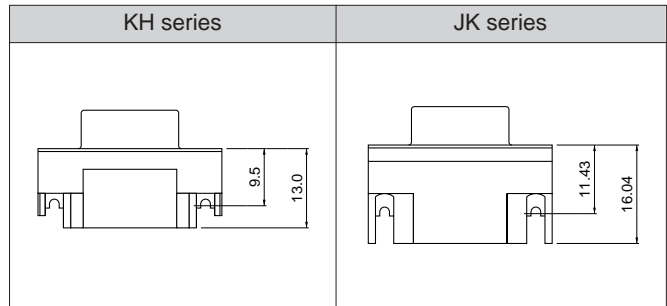
## Features

- The depth is trimmed to 13.0mm, reducing the surface mounting area by 20% compared with our JK series subminiature connectors.

\* RoHS compliant products are published.

\* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.

\* Contact JST for details.



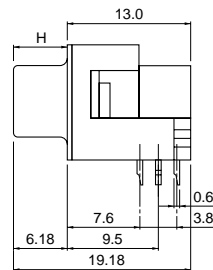
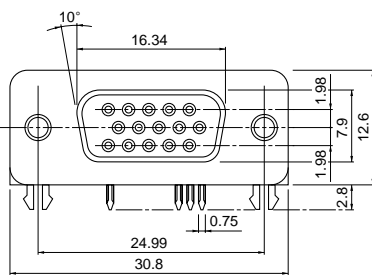
## Standards

Recognized E60389

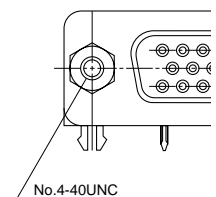
Certified LR20812

Right angle through-hole socket

Type A



With hexagonal lock screw blocks(H:6.3mm) having a No.4-40UNC inch thread



H: Height of the lock screw block (for Types A, B & J)

Cir- cuits	Model No.		Q'ty / box
	Gold-plated (flash) receptacle	Gold-plated (0.76micron) receptacle	
15	<b>KHEY-15S-1A**</b>	<b>KHEY-15S-1A**14</b>	100

**RoHS compliance** This product displays (LF)(SN) A on a label.

Note: \*\* shows the location where a two-digit code (see the table below for codes) should be entered. For example, if a 15-circuit gold-plated (flash) socket with hexagonal lock screw blocks having a No.4-40UNC inch thread and with grounding adapters having a spring lock device is required, specify the model number as KHEY-15S-1A3A.

With grounding adapters with a spring lock device



3A

# D SUBMINIATURE CONNECTOR KH SERIES

## Specifications

### Materials

Part name	Material and Finish
Contact	Phosphor bronze, nickel-undercoated, Mating part: gold-plated Solder tail: tin-plated (reflow treatment)
Insulator	Glass-filled PBT, UL94-0, black
Shell	Steel, copper-undercoated, nickel-plated
Grounding adapter with spring lock device	Brass, nickel-undercoated, tin/copper alloy-plated

### Characteristics

Current rating	1.0A,AC,DC
Voltage rating	250V,AC,DC
Temperature range	-40°C to +85°C (including temperature rise in applying electrical current)
Contact resistance	Initial value/15mΩ max. After environmental testing/30mΩ max.
Insulation resistance	5,000MΩ min.
Withstanding voltage	AC1,000V/minute
Applicable PC board thickness	1.6mm

\*Contact JST for details.

### Model number identification

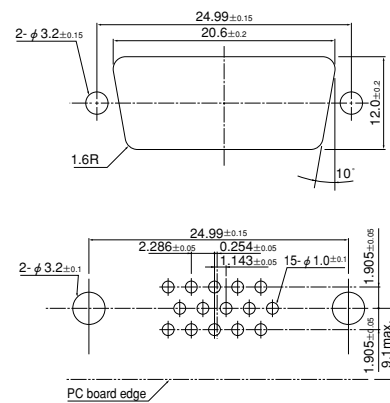
**KH E Y - 15 S - 1A 3 A 14**

- Series name
- Shell size: E
- Wire connection type:  
Y ... Right angle through-hole type
- Number of circuits: 15
- Connector type: S ... Socket
- Connector construction/dimensions:  
Standard KH series right angle through-hole type
- Types of grounding adapter:  
3 ... With grounding adapters having a spring lock device
- Type of lock screw block:
  - A ... With hexagonal lock screw blocks having a No. 4-40UNC inch thread
  - B ... With hexagonal lock screw blocks having an M2.6 thread
  - F ... Without lock screw blocks, but with grounding adapters having a No. 4-40UNC inch thread
  - G ... Without lock screw blocks, but with grounding adapters having an M2.6 thread
  - H ... Without lock screw blocks, but with grounding adapters having an M3 thread
  - J ... With hexagonal lock screw blocks having an M3 thread
- Finish of mating part
 

Blank ... Gold-plated (flash)	12 ... 0.2micron gold-plated
13 ... 0.4micron gold-plated	14 ... 0.76micron gold-plated

Note: Contact JST for special requirements.

### PC board layout (viewed from component side) and Panel layout



Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.  
2. Hole dimensions differ according to the kind of PC board and piercing method.  
The dimensions above should serve as a guideline. Contact JST for details.

Type B	Type D	Type F	Type G	Type H
With hexagonal lock screw blocks(H:6.3mm) having an M2.6 thread	Without lock screw blocks F, G, H: Grounding adapters have a thread (*1) for securing separately-purchased lock screw blocks (*2)			With hexagonal lock screw blocks(H:6.3mm) having an M3 thread
	*1: No.4-40UNC inch thread *2: Model number HFS-4S-( )1W(M)	*1: M2.6 thread *2: Model number HFS-2.6S-( )1W(M)	*1: M3 thread *2: Model number HFS-3S-( )1W(M)	
<b>3B</b>	<b>3F</b>	<b>3G</b>	<b>3H</b>	<b>3J</b>



# D SUBMINIATURE J&JK SERIES CONNECTOR

Accessories/EMI prevention shielding cover ( J cover)

## J COVER



J cover



## Features

- This shielding cover is made of steel, formed by our advanced stamping technology, and nickel-plated.
  - The box-shaped cover completely encloses such EMI radiating areas as the connections between the connector and wires. The result is a superior shielding effect.
  - To install the shielding cover, simply align and press the upper and lower cover elements, then tighten the nuts. It then securely grips the round cables.
  - This cover is so compact, light and sturdy, that it can be used to cover the connectors of any input/output cable. Moreover, it is attractive in appearance.
- \* RoHS compliant products are published.  
 \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.  
 \* Contact JST for details.

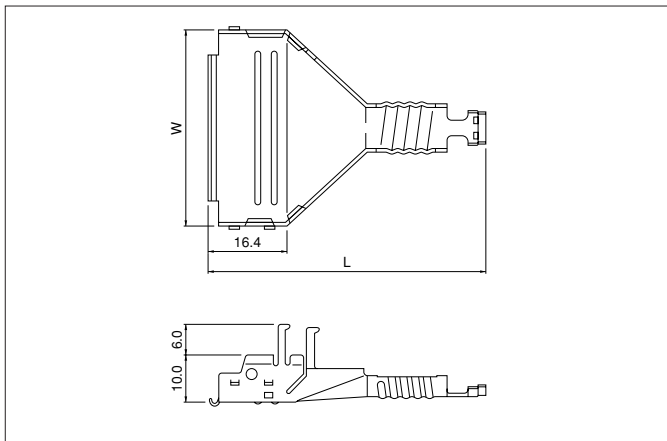
## Standards

Recognized E60389

### Applicable cable dimensions

Circuits	J series	9	15	25	37
	JK series	15	—	—	—
Cable outer diameter (mm)		7.0 ±0.2		8.0 ±0.2	10.0 ±0.2

## Shielding cover A



J series		JK series		Dimensions (mm)		Q'ty / box
Circuits	Model No.	Circuits	Model No.	W	L	
9	<b>J-SC9A</b>	15	<b>JK-SC15A</b>	19.4	42.0	200
15	<b>J-SC15A</b>	—	—	27.6	46.9	150
25	<b>J-SC25A</b>	—	—	41.4	57.0	100
37	<b>J-SC37A</b>	—	—	57.8	70.6	125

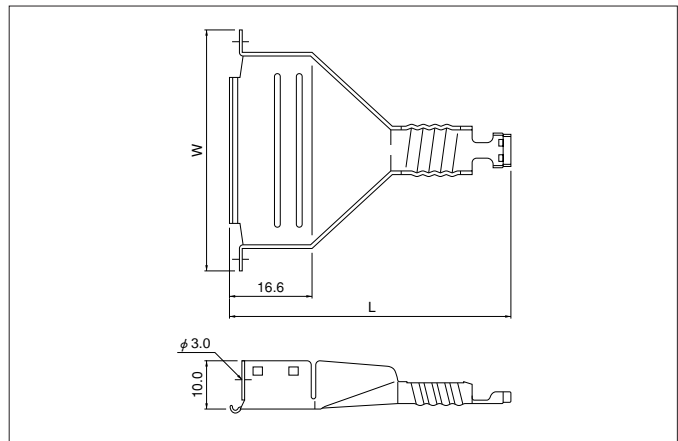
### Material and Finish

Steel, copper- undercoated, nickel-plated

### RoHS compliance

Note: The cover of the JK series 15-circuit connector is the same as that of the J series 9-circuit connector, except for the number of circuits indicated.

## Shielding cover B



Circuits		Model No.	Dimensions (mm)		Q'ty / box
J series	JK series		W	L	
9	15	<b>J-SC9B</b>	30.0	(42.0)	200
15	—	<b>J-SC15B</b>	38.0	(46.9)	150
25	—	<b>J-SC25B</b>	52.0	(57.0)	150
37	—	<b>J-SC37B</b>	68.0	(70.6)	100

### Material and Finish

Steel, copper-undercoated, nickel-plated

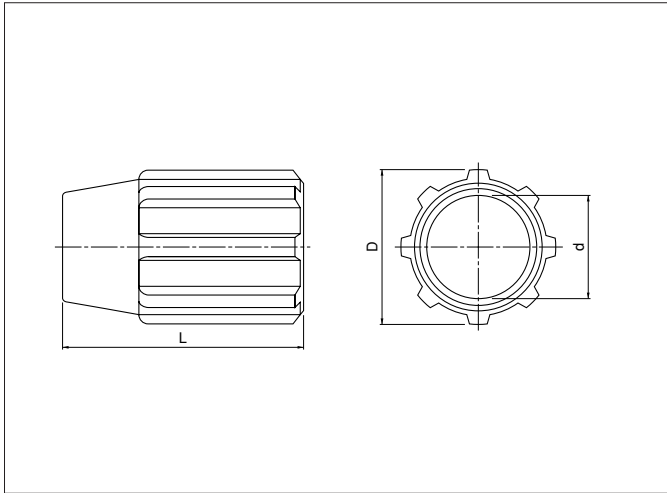
### RoHS compliance

Note: The cover of the JK series 15-circuit connector is the same as that of the J series 9-circuit connector.



# D SUBMINIATURE CONNECTOR J&K SERIES

## Cover nut



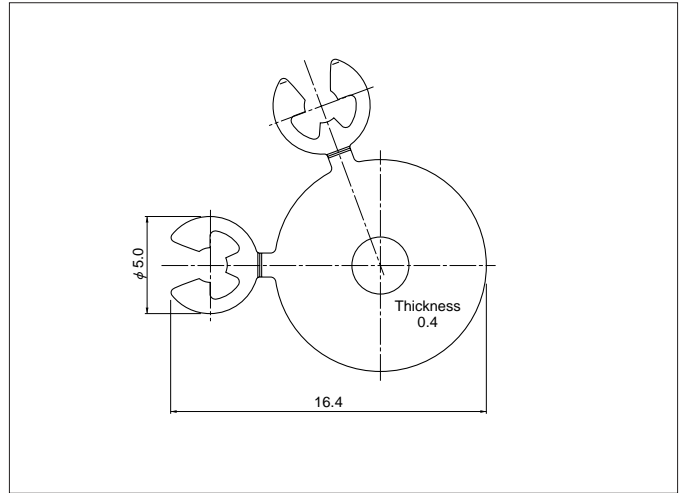
Circuits	Model No.	D	d	L	Q'ty / box
9	<b>J-CN9 · 15</b>	13.6	7.2	19.0	1,000
15					
25	<b>J-CN25</b>	16.4	8.4	25.0	1,000
37	<b>J-CN37</b>	18.8	10.4	28.0	1,500

### Material

Glass-filled, PBT, UL94V-0, black

### RoHS compliance

## E-ring



Model No.	Q'ty / box
<b>J-ER</b>	5,000
Material	
Stainless steel	

### RoHS compliance

Note: The cover nuts, lock screws and E-rings are used with both the J and JK series connectors.

## Lock screw

No.4-40UNC (Inch thread)	M2.6 (Metric thread)	M3 (Metric thread)

Type of screw	Model No.	Q'ty / box
No.4-40UNC (Inch thread)	<b>J-SL-1C</b>	5,000
M2.6 (Metric thread)	<b>J-SL-2C</b>	5,000
M3 (Metric thread)	<b>J-SL-3C</b>	5,000

### Material and Finish

Steel, copper-undercoated, nickel-plated

### RoHS compliance

Use the following Model Nos. when ordering J-covers as a set.

J series		JK series		Parts in one set	Q'ty / box
Circuits	Model No.	Circuits	Model No.		
9	<b>J-C9-( )C</b>	15	<b>JK-C15-( )C</b>	Shielding cover A ..... 1 pc.	25
15	<b>J-C15-( )C</b>	—	—	Shielding cover B ..... 1 pc.	25
25	<b>J-C25-( )C</b>	—	—	Cover nut ..... 1 pc.	20
37	<b>J-C37-( )C</b>	—	—	Lock screw ..... 2 pcs.	10
				E-ring ..... 1 set	

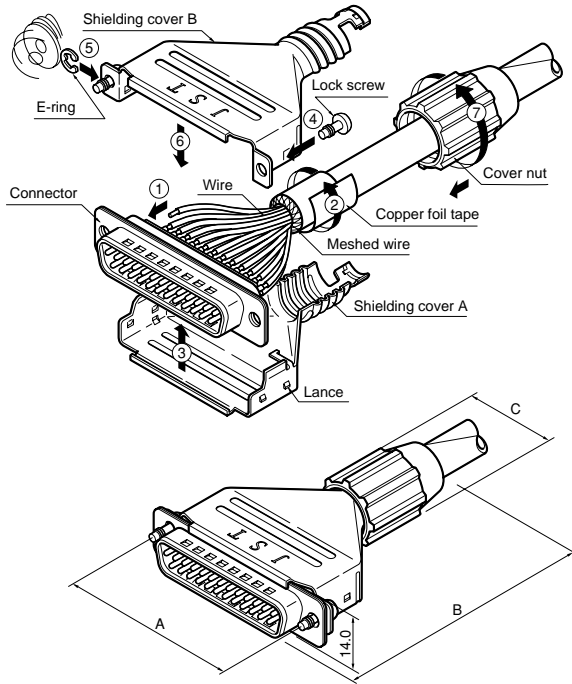
### RoHS compliance

Note: In the above lock screw model numbers, the number in parentheses indicates the type of screw-1: Inch thread (No.4-40UNC), 2: Metric thread (M2.6), 3: Metric thread (M3).

# D SUBMINIATURE CONNECTOR J&K SERIES

## J-cover assembly procedure

### J series

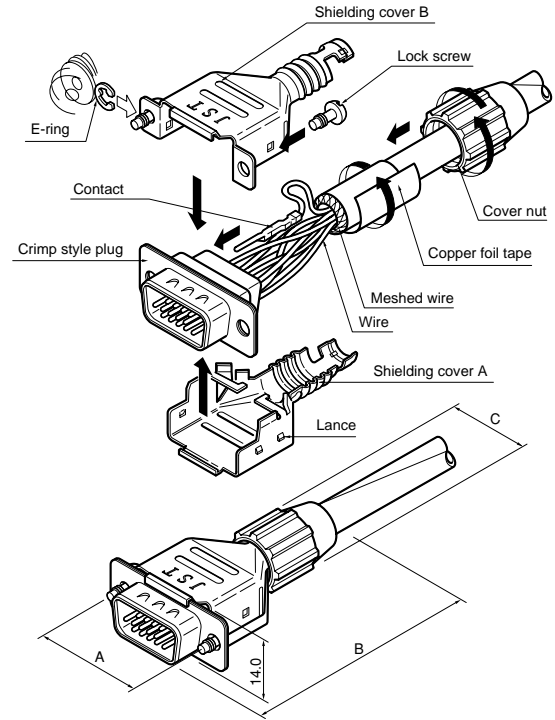


### Assembly procedure

1. Connect wires to the connector by soldering or crimping.
2. Fold back the braided shielding wire along the outside insulation and wind the copper foil tape around the shielding wire.
3. Install the connector into shielding cover A.
4. Screw the lock screws onto shielding cover B.
5. Install the E-rings.
6. Align shielding cover B with shielding cover A and press shielding cover B until it engages the lances of shielding cover A.
7. Tighten the cover nut until the predetermined position is reached.

Note: For details of the J-cover assembly procedure, please refer to the processing specifications separately available. The shielding effect of the J-cover is critically dependent on proper assembly.

### JK series



### Dimensions after assembly

Circuits		Dimensions (mm)		
J series	JK series	A	B	C
9	15	24.99	(49.0)	13.6
15	—	33.32	(53.0)	13.6
25	—	47.04	(64.5)	16.4
37	—	63.50	(78.5)	18.9



# D SUBMINIATURE J&JK SERIES

Accessories/EMI prevention overmolding cover

## MOLD COVER



## Features

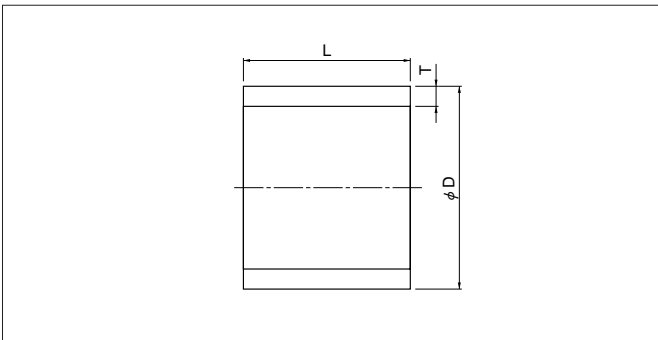
- This cover completely encloses all wire connections to the connector, and its braided wire crimp section ensures a reliable ground connection. The result is excellent shielding.
- This cover is sturdy enough to withstand the high pressure necessary during overmolding. It can thus be finish-molded directly.
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Applicable cable diameter

Circuits		Cable O.D.(mm)
J series	JK series	
9	15	8.6 <sup>±0.2</sup>
15	—	7.6 <sup>±0.2</sup>
25	—	8.6 <sup>±0.2</sup>

Note: Contact JST for cables other than those listed above.

## Ferrule



Circuits		Ferrule	Dimensions (mm)		
J series	JK series		φ D	T	L
9 · 25	15	A	8.0	0.5	4.0
		B	11.3	0.6	8.0
15	—	A	7.0	0.5	4.0
		B	10.5	0.6	8.0

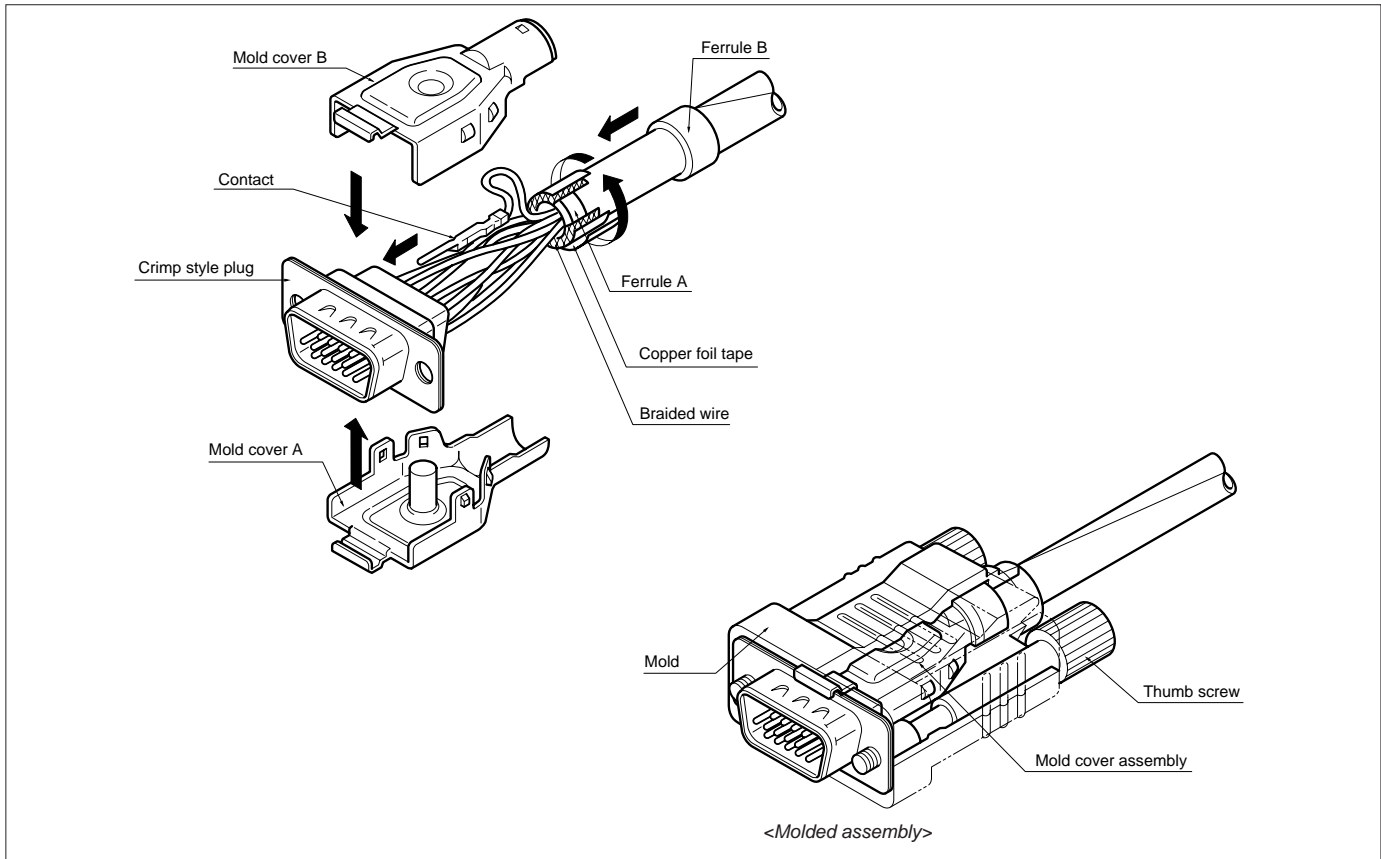
RoHS compliance

Mold cover A		Mold cover B	
<b>JK-MC15A-3</b> <b>J-MC15A</b>	<b>J-MC25A-4</b>	<b>JK-MC15B-3</b> <b>J-MC15B</b>	<b>J-MC25B-4</b>
<p>*Dimensions in ( ) are those for the J-MC15A.</p>		<p>*Dimensions in ( ) are those for the J-MC15B.</p>	

RoHS compliance

# D SUBMINIATURE CONNECTOR J&K SERIES

## Mold cover assembly procedure



Note: Contact JST for thumb screws.

### Assembly procedure

#### 1. Processing braided shielding wire

Pass the cable through ferrule B and remove the insulation at the end of the cable. Install ferrule A and fold back the braided shielding wire along the outside insulation. Then wind the copper foil tape around the shielding wire.

#### 2. Connecting the wires to the contacts

Connect the wires to the contacts by crimping and insert the contacts into the housing.

#### 3. Assembling the mold covers

Align mold cover B with mold cover A and press mold cover B until it engages the lances of mold cover A. Install ferrule B over the cable holding section of the cover assembly and crimp ferrule B. This completes the assembly.

Circuits		Parts name	Model No.	Material and Finish	Qty / box or bag
J series	JK series				
9	15	Mold cover A	<b>JK-MC15A-3</b>	Steel, copper-undercoated, nickel-plated	500
		Mold cover B	<b>JK-MC15B-3</b>		
		Ferrule A	<b>JK-FL15A-8.0C</b>	Copper, tin-plated	1,000
		Ferrule B	<b>JK-FL15B-11.3</b>		500
15	—	Mold cover A	<b>J-MC15A</b>	Steel, copper-undercoated, nickel-plated	200
		Mold cover B	<b>J-MC15B</b>		
		Ferrule A	<b>J-FL15A-7.0C</b>	Copper, tin-plated	1,000
		Ferrule B	<b>J-FL15B-10.5</b>		500
25	—	Mold cover A	<b>J-MC25A-4</b>	Steel, copper-undercoated, nickel-plated	250
		Mold cover B	<b>J-MC25B-4</b>		
		Ferrule A	<b>JK-FL15A-8.0C</b>	Copper, tin-plated	1,000
		Ferrule B	<b>JK-FL15B-11.3</b>		500

RoHS compliance

## Crimping machine, Applicator

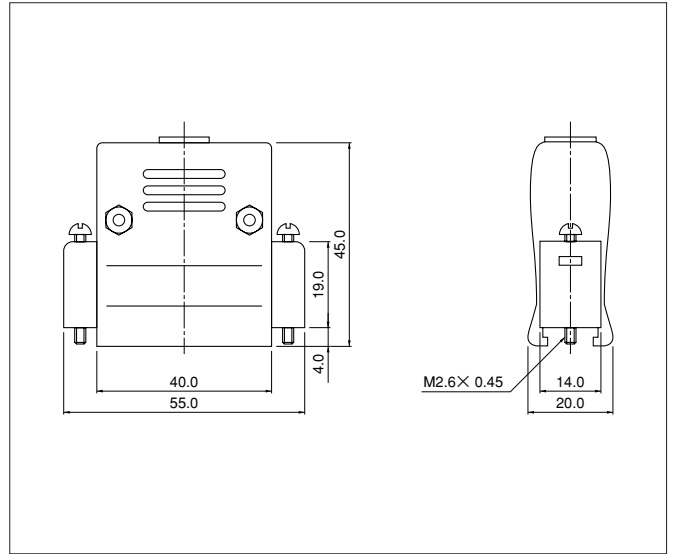
Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>JK-FL15B-11.3</b>	AP-K2N	MKS-L-RG	MK/JK-MC15	APLMK JK-MC15
<b>J-FL15B-10.5</b>			MK/J-MC15	APLSC JK-MC15



# D SUBMINIATURE J&K SERIES

## Accessories/Covers

### EMI SHIELDING ALUMINUM DIE-CAST COVER (for 25-circuit J series connectors)



#### Features

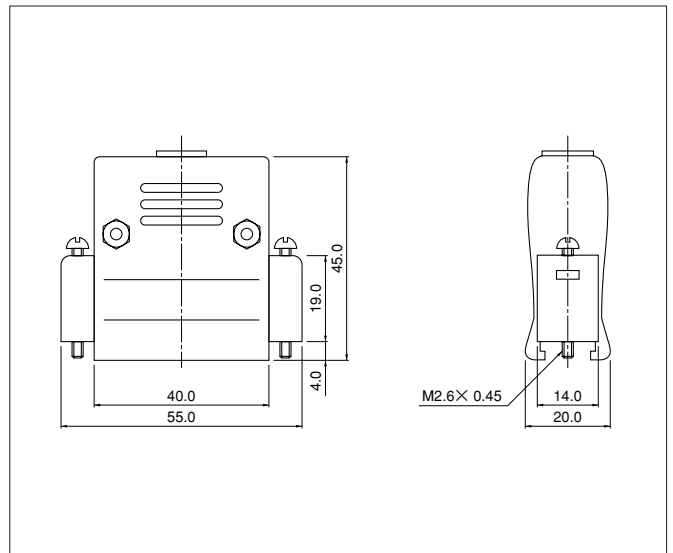
- This cover is made of aluminum die-cast .
- The D subminiature connector and all its wire connections can be completely covered to provide excellent shielding.
- This EMI shielding cover can be used together with the hexagonal and rectangular metric lock screws specified in JIS-C6361. This cover is ideally suited for RS-232C cable connectors.

Model No.	Parts in one set	Cover material	Q'ty / box
<b>JCB-25EM</b>	Cover A - 1 pc. Cover B - 1 pc. Lock screw - 2 pcs. Cable clamp - 2 pcs. Cover screws and nuts - 2 pcs. for each Clamp screws - 4 pcs.	Aluminum die-cast	10

#### RoHS compliance

- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

### JIS STYLE PLASTIC COVER (for 25-circuit J series connectors)



#### Features

- Molded plastic cover.
- This cover can be used together with the hexagonal and rectangular metric lock screws specified in JIS-C-6361.

- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

Model No.	Parts in one set	Cover material	Q'ty / box
<b>JCB-25M</b>	Covers - 2 pcs. Lock screw - 2 pcs. Cable clamp - 2 pcs. Cover screws and nuts - 2 pcs. for each Clamp screws - 2 pcs.	ABS resin	10

#### RoHS compliance




# D SUBMINIATURE CONNECTOR J·JH·JK & KH SERIES

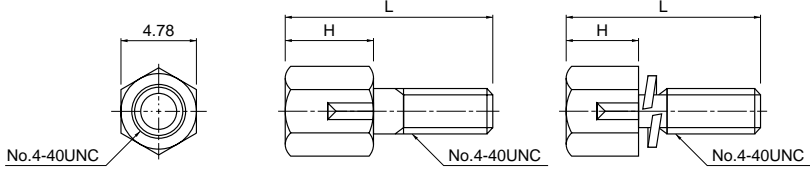
## Accessories/Lock screw block

A variety of accessories are available for the D subminiature connectors.

### LOCK SCREW BLOCK




**Hexagonal lock screw block  
(inch thread: No.4-40UNC)**



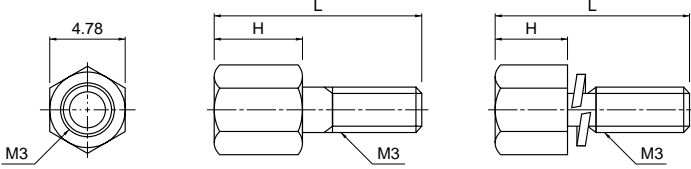
Type A                      Type B

Dimension / Model No.	Applicable series				Dimension H (mm)	Type	Attachment	Q'ty / box
	J series right angle through-hole type JK series straight through-hole type	JK series right angle through-hole type	J series straight through-hole type	JH series right angle through-hole type KH series right angle through-hole type				
Dimension L (mm)	13.1	15.0	10.0	11.8				
Model No.	JFS-4S-C1N	KFS-4S-C1N	—	—	5.5	A	Spring washer .. 1 pc. Nut ..... 1 pc.	2,000
	JFS-4S-B1W	KFS-4S-B1W	SFS-4S-B1W	HFS-4S-B1W	4.8		Spring washer .. 1 pc.	
	JFS-4S-C1W	KFS-4S-C1W	SFS-4S-C1W	HFS-4S-C1W	5.5	B	Hexagonal lock screw & spring washer are integrated	
	JFS-4S-B1WM	KFS-4S-B1WM	SFS-4S-B1WM	HFS-4S-B1WM	4.8			
	JFS-4S-C1WM	KFS-4S-C1WM	SFS-4S-C1WM	HFS-4S-C1WM	5.5			

RoHS compliance



**Hexagonal lock screw block  
(metric thread: M3)**



Type A                      Type B

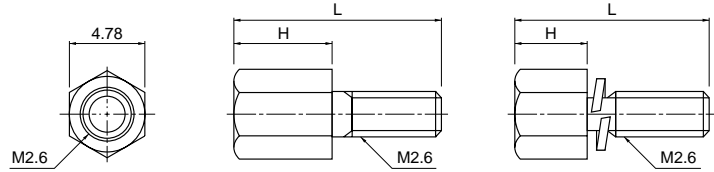
Dimension / Model No.	Applicable series				Dimension H (mm)	Type	Attachment	Q'ty / box
	J series right angle through-hole type JK series straight through-hole type	JK series right angle through-hole type	J series straight through-hole type	JH series right angle through-hole type KH series right angle through-hole type				
Dimension L (mm)	13.1	15.0	10.0	11.8				
Model No.	JFS-3S-C1N	KFS-3S-C1N	—	—	5.5	A	Spring washer .. 1 pc. Nut ..... 1 pc.	2,000
	JFS-3S-B1W	KFS-3S-B1W	SFS-3S-B1W	HFS-3S-B1W	4.8		Spring washer .. 1 pc.	
	JFS-3S-C1W	KFS-3S-C1W	SFS-3S-C1W	HFS-3S-C1W	5.5	B	Hexagonal lock screw & spring washer are integrated	
	JFS-3S-B1WM	KFS-3S-B1WM	SFS-3S-B1WM	HFS-3S-B1WM	4.8			
	JFS-3S-C1WM	KFS-3S-C1WM	SFS-3S-C1WM	HFS-3S-C1WM	5.5			

RoHS compliance

# D SUBMINIATURE CONNECTOR J·JH·JK&KH SERIES



Hexagonal lock screw block  
(metric thread: M2.6)



Type A

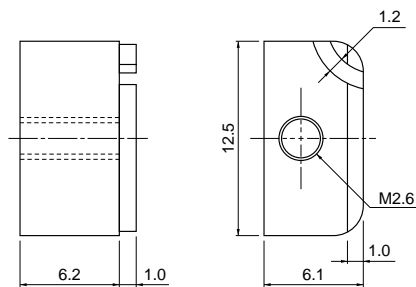
Type B

Applicable series	J series right angle through-hole type JK series straight through-hole type	JK series right angle through-hole type	J series straight through-hole type	JH series right angle through-hole type KH series right angle through-hole type	Dimension H (mm)	Type	Attachment	Q'ty / box
Dimension / Model No.	Dimension L (mm)	13.1	15.0	10.0				
Model No.	JFS-2.6S-C1N	KFS-2.6S-C1N	—	—	5.5	A	Spring washer .. 1 pc. Nut ..... 1 pc.	2,000
	JFS-2.6S-B1W	KFS-2.6S-B1W	SFS-2.6S-B1W	HFS-2.6S-B1W	4.8		Spring washer .. 1 pc.	
	JFS-2.6S-C1W	KFS-2.6S-C1W	SFS-2.6S-C1W	HFS-2.6S-C1W	5.5	B	Hexagonal lock screw & spring washer are integrated	
	JFS-2.6S-B1WM	KFS-2.6S-B1WM	SFS-2.6S-B1WM	HFS-2.6S-B1WM	4.8			
	JFS-2.6S-C1WM	KFS-2.6S-C1WM	SFS-2.6S-C1WM	HFS-2.6S-C1WM	5.5			

RoHS compliance



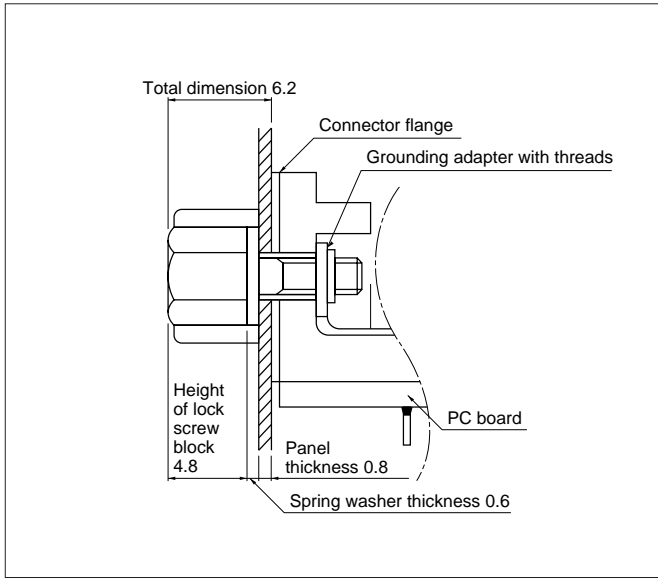
Rectangular lock screw block  
(metric thread: M2.6)



Model No.	Attachment	Q'ty / box
JFS-2.6R-N	Spring washer – 1 pc. Set screw – 1 pc.	1,000

RoHS compliance

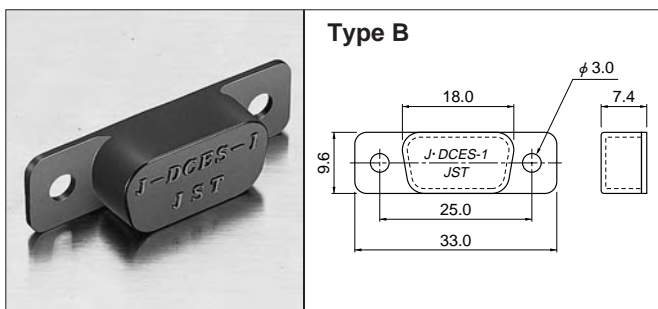
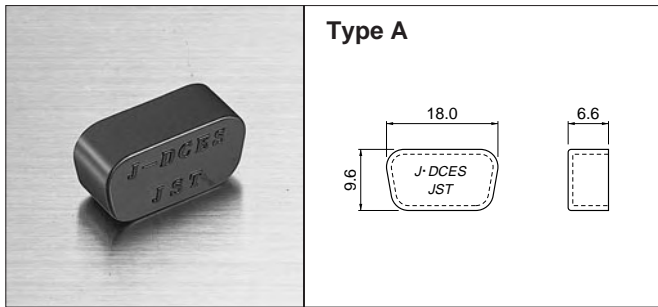
# D SUBMINIATURE CONNECTOR J·JH·JK&KH SERIES



## Application examples of hexagonal lock screw blocks

- The resulting total dimension from the connector flange to the top of the hexagonal lock screw block must be 6.2mm after assembly.
- The D subminiature connector can be installed on the Panel by simply tightening the hexagonal lock screw block together with grounding adapter, which has an identical thread to that of the F, G, and H types.

## DUST COVER (for receptacles)



Type	Circuits		Model No.	Q'ty / box
	J series	JK series		
A	9	15	<b>J-DCES</b>	1,000
B			<b>J-DCES-1</b>	
Material				
PA, UL94V-0, black				

**RoHS compliance**

## EXTRACTION TOOL



With this tool, contacts (connected to wires by crimping) can be easily removed if they are improperly inserted into plug and receptacle housings.

Applicable Connector		Model No.
J series		<b>DEJ-0.3</b>
JK series	Plug	<b>KEJ-0.7</b>
	Receptacle	<b>KEJ-0.4</b>





# MD CONNECTOR

## Miniature circular connectors

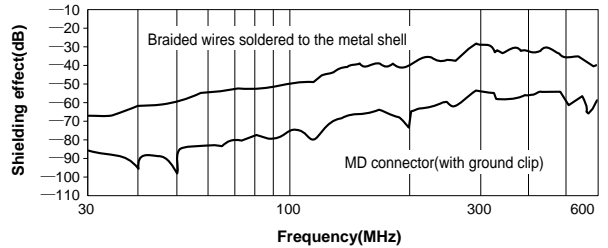
The extremely compact MD miniature circular connector has an outside diameter roughly half that of conventional circular DIN connectors. The connector's contact exclusively designed by JST dramatically reduces assembly time while improving contact reliability. The MD connector's shielding is superb. All you need to do is crimp the connector ground clip over the cable's braided shielding wire. Simple and reliable, JST's MD connector is well suited for the production of high-density office automation equipments as well as audio and video products.

- Crimp contact with integral construction for improved reliability
- Easy assembly without using special tools
- Simple braid-to-connector assembly and effective EMI protection

### Standards

- Recognized E60389
- Certified LR20812

#### Shielding effect



• The shielding effect differs depending on the wire specifications.

- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

### PC board layout

Layout Circuits	Mating section layout	PC board layout (viewed from component side)	
		Standard and Type B	Front shielding type
4			
5			
6			

# MD CONNECTOR

Layout Circuits	Mating section layout	PC board layout (viewed from component side)	
		Standard and Type B	Front shielding type
7			
8	 (Type B) 		
9			

Note: 1. The two holes are necessary when installing a shielding cover.

2. Tolerances are non-cumulative:  $\pm 0.05\text{mm}$  for all centers.

3. Hole dimensions differ depending on the kind of PC board and piercing method. The dimensions above should serve as a guideline.

For details, contact JST.

4. The layout drawing is viewed from the receptacle mounting side.

5. When using a receptacle with shielding cover or with flange shielding cover, the pattern should be designed to connect the shielding cover and the shielding tube, if necessary. (No need for the front shielding cover.)

## Assembly layout

<div style="text-align: right;">Plug</div> <div style="text-align: left;">Receptacle</div>	Straight type	Side entry type
Standard type Type B  With shielding cover	<p>Technical drawing showing the assembly layout of a straight type MD connector with a shielding cover. The diagram includes dimensions: 13.0 (width of the main body), 20.0 (total length), 15.6 (length of the inner sleeve), 12.8 (height of the main body), and 8.5 (width of the base).</p>	<p>Technical drawing showing the assembly layout of a side entry type MD connector with a shielding cover. The diagram includes dimensions: 13.0 (width of the main body), 15.0 (length of the side entry section), 12.8 (height of the main body), and 8.5 (width of the base).</p>
Standard type Type B  With flange shielding cover	<p>Technical drawing showing the assembly layout of a straight type MD connector with a flange shielding cover. The diagram includes dimensions: 13.2 (width of the main body), 20.0 (total length), 15.6 (length of the inner sleeve), 12.8 (height of the main body), and 8.5 (width of the base).</p>	<p>Technical drawing showing the assembly layout of a side entry type MD connector with a flange shielding cover. The diagram includes dimensions: 13.2 (width of the main body), 15.0 (length of the side entry section), 12.8 (height of the main body), and 8.5 (width of the base).</p>
Front shielding type	<p>Technical drawing showing the assembly layout of a front shielding type MD connector. The diagram includes dimensions: 12.5 (width of the main body), 20.0 (total length), 15.6 (length of the inner sleeve), 19.4 (height of the main body), and 8.5 (width of the base).</p>	<p>Technical drawing showing the assembly layout of a side entry type MD connector with front shielding. The diagram includes dimensions: 12.5 (width of the main body), 15.0 (length of the side entry section), 19.4 (height of the main body), and 8.5 (width of the base).</p>

# MD CONNECTOR

## Plug

### Straight type plug

#### Contact

JST's exclusive one-piece contact is formed and cold worked by stamping presses to ensure the highest reliability.

#### Housing B

#### Metal Shell

Three shell types (standard, A and B) are available.

#### Solder tail

#### Ground clip

If used, the ground clip is crimped to cover the cable braid.

#### Housing A

Housing A is designed to keep the contacts firmly in place while protecting them from damage.

#### Assembled product

#### Molded product

### Side entry type plug

#### Contact

#### Metal Shell

One piece including ground clip

#### Housing A

#### Housing B

#### Assembled product

#### Molded product

## Specifications

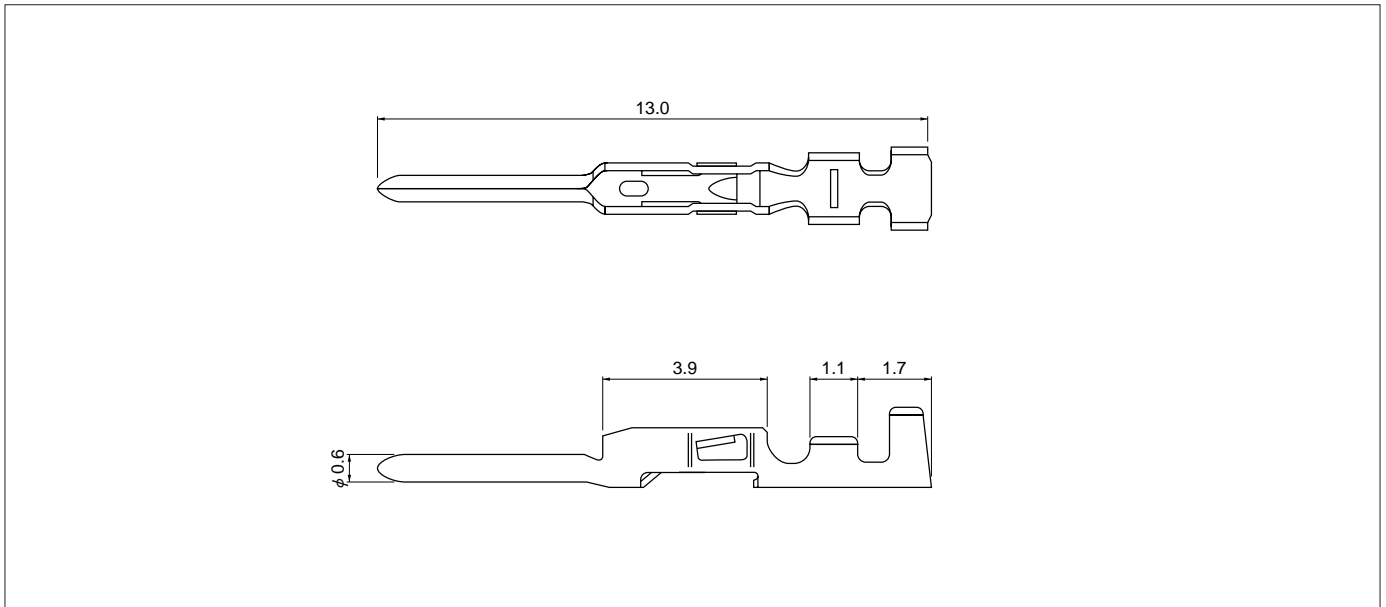
### Materials

Part name	Material and Finish
Contact	Phosphor bronze, nickel-undercoated, Mating part; gold-plated Crimping part; tin-plated (reflow treatment) Phosphor bronze, tin-plated (reflow treatment) Phosphor bronze, nickel-undercoated silver-plated
Housing A, B	PBT, UL94V-0, black
Metal shell	Steel, nickel-plated
Ground clip	Brass, nickel-plated

### Characteristics

Current rating	1.0A, AC, DC (AWG#26)
Voltage rating	50V, AC, DC
Temperature range	-25°C ~ +85°C (including temperature rise in applying electrical current)
Contact resistance	Initial value: 100mΩ max. After environmental testing: 300mΩ max.
Insulation resistance	50MΩ min.
Withstanding voltage	500V AC/minute
Applicable wire	AWG #30 ~ #24

## Plug contact



Model No.			Applicable wire			Q'ty / reel
Gold-plated (flash)	Silver-plated	Tin-plated	mm <sup>2</sup>	AWG #	Insulation O.D. (mm)	
<b>MD-SP2240</b>	<b>MD-SP2270</b>	<b>MD-SP2290</b>	0.06 ~ 0.13	30 ~ 26	0.7 ~ 1.1	10,000
<b>MD-SP1240</b>	<b>MD-SP1270</b>	<b>MD-SP1290</b>	0.13 ~ 0.2	26 ~ 24	1.0 ~ 1.2	10,000

**RoHS compliance** Gold-plated products display (LF)(SN) on a label.

## Model number identification

**MD - S P 2 2 40**

- Series name
- Product from: S ... Chain, B ... Loose piece
- Type of contact: P ... Plug contact
- Applicable wire: 1 ... AWG #26 ~ #24  
2 ... AWG #30 ~ #26
- Material: 2 ... Phosphor bronze
- Finish
  - 40 ... Gold-plated (flash)
  - 44 ... 0.76 micron gold-plated
  - 45 ... 1.3 micron gold-plated
  - 70 ... Silver-plated
  - 90 ... Tin-plated (reflow treatment)

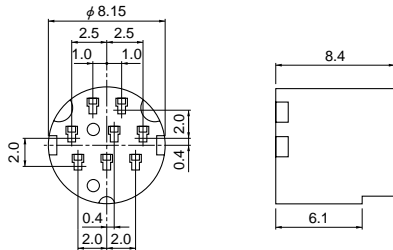
\*Contact JST for details.

# MD CONNECTOR

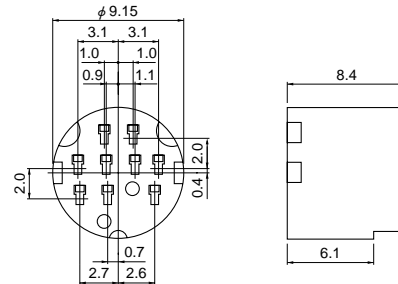
## Housing

### Housing A

(With 4 to 8 circuits)

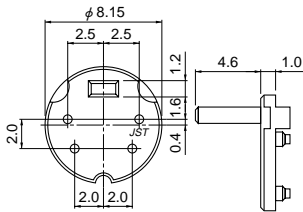


(With 9 circuits)

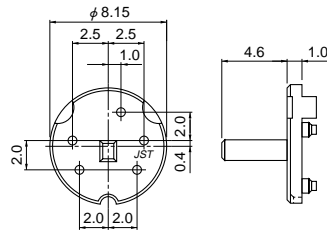


### Housing B

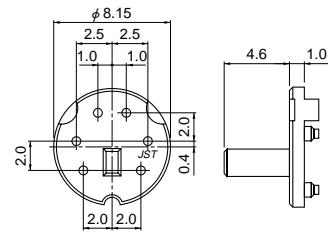
(With 4 circuits)



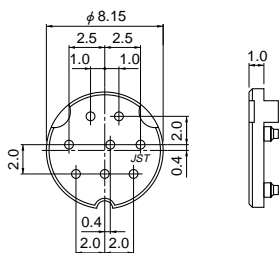
(With 5 circuits)



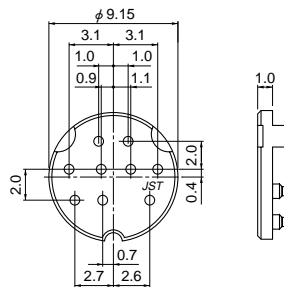
(With 6 circuits)



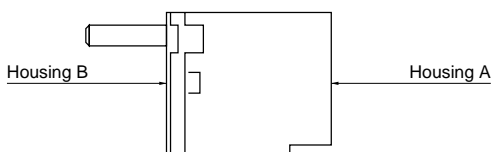
(With 8 circuits)



(With 9 circuits)



### Combined housings A and B



Housing A is used with housing B. Housing B must have the same number of orifices as there will be contacts in the connector. However, housing A can have a greater number of cavities (but never less). Thus in applications in which a user may require MD connectors with different pin counts, only one kind of "A" housing needs to be inventoried - the one with the highest pin count. For more details regarding such combinations, contact JST.

Circuits	Model No.		Q'ty / box
	Housing A	Housing B	
4	<b>MD-PI 4A</b>	<b>MD-PI 4B</b>	1,000
5	—	<b>MD-PI 5B</b>	1,000
6	<b>MD-PI 6A</b>	<b>MD-PI 6B</b>	1,000
8	<b>MD-PI 8A</b>	<b>MD-PI 8B</b>	1,000
9	<b>MD-PI 9A</b>	<b>MD-PI 9B</b>	1,000

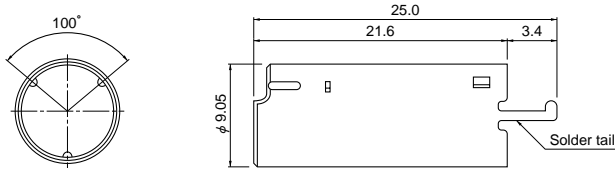
#### RoHS compliance

Note: MD-PI5B is not CSA certified.

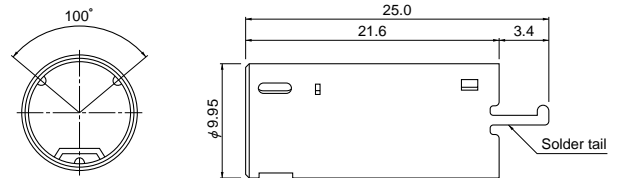
## Metal shell (straight type)

### Standard type

(With 4 to 8 circuits)

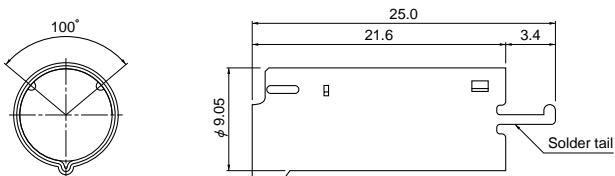


(With 9 circuits)



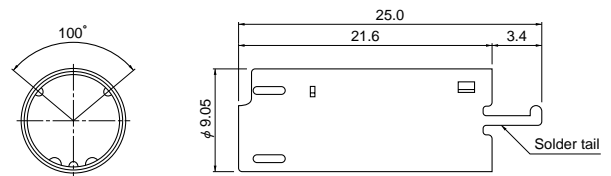
### Type A

(features polarizing keys, usable with S-VHS connector)



### Type B

(features 4 polarizing keys, usable with having 8 circuits)

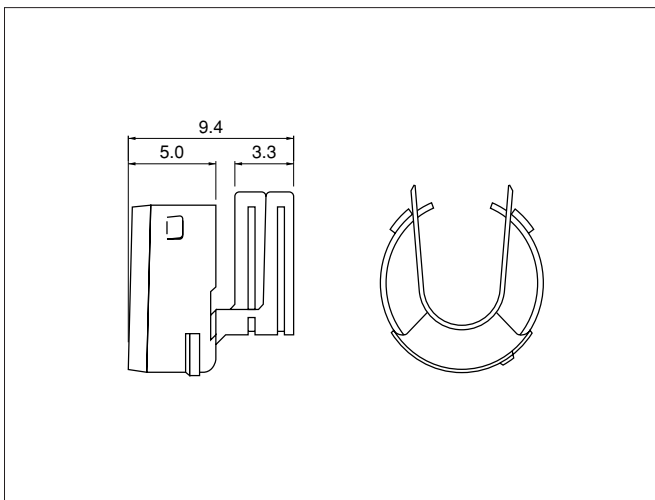


Circuits	Model No.						Q'ty / box
	Standard		Type A (features three polarizing keys)		Type B (features 4 polarizing keys...8 circuits only)		
	With solder tail	Without solder tail	With solder tail	Without solder tail	With solder tail	Without solder tail	
4 ~ 8	<b>MD-PS8T</b>	*MD-PS8T1	*MD-PS8AT	*MD-PS8AT1	*MD-PS8BT	*MD-PS8BT1	750
9	<b>MD-PS9T</b>	*MD-PS9T1	—	—	—	—	750

#### RoHS compliance

\*Marked products are not CSA certified.

## Ground clip



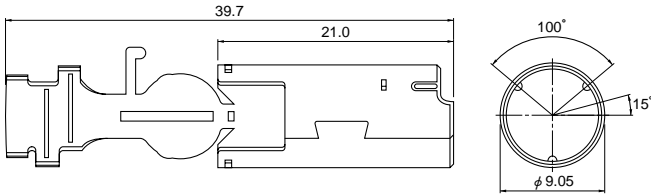
Circuits	Model No.	Applicable cable O.D.(mm)	Q'ty / reel
4 ~ 8	<b>MD-PCC8T-S1</b>	2.7 ~ 3.8	1,000
	<b>MD-PCC8T-S2</b>	4.3 ~ 5.5	1,000
9	<b>MD-PCC9T-S3</b>	3.6 ~ 4.8	1,000

RoHS compliance

# MD CONNECTOR

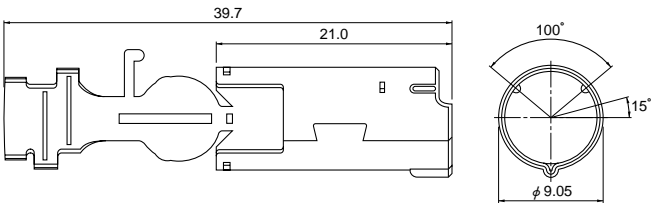
## Metal shell (side entry type)

### Standard type



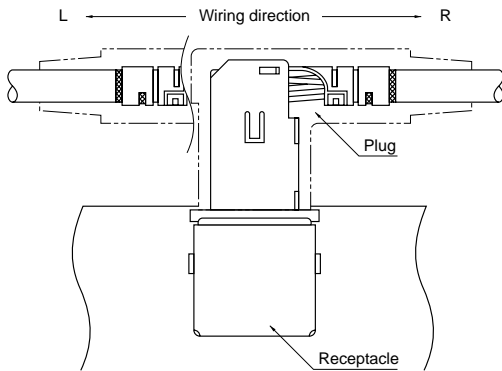
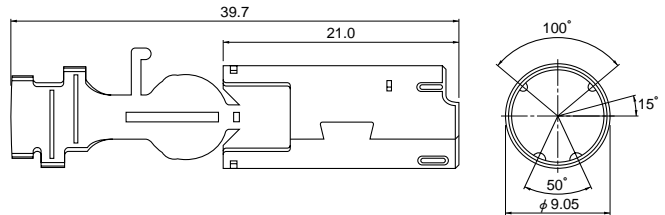
### Type A

(features polarizing keys, usable with S-VHS connector)



### Type B

(features 4 polarizing keys, usable with housing having 8 circuits)



Viewing from the receptacle mounting side

Type	Circuits	Model number		Q'ty / box
		R	L	
Standard	4 ~ 8	<b>MD-PS8SR</b>	<b>MD-PS8SL</b>	500
A	4 ~ 8	<b>MD-PS8ASR</b>	—	500
B	8	<b>MD-PS8BSR</b>	—	500

RoHS compliance

## Crimping machine, Applicator

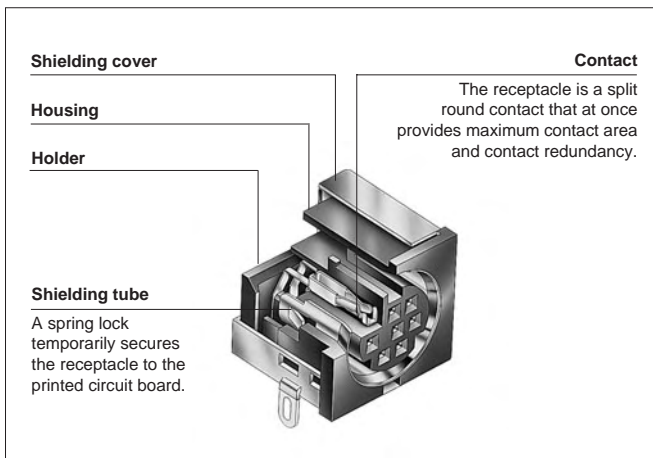
Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>MD-PCC8T-S1</b>	AP-K2N	MKS-L	MK/MD-PCC8T-S1	APLMK MD-PCC8T-S1
		*MKS-SC	—	—
<b>MD-PCC8T-S2</b>		MKS-L	MK/MD-PCC8T-S2	APLMK MD-PCC8T-S2
		*MKS-SC	—	—
<b>MD-PCC8T-S3</b>		MKS-L	MK/MD-PCC8T-S3	APLMK MD-PCC8T-S3
		*MKS-SC	—	—
<b>MD-PS8SL</b>		MKS-L-RG	MK/MD-PS8SR	APLMK MD-PS8SR
		*MKS-SC	—	—
<b>MD-PS8ASR</b>		MKS-L-RG	MK/MD-PS8SR	APLMK MD-PS8SR
		*MKS-SC	—	—

Note: \*Strip-crimp applicator

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>MD-PS8BSR</b>	AP-K2N	MKS-L-RG	MK/MD-PS8SR	APLMK MD-PS8SR
		*MKS-SC	—	—
<b>MD-PS8SR</b>		MKS-L-RG	MK/MD-PS8SR	APLMK MD-PS8SR
		*MKS-SC	—	—
<b>MD-SP12**</b>		MKS-L	MK/MD-SP12	APLMK MD-SP12
		*MKS-SC	SC/MD-SP12	APLSC MD-SP12
<b>MD-SP22**</b>		MKS-L	MK/MD-SP22	APLMK MD-SP22
		*MKS-SC	SC/MD-SP22	APLSC MD-SP22



## Receptacle (through-hole type)



- **Split round contact provides maximum contact area and contact redundancy**

The receptacle contact is split to insure redundant connection and is cylindrically shaped to provide maximum contact mating area. The result is a highly reliable connection to the mating pin. This superb contact performance is maintained even after many mating and unmating cycles.

- **Flange construction**

The flange construction allows the receptacle to be secured on the equipment chassis with screws, ensuring more reliable electrical connection.



Standard type with flange shielding cover

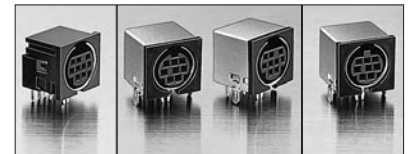
(Standard type/Type B)

- **Compact, high-density design**

This receptacle has a low profile with a mounting height of just 12.8mm and width of 14.0mm. It takes up little space on the printed circuit board, allowing high-density product design.

- **Spring locks make it easy to temporarily secure receptacles to printed circuit boards for soldering**

The shielding tubes are equipped with spring locks which can be used to temporarily secure the receptacles to printed circuit boards. This prevents the receptacles from moving and ensures reliable soldering.



Standard type without shielding cover (left)  
Standard type with shielding cover (center)  
Type B (applicable to Type B plug) (right)

(Front shielding type)

- **Front shielding construction**

A metal shielding cover integrating the connection part which connects to the plug's shell is used. Because there is no gap between the receptacle and the plug, this construction prevents the entry of space conductive noise.

- **Effective shielding**

With the front shielding construction and the flange construction, the shielding effect is improved by about 15 dB over the conventional models.



Front shielding type receptacle

## Specifications

### Materials

Part name	Material and Finish
Contact	Phosphor bronze, nickel-undercoated, Mating part: gold-plated Solder tail: tin-plated (reflow treatment) Phosphor bronze, nickel-undercoated silver-plated Phosphor bronze, tin-plated (reflow treatment)
Housing / Holder	PBT, UL94V-0

### Characteristics

Current rating	1.0A, AC, DC
Voltage rating	50V, AC, DC
Temperature range	-25°C ~ +85°C (including temperature rise in applying electrical current)
Contact resistance	Initial value: 100mΩ max. After environmental testing: 300mΩ max.
Withstanding voltage	500V AC/minute
Applicable PC board thickness	1.6mm

### [Standard type/Type B]

Shielding tube	Brass, nickel-plated (*note)
Shielding cover	Brass, nickel-undercoated, tin/copper alloy-plated

### [Front shielding Type]

Shielding cover	Brass, nickel-plated (*note)
-----------------	------------------------------

Note: Use soldering flux that is suitable for nickel-plating. Tin plated version is also available.

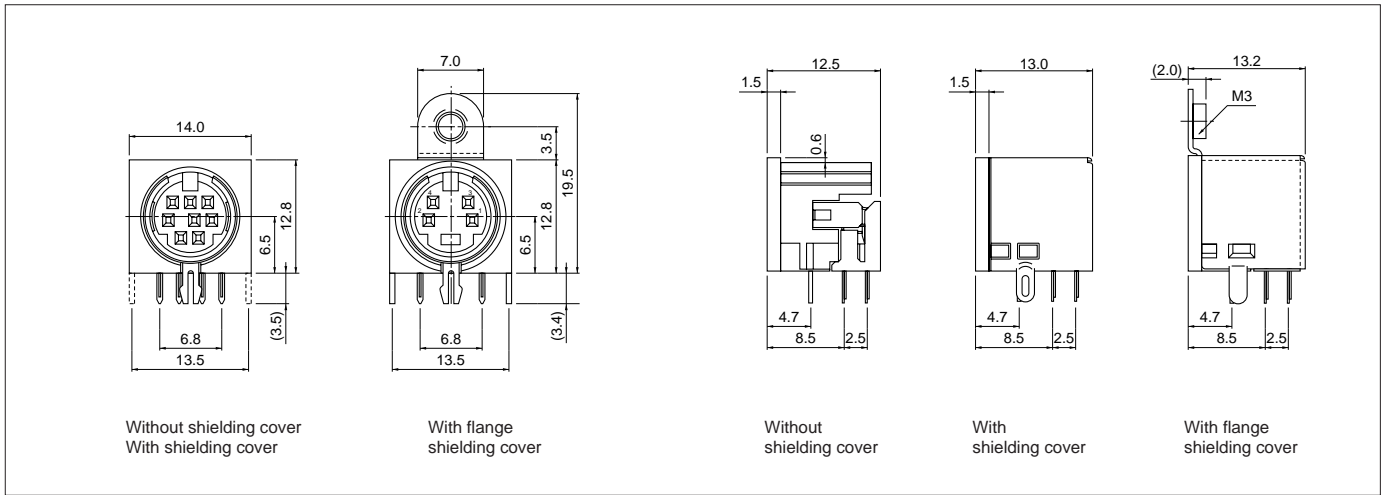
### Model number identification

	MD - S 8 0 00 B - 10
• Series name	MD - S
• Product name: S ... Receptacle	S
• Circuits: 4, 5, 6, 7, 8, 9	8
• Shielding cover: 0 ... Without shielding cover 1 ... With shielding cover 3 ... With front shielding cover	0
• Flange: 00 ... Without flange 30 ... With flange 50 ... With top flange with nuts	00
• Type B indication B ... Type B (Applicable to Type B plug) Blank...Standard type (Applicable to Standard and Type A plugs) ...Front shielding type (Applicable to Standard and Type plugs)	B
• Finish 10 ... Gold-plated (flash) 13 ... 0.4micron gold-plated 14 ... 0.76micron gold-plated 70 ... Silver-plated 90 ... Tin-plated (reflow treatment)	10

Note: Contact JST for special plating requirements.

# MD CONNECTOR

## Standard type / Type B



### • Standard type: Without shielding cover

Cir- cuits	Model No.			Q'ty / box
	Gold-plated(flash)receptacle	Silver-plated receptacle	Tin-plated receptacle	
4	MD-S4000-10	MD-S4000-70	MD-S4000-90	200
5	MD-S5000-10	MD-S5000-70	MD-S5000-90	200
6	MD-S6000-10	MD-S6000-70	MD-S6000-90	200
7	MD-S7000-10	MD-S7000-70	MD-S7000-90	200
8	MD-S8000-10	MD-S8000-70	MD-S8000-90	200
9	MD-S9000-10	MD-S9000-70	MD-S9000-90	200

**RoHS compliance** Gold-plated products display (LF)(SN) on a label.

### • Standard type: With shielding cover

Cir- cuits	Model No.			Q'ty / box
	Gold-plated(flash)receptacle	Silver-plated receptacle	Tin-plated receptacle	
4	MD-S4100-10	MD-S4100-70	MD-S4100-90	200
5	MD-S5100-10	MD-S5100-70	MD-S5100-90	200
6	MD-S6100-10	MD-S6100-70	MD-S6100-90	200
7	MD-S7100-10	MD-S7100-70	MD-S7100-90	200
8	MD-S8100-10	MD-S8100-70	MD-S8100-90	200
9	MD-S9100-10	MD-S9100-70	MD-S9100-90	200

**RoHS compliance** Gold-plated products display (LF)(SN) on a label.  
Silver-plated/Tin-plated products display (LF) on a label.

### • Standard type: With flange shielding cover

Cir- cuits	Model No.			Q'ty / box
	Gold-plated(flash)receptacle	Silver-plated receptacle	Tin-plated receptacle	
4	MD-S4130-10	MD-S4130-70	MD-S4130-90	200
5	MD-S5130-10	MD-S5130-70	MD-S5130-90	200
6	MD-S6130-10	MD-S6130-70	MD-S6130-90	200
7	MD-S7130-10	MD-S7130-70	MD-S7130-90	200
8	MD-S8130-10	MD-S8130-70	MD-S8130-90	200

**RoHS compliance** Gold-plated products display (LF)(SN) on a label.  
Silver-plated/Tin-plated products display (LF) on a label.

### • Type B: Without shielding cover

Cir- cuits	Model No.			Q'ty / box
	Gold-plated(flash)receptacle	Silver-plated receptacle	Tin-plated receptacle	
8	MD-S8000B-10	MD-S8000B-70	MD-S8000B-90	200

**RoHS compliance** Gold-plated products display (LF)(SN) on a label.

### • Type B: With shielding cover

Cir- cuits	Model No.			Q'ty / box
	Gold-plated(flash)receptacle	Silver-plated receptacle	Tin-plated receptacle	
8	MD-S8100B-10	MD-S8100B-70	MD-S8100B-90	200

**RoHS compliance** Gold-plated products display (LF)(SN) on a label.  
Silver-plated/Tin-plated products display (LF) on a label.

### • Type B: With flange shielding cover

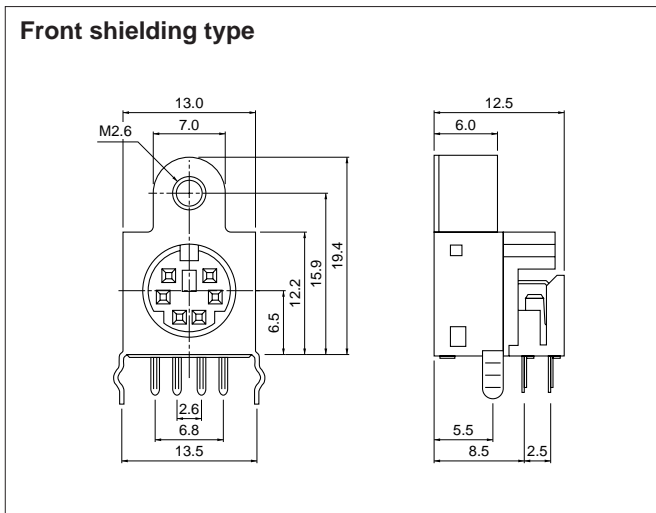
Cir- cuits	Model No.			Q'ty / box
	Gold-plated(flash)receptacle	Silver-plated receptacle	Tin-plated receptacle	
8	MD-S8130B-10	MD-S8130B-70	MD-S8130B-90	200

**RoHS compliance** Gold-plated products display (LF)(SN) on a label.  
Silver-plated/Tin-plated products display (LF) on a label.

### • Front shielding type

Cir- cuits	Model No.			Q'ty / box
	Gold-plated(flash)receptacle	Silver-plated receptacle	Tin-plated receptacle	
4	MD-S4350-10	MD-S4350-70	MD-S4350-90	200
5	MD-S5350-10	MD-S5350-70	MD-S5350-90	200
6	MD-S6350-10	MD-S6350-70	MD-S6350-90	200
8	MD-S8350-10	MD-S8350-70	MD-S8350-90	200

**RoHS compliance** Gold-plated products display (LF)(SN) A on a label.  
Silver-plated/Tin-plated products display ↯ A on a label.  
(↯ shows space.)





# MD CONNECTOR(SMT)

## Miniature circular connectors

- Front shielding construction
- Flange construction

### Specifications

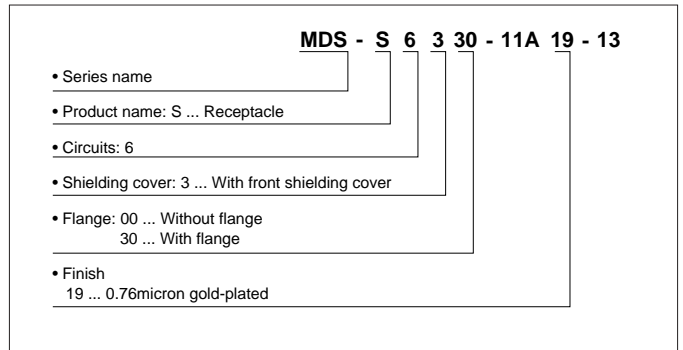
#### Materials

Part name	Material and Finish
Contact	Copper alloy, nickel-undercoated, Mating part: selective gold-plated Solder tail; tin-plated (reflow treatment)
Housing	PPS, UL94V-0
Front shell	With flange: Steel, nickel-plated Without flange: Brass, nickel-plated
Metal fixture	Copper alloy, copper-undercoated, nickel-plated

#### Characteristics

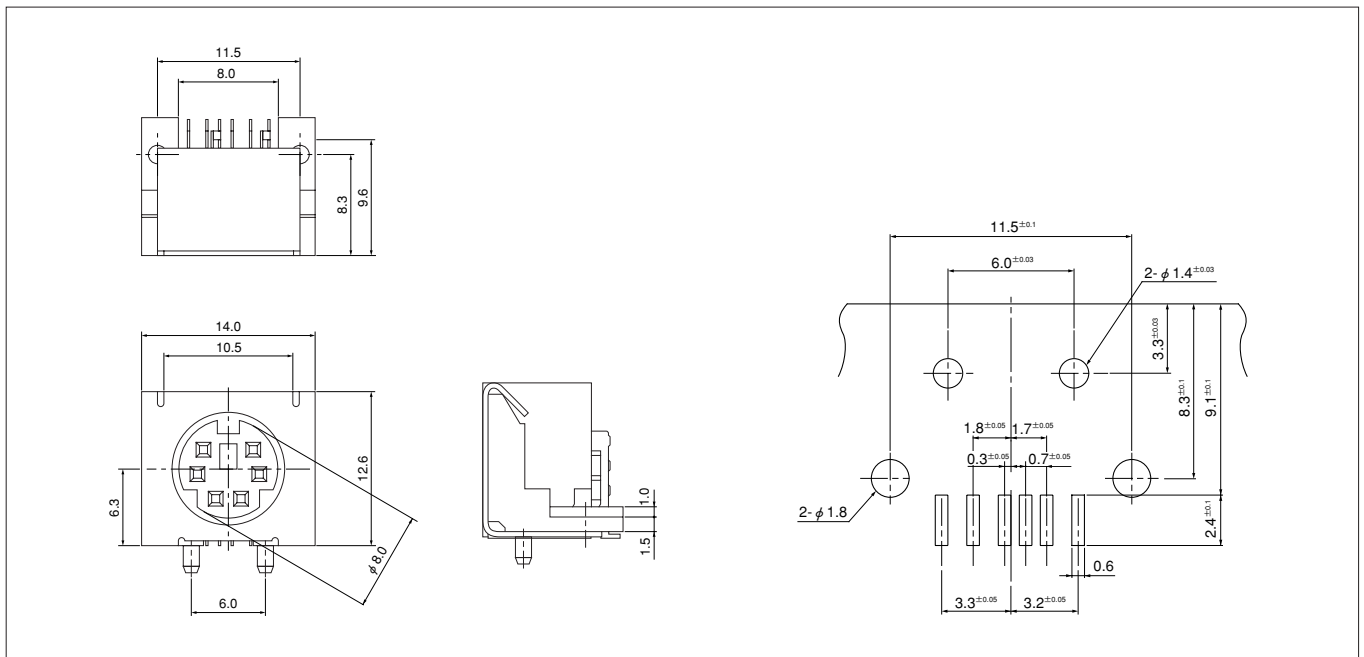
Current rating	1.0A, AC, DC
Voltage rating	125V, AC, DC
Temperature range	-40°C to +85°C (including temperature rise in applying electrical current)
Contact resistance	Initial value: 20mΩ max. After environmental testing: 30mΩ max.
Insulation resistance	500MΩ min.
Withstanding voltage	500V AC/minute

#### Model number identification



- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

### PC board layout (viewed from component side)



Cir-cuits	Flange	Model No.	Q'ty / box
6	without flange	<b>MDS-S6300-11A19 -14</b>	320

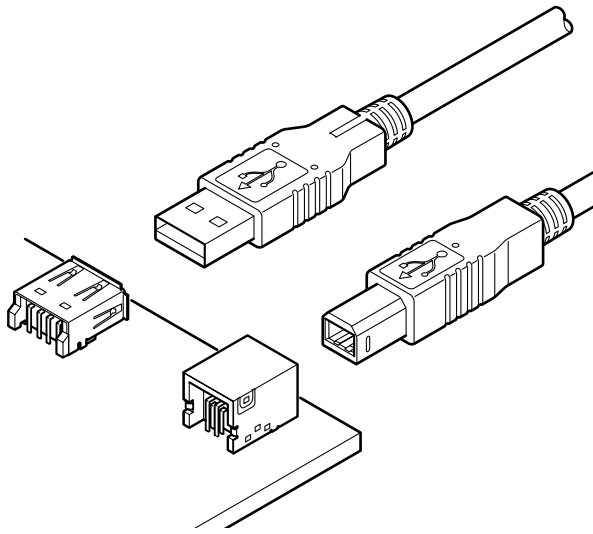
- Note: 1. Tolerances are non-cumulative: ±0.03mm for all centers.  
2. The dimensions above should serve as a guideline.  
Contact JST for details.

**RoHS compliance** This product displays (LF)(SN) on a label.



# UB CONNECTOR

## USB (Universal Serial Bus) Conforming Connector



- **Conforms to USB (Universal Serial Bus) standards**
- **Secure EMI shielding effect**
- **Distortion preventive device**
- **SMT configuration**

### Specifications

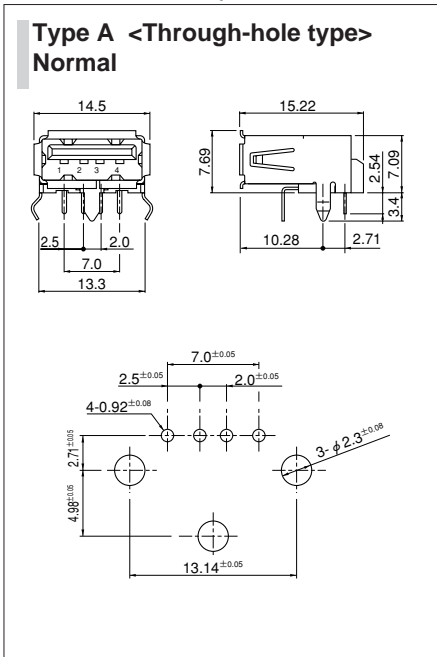
- Current rating: 1.0A AC, DC/ line
- Voltage rating: 30V AC, DC
- Temperature range: -55°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/30m Ω max.  
After environmental testing/10m Ω max.  
(variation from initial value)
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 750V AC/minute
- Applicable wire (Plug): AWG #20 to #28  
Insulation O.D./1.58 to 0.79mm
- Applicable cable O.D. (Plug): 5.3 to 3.4mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

### Standards

- Ⓜ Recognized E60389
- Ⓢ Certified LR20812

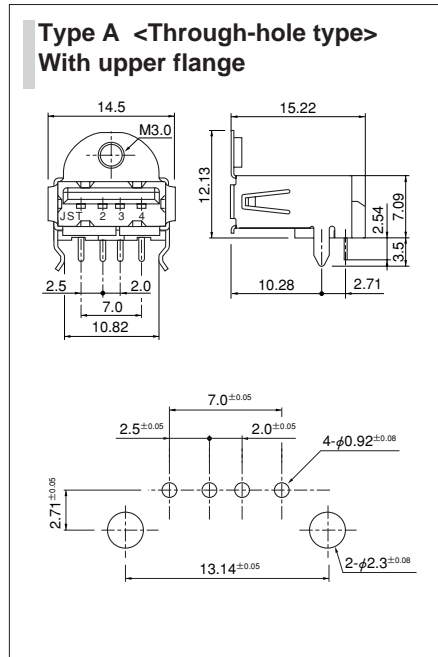
### Receptacle

USB2.0 certified product



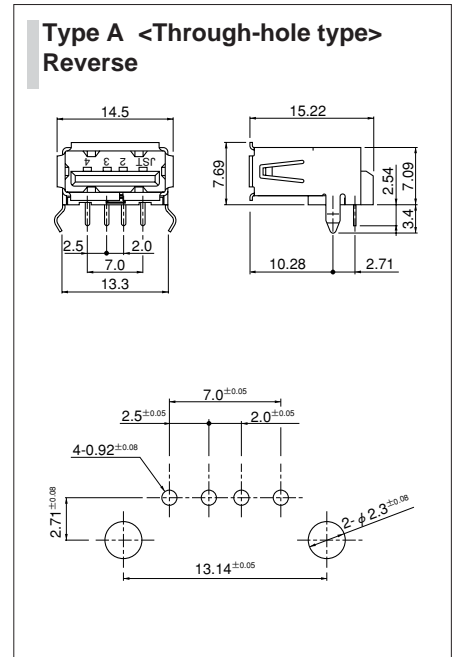
Model No.	Material and Finish	Qty / box
UBA-4R-D14T-4D	Contact	Copper alloy, nickel-undercoated, selective gold-plated
	Housing	Thermoplastic resin, UL94V-0
	Shell	Copper alloy, nickel-undercoated, tin-plated
	Solder tab	Copper alloy, copper-undercoated, tin-plated (reflow treatment)

RoHS compliance This product displays (LF)(SN) on a label.



Model No.	Material and Finish	Qty / box
UBA-4R-D14C2-4D	Contact	Copper alloy, nickel-undercoated, selective gold-plated
	Housing	Thermoplastic resin, UL94V-0
	Shell	Copper alloy, nickel-undercoated, tin-plated

RoHS compliance This product displays (LF)(SN) on a label.

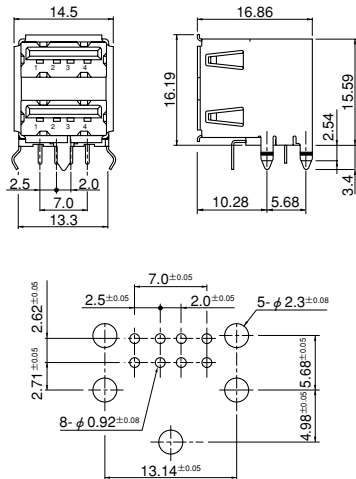


Model No.	Material and Finish	Qty / box
UBA-R4R-D14-4D	Contact	Copper alloy, nickel-undercoated, selective gold-plated
	Housing	Thermoplastic resin, UL94V-0
	Shell	Copper alloy, nickel-undercoated, tin-plated

RoHS compliance This product displays (LF)(SN) on a label.

## Receptacle

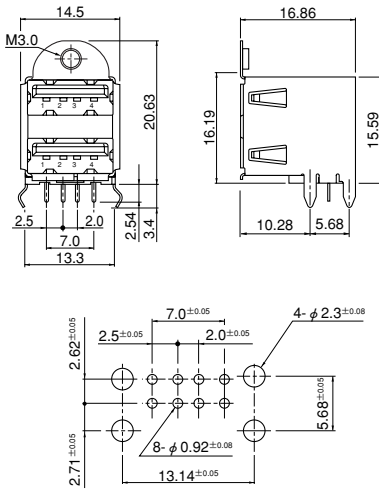
### Type A <Through-hole type> Double-stack



Model No.	Material and Finish	Qty / box
UBA-4RS-D14T-4D	Contact	Copper alloy, nickel-undercoated, selective gold-plated
	Housing	Thermoplastic resin, UL94V-0
	Locater	Thermoplastic resin, UL94V-0
	Shell	Copper alloy, nickel-undercoated, tin-plated
	Solder tab	Copper alloy, copper-undercoated, tin-plated (reflow treatment)
		210

RoHS compliance This product displays (LF)(SN) on a label.

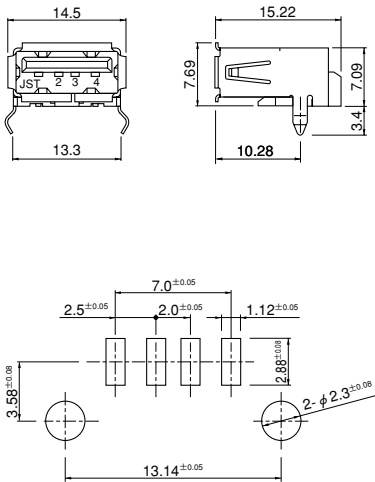
### Type A <Through-hole type> Double-stack with upper flange



Model No.	Material and Finish	Qty / box
UBA-4RS-D14C-4D	Contact	Copper alloy, nickel-undercoated, selective gold-plated
	Housing	Thermoplastic resin, UL94V-0
	Locater	Thermoplastic resin, UL94V-0
	Shell	Copper alloy, nickel-undercoated, tin-plated
	Solder tab	Copper alloy, copper-undercoated, tin-plated (reflow treatment)
		-

RoHS compliance This product displays (LF)(SN) on a label.

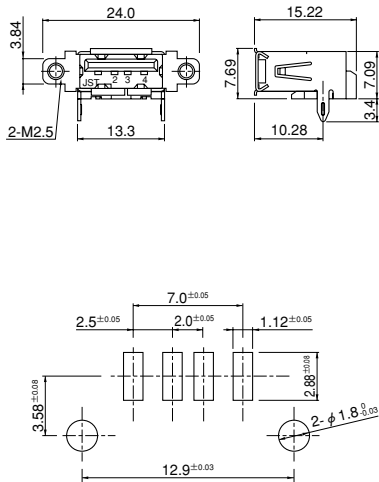
### Type A <SMT type> Without flange



Model No.	Material and Finish	Qty / box
UBA-4R-S14-4S	Contact	Copper alloy, nickel-undercoated, selective gold-plated
	Housing	Thermoplastic resin, UL94V-0
	Shell	Copper alloy, nickel-undercoated, tin-plated
	Solder tab	Copper alloy, copper-undercoated, tin-plated (reflow treatment)
		250

RoHS compliance This product displays (LF)(SN) on a label.

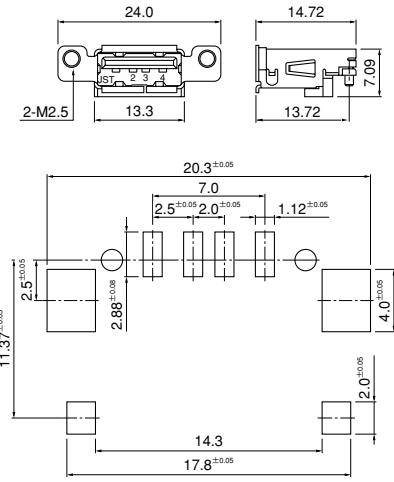
### Type A <SMT type> With side flange



Model No.	Material and Finish	Qty / box
UBA-4R-S14A-4S	Contact	Copper alloy, nickel-undercoated, selective gold-plated
	Housing	Thermoplastic resin, UL94V-0
	Locater	Thermoplastic resin, UL94V-0
	Shell	Copper alloy, nickel-undercoated, tin-plated
	Solder tab	Copper alloy, copper-undercoated, tin-plated (reflow treatment)
		192

RoHS compliance This product displays (LF)(SN) on a label.

### Type A <SMT type, off-set 3mm> With side flange



Model No.	Material and Finish	Qty / box
UBA-4R-S14B-4S	Contact	Copper alloy, nickel-undercoated, selective gold-plated
	Housing	Thermoplastic resin, UL94V-0
	Locater	Thermoplastic resin, UL94V-0
	Shell	Copper alloy, nickel-undercoated, tin-plated
	Solder tab	Copper alloy, copper-undercoated, tin-plated (reflow treatment)
		378

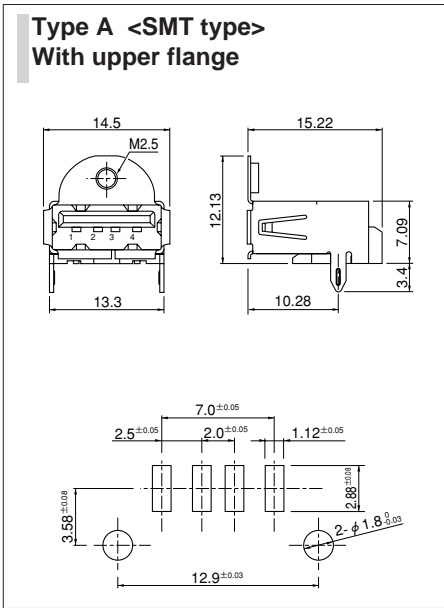
RoHS compliance This product displays (LF)(SN) on a label.

Note: The dimensions above should serve as a guideline. Contact JST for details.

# UB CONNECTOR

## Receptacle

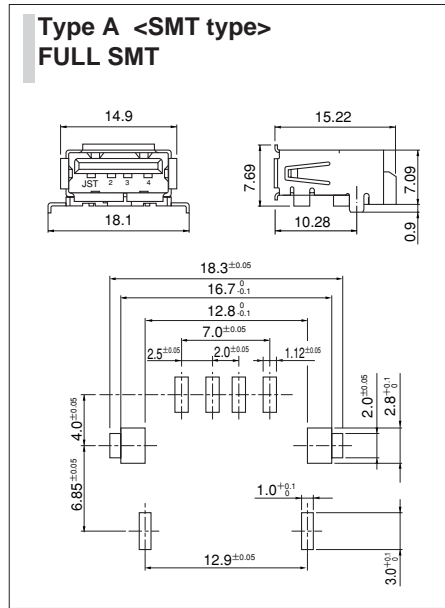
**Type A <SMT type>  
With upper flange**



Model No.	Material and Finish		Qty / box
UBA-4R-S14C-4S	Contact	Copper alloy, nickel-undercoated, selective gold-plated	216
	Housing	Thermoplastic resin, UL94V-0	
	Shell	Copper alloy, nickel-undercoated, tin-plated	

**RoHS compliance** This product displays (LF)(SN) on a label.  
*Note: The dimensions above should serve as a guideline. Contact JST for details.*

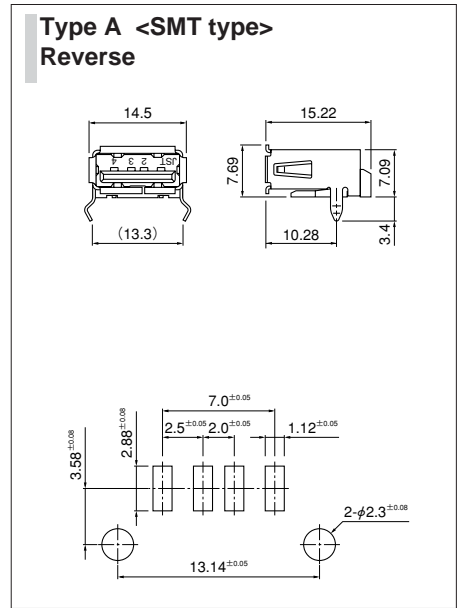
**Type A <SMT type>  
FULL SMT**



Model No.	Material and Finish		Qty / box
UBA-4R-S14H-4S	Contact	Copper alloy, nickel-undercoated, selective gold-plated	-
	Housing	Thermoplastic resin, UL94V-0	
	Locater	Thermoplastic resin, UL94V-0	
	Shell	Copper alloy, nickel-undercoated, tin-plated	
	Solder tab	Copper alloy, nickel-undercoated, tin-plated	

**RoHS compliance** This product displays (LF)(SN) on a label.

**Type A <SMT type>  
Reverse**

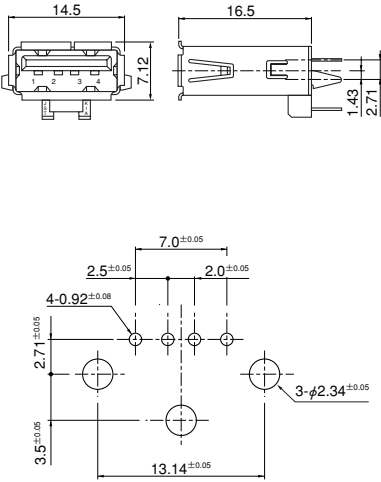


Model No.	Material and Finish		Qty / box
UBA-R4R-S14-4S	Contact	Copper alloy, nickel-undercoated, selective gold-plated	250
	Housing	Thermoplastic resin, UL94V-0	
	Shell	Copper alloy, nickel-undercoated, tin-plated	

**RoHS compliance** This product displays (LF)(SN) on a label.

## Receptacle

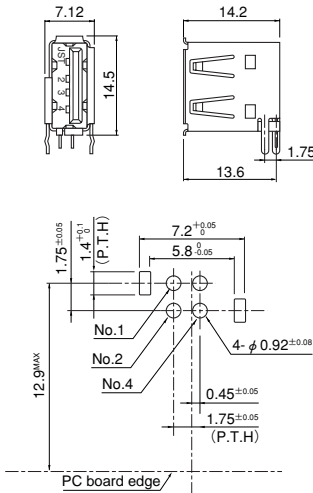
### Type A <Through-hole type> Straight, normal



Model No.	Material and Finish	Qty / box
UBAS-4R-D14D-4D	Contact	Copper alloy, nickel-undercoated, selective gold-plated
	Housing	Thermoplastic resin, UL94V-0
	Shell	Copper alloy, nickel-undercoated, tin-plated
		250

RoHS compliance This product displays (LF)(SN) on a label.

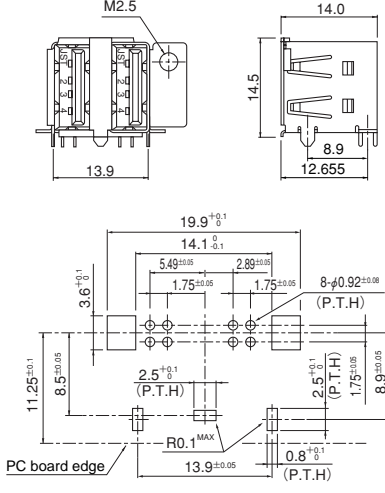
### Type A <Through-hole type> Vertical, normal



Model No.	Material and Finish	Qty / box
UBAL-4R-D14-4S	Contact	Copper alloy, nickel-undercoated, selective gold-plated
	Housing	Thermoplastic resin, UL94V-0
	Shell	Copper alloy, nickel-undercoated, tin-plated
		350

RoHS compliance This product displays (LF)(SN) on a label.

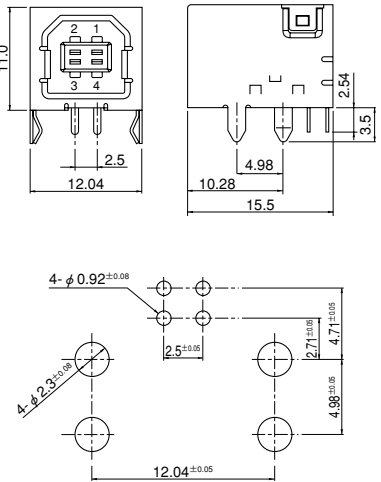
### Type A <SMT/Through-hole type> Vertical, dual-row



Model No.	Material and Finish	Qty / box
UBAL-4RS-D14K-4S	Contact	Copper alloy, nickel-undercoated, selective gold-plated
	Housing	Thermoplastic resin, UL94V-0
	Shell A	Copper alloy, nickel-undercoated, tin-plated
	Shell B	Copper alloy, nickel-undercoated, tin-plated
		105

RoHS compliance This product displays (LF)(SN) on a label.

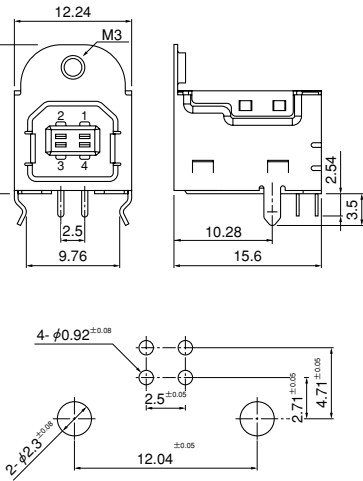
### Type B <Through-hole type> Normal



Model No.	Material and Finish	Qty / box
UBB-4R-D14T-4D	Contact	Copper alloy, nickel-undercoated, selective gold-plated
	Housing	Thermoplastic resin, UL94V-0
	Shell	Copper alloy, nickel-undercoated, tin-plated
		270

RoHS compliance This product displays (LF)(SN) on a label.

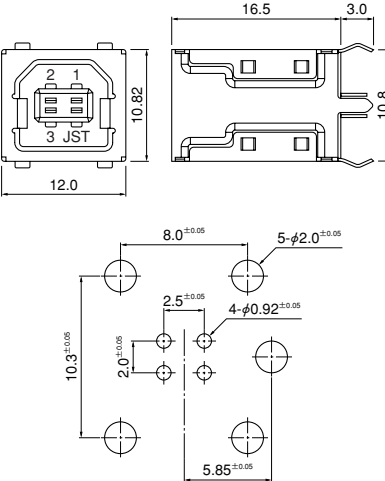
### Type B <Through-hole type> With upper flange



Model No.	Material and Finish	Qty / box
UBB-4R-D14C-4D	Contact	Copper alloy, nickel-undercoated, selective gold-plated
	Housing	Thermoplastic resin, UL94V-0
	Shell	Copper alloy, nickel-undercoated, tin-plated
		270

RoHS compliance This product displays (LF)(SN) on a label.

### Type B <Through-hole type> Straight



Model No.	Material and Finish	Qty / box
UBBS-4R-D14-4D	Contact	Copper alloy, nickel-undercoated, selective gold-plated
	Housing	Thermoplastic resin, UL94V-0
	Shell	Copper alloy, nickel-undercoated, tin-plated
		600

RoHS compliance This product displays (LF)(SN) on a label.

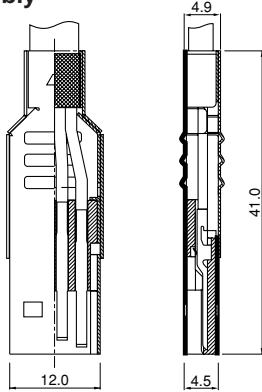
Note: The dimensions above should serve as a guideline. Contact JST for details.

# UB CONNECTOR

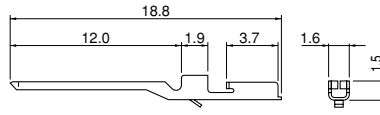
## Plug type A

USB2.0 certified product

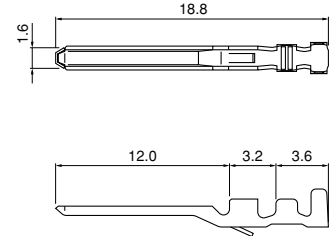
### Assembly



### Contact (Solder pot type)



### Contact (Crimp type)



Model No.

**UBA-P\*14**

Model No.

**UBB-DP214**

Material and Finish

Copper alloy,  
nickel-undercoated,  
selective gold-plated

Q'ty / reel

12,000

Model No.

**UBB-SP1114**

Applicable wire

AWG#

Insulation O.D. (mm)

Q'ty / reel

24~20

1.03~1.58

10,000

**UBB-SP2114**

28~24

0.79~1.17

12,000

Material and Finish

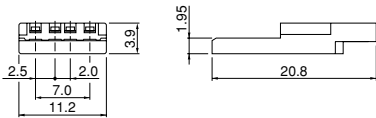
Copper alloy, nickel-undercoated, selective gold-plated

**RoHS compliance** This product displays (LF)(SN) on a label.

Note: Not CSA certified.

**RoHS compliance** This product displays (LF)(SN) on a label.

### Housing



Model No.

**UBA-PH4-1**

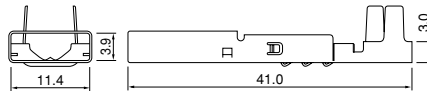
Material

Glass-filled PBT, UL94V-0

Q'ty / bag

500

### Shielding cover A



Model No.

**UBA-SC4A**

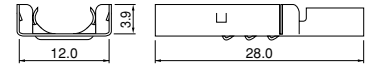
Material and Finish

Mild steel,  
nickel-undercoated,  
tin-plated

Q'ty / box

400

### Shielding cover B



Model No.

**UBA-SC4B**

Material and Finish

Mild steel,  
nickel-undercoated,  
tin-plated

Q'ty / box

1,000

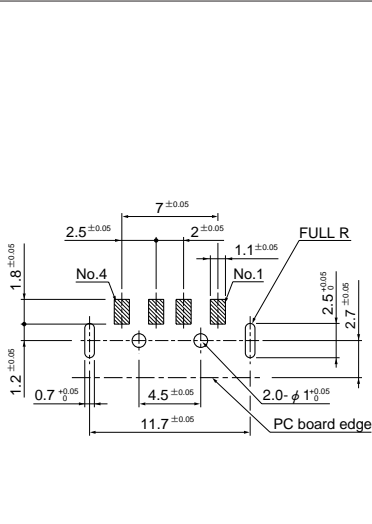
**RoHS compliance**

Note: USB2.0 certification for UB connector harness is needed separately.

**RoHS compliance** This product displays (LF) on a label.

**RoHS compliance** This product displays (LF) on a label.

## Plug type A SMT type



Model No.	Material and Finish	Q'ty / box
<b>UBA-4P-S14C</b>	Contact	Copper alloy, nickel-undercoated, selective gold-plated
	Housing	Thermoplastic resin, UL94V-0
	Shell	Copper alloy, nickel-undercoated, palladium-plated

**RoHS compliance** This product displays (LF)(SN) on a label.

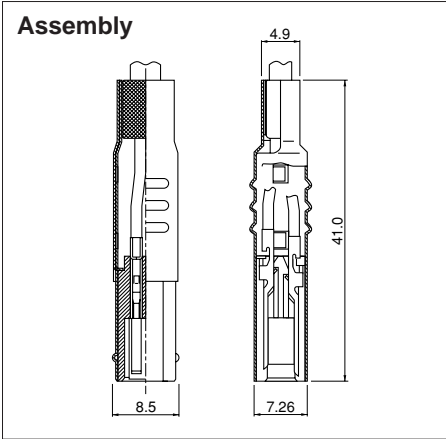
Note: 1. Not UL/CSA approved.

2. The dimensions left should serve as a guideline.  
Contact JST for details.



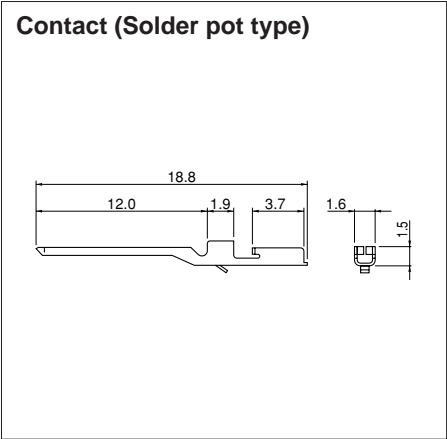
## Plug type B

USB2.0 certified product



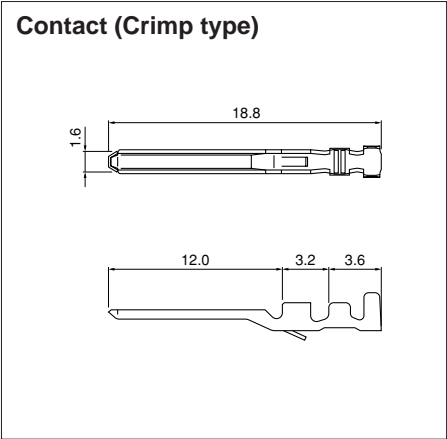
Model No.
<b>UBB-P*14</b>

Note: Not CSA certified.



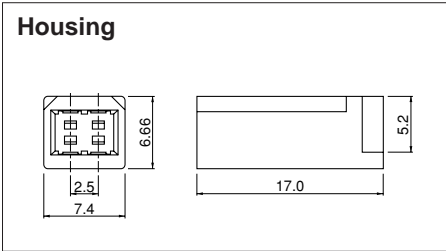
Model No.	Material and Finish	Q'ty / reel
<b>UBB-DP214</b>	Copper alloy, nickel-undercoated, selective gold-plated	12,000

RoHS compliance This product displays (LF)(SN) on a label.



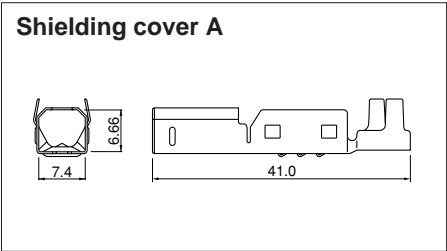
Model No.	Applicable wire		Q'ty / reel
	AWG#	Insulation O.D. (mm)	
<b>UBB-SP1114</b>	24~20	1.03~1.58	10,000
<b>UBB-SP2114</b>	28~24	0.79~1.17	12,000

Material and Finish  
Copper alloy, nickel-undercoated, selective gold-plated  
RoHS compliance This product displays (LF)(SN) on a label.



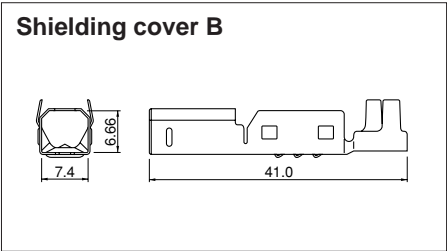
Model No.	Material	Q'ty / bag
<b>UBB-PH4-1</b>	Glass-filled PBT, UL94V-0	500

RoHS compliance  
Note: Contact JST for USB2.0 standards.



Model No.	Material and Finish	Q'ty / box
<b>UBB-SC4A</b>	Mild steel, nickel-undercoated, tin-plated	500

RoHS compliance This product displays (LF) on a label.



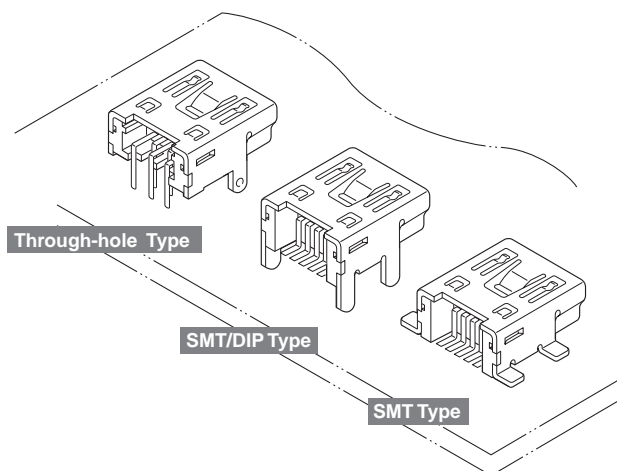
Model No.	Material and Finish	Q'ty / box
<b>UBB-SC4B</b>	Mild steel, nickel-undercoated, tin-plated	1,000

RoHS compliance This product displays (LF) on a label.



# UB CONNECTOR mini-B Type

## USB (Universal Serial Bus) Conforming Connector



**The USB 2.0 certified receptacle is quite suitable for the interface of the small and miniaturized PC-peripheral products as Digital Cameras and MP3 Players.**

- **Space saving design**
- **Shielding and higher reliability of connection**
- **Excellent insertion and withdrawal forces**
- **Variations**

### Specifications

- Current rating: 1.0A AC, DC
  - Voltage rating: 30V AC, DC
  - Temperature range: -55°C to +85°C  
(including temperature rise in applying electrical current)
  - Contact resistance: Initial value/50m Ω max.  
After environmental testing/50m Ω max.
  - Insulation resistance: 1,000M Ω min.
  - Withstanding voltage: 100V AC/minute
  - Applicable wire: Mating with USB 2.0 certified mini-B plug
  - Applicable PC board thickness: Through-hole/1.0mm  
SMT, SMT-through-hole/  
1.0 to 1.2mm
- \* RoHS compliant products are published.  
\* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.  
\* Contact JST for details.

### Standards

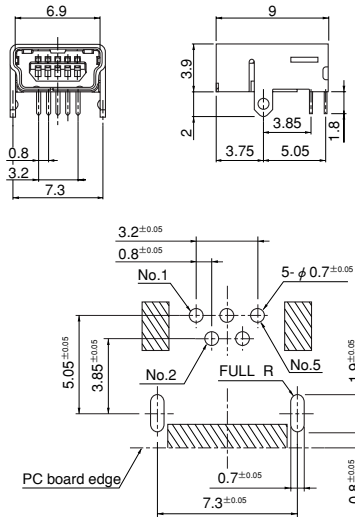
Recognized E60389

# UB CONNECTOR mini-B Type

## Receptacle

USB 2.0 certified product

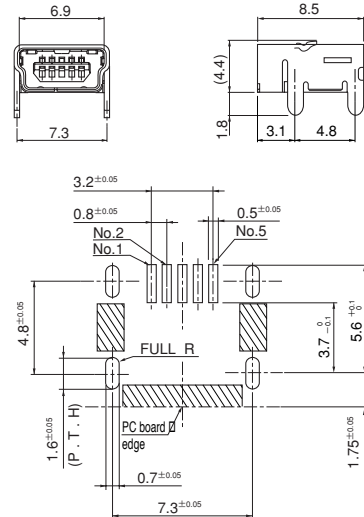
### Through-hole/Through-hole



Model No.	Material and Finish		Q'ty/box
UB-M5BR-DM14-4D	Contact	Copper alloy, nickel-undercoated, selective gold-plated	400
	Housing	Thermoplastic resin, UL94V-0	
	Shell	Copper alloy, nickel-undercoated, tin-plated	

RoHS compliance This product displays (LF)(SN) on a label.

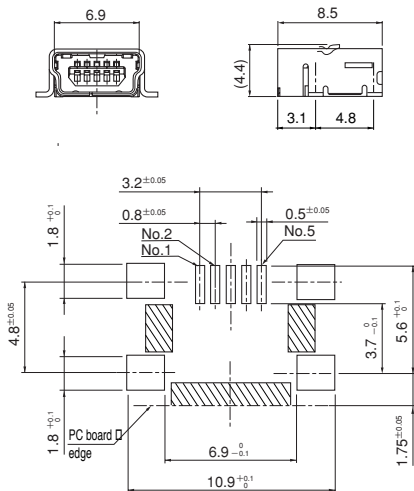
### Through-hole/SMT



Model No.	Material and Finish		Q'ty/box
UB-M5BR-S14-4S	Contact	Copper alloy, nickel-undercoated, selective gold-plated	840
	Housing	Heat resisting resin, UL94V-0	
	Shell	Copper alloy, nickel-undercoated, tin-plated	

RoHS compliance This product displays (LF)(SN) on a label.

### SMT/SMT



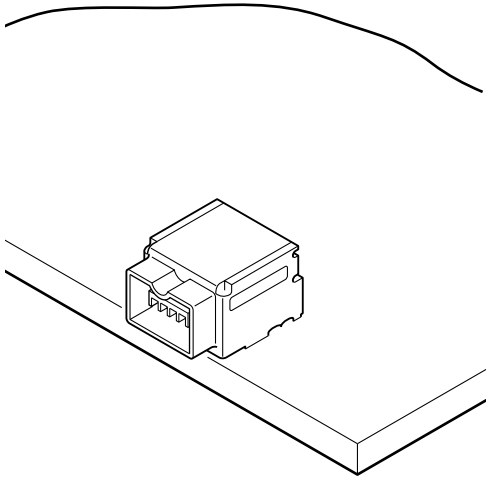
Model No.	Material and Finish		Q'ty/box
UB-M5BR-G14-4S	Contact□	Copper alloy, nickel-undercoated, selective gold-plated□	840
	Housing□	Heat resisting resin, UL94V-0□	
	Shell	Copper alloy, nickel-undercoated, tin-plated	

RoHS compliance This product displays (LF)(SN) on a label.



# RV CONNECTOR

High-speed serial interface connectors



Conforming to the IEEE 1394 standards (4P), the RV connector is a high-speed serial interface connector designed for use in PCs and consumer electronic equipment.

- A variety of receptacles are available
- Compact

## Specifications

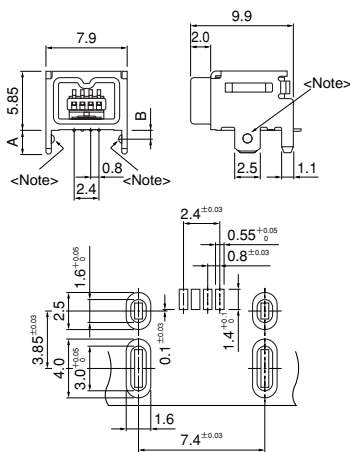
- Current rating: 0.3A AC, DC
- Voltage rating: 30V AC, DC
- Temperature range: -40°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/50m Ω max.  
After environmental testing/30m Ω max.  
(variation from initial value)
- Insulation resistance: 100M Ω min.
- Withstanding voltage: 100V AC/minute
- Applicable PC board thickness: 0.8 to 1.6mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

- Ⓜ Recognized E60389
- Ⓢ Certified LR20812

## Receptacle

### Normal <SMT type>

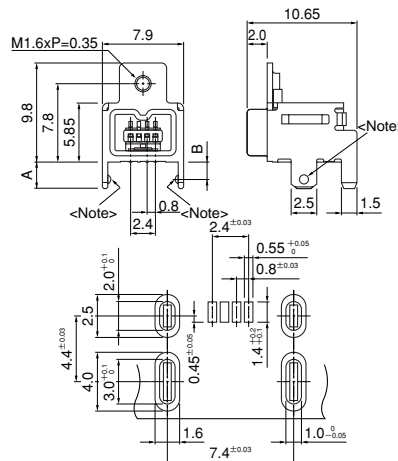


Model No.	Material and Finish
Supplied on embossed tape RV-SS4G-N-BM-TB	Housing PPS, UL94V-0 Contact Copper alloy, overall nickel-undercoated, Mating part: gold-plated Solder tail: tin-plated(reflow treatment)
Supplied in tray RV-SS4G-N-B( )	Shell cover Copper alloy, copper-undercoated, nickel-plated Shell Mild steel, nickel-undercoated, tin-plated

**RoHS compliance** This product displays (LF)(SN) on a label.  
Note: Embossed-taping products have no dimple.

Type	Applicable PC board thickness (mm)	Dimensions (mm)	
		A	B
Normal type	0.8	2.15	0.8
	1.6	2.45	1.6

### Normal <SMT type> with upper flange<M1.6>

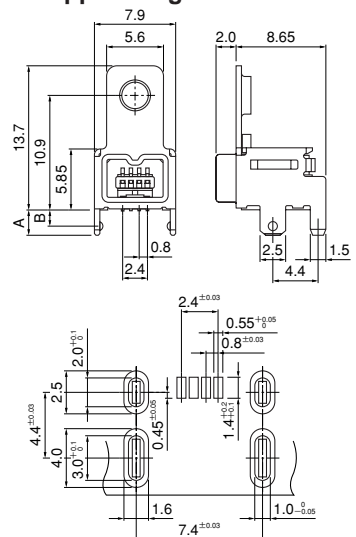


Model No.	Material and Finish
Supplied on embossed tape RV-SS4G-F16N-C-TB	Housing PPS, UL94V-0 Contact Copper alloy, overall nickel-undercoated, Mating part: gold-plated Solder tail: tin-plated(reflow treatment)
Supplied in tray RV-SS4G-F16N-C( )	Shell cover Copper alloy, copper-undercoated, nickel-plated Shell Mild steel, copper-undercoated, nickel-undercoated, tin/nickel alloy-plated

**RoHS compliance** This product displays (LF)(SN) on a label.  
Note: Embossed-taping products have no dimple.

Note: 1. Receptacles are not UL/CSA approved.  
2. Model No. : ( ) denotes the applicable PC board thickness.  
08 ... For 0.8mm thick PC board  
16 ... For 1.6mm thick PC board

### Normal <SMT type> with upper flange<M3>

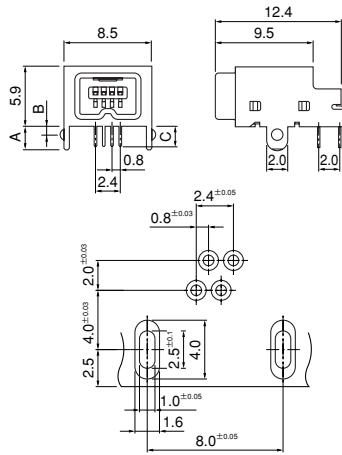


Model No.	Material and Finish
RV-SS4G-F30N-E ( )	Housing PPS, UL94V-0 Contact Copper alloy, overall nickel-undercoated, Mating part: gold-plated Solder tail: tin-plated(reflow treatment)
	Shell cover Copper alloy, copper-undercoated, nickel-plated Shell Mild steel, copper-undercoated, nickel-undercoated, tin/nickel alloy-plated

**RoHS compliance** This product displays (LF)(SN) on a label.

## Receptacle

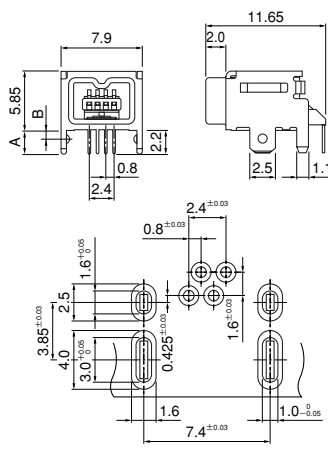
### Reverse <Through-hole type>



Model No.	Material and Finish
RV-SS4D-R-A ( )	Housing PBT, UL94V-0
	Contact Copper alloy, overall nickel-undercoated, Mating part: gold-plated Solder tail: tin-plated(reflow treatment)
	Shell cover Copper alloy, copper-undercoated, nickel-plated
	Shell Mild steel, nickel-undercoated, tin/copper alloy-plated

RoHS compliance This product displays (LF)(SN) on a label.

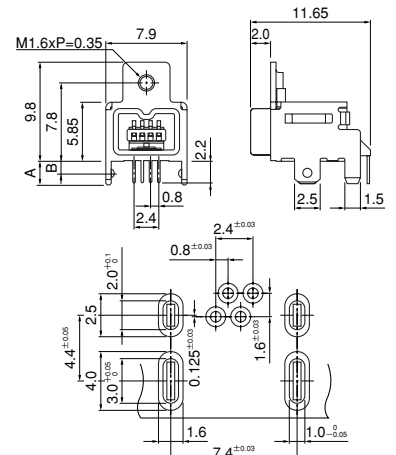
### Normal <Through-hole type>



Model No.	Material and Finish
RV-SS4D-N-B ( )	Housing PPS, UL94V-0
	Contact Copper alloy, overall nickel-undercoated, Mating part: gold-plated Solder tail: tin-plated(reflow treatment)
	Shell cover Copper alloy, copper-undercoated, nickel-plated
	Shell Mild steel, nickel-undercoated, tin/copper alloy-plated

RoHS compliance This product displays (LF)(SN) on a label.

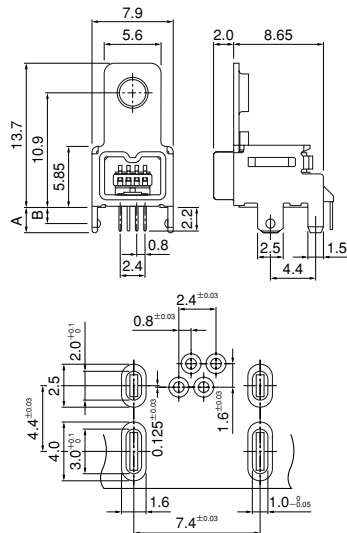
### Normal <Through-hole type> with upper flange<M1.6>



Model No.	Material and Finish
RV-SS4D-F16N-C ( )	Housing PPS, UL94V-0
	Contact Copper alloy, overall nickel-undercoated, Mating part: gold-plated Solder tail: tin-plated(reflow treatment)
	Shell cover Copper alloy, copper-undercoated, nickel-plated
	Shell Mild steel, nickel-undercoated, tin/copper alloy-plated

RoHS compliance This product displays (LF)(SN) on a label.

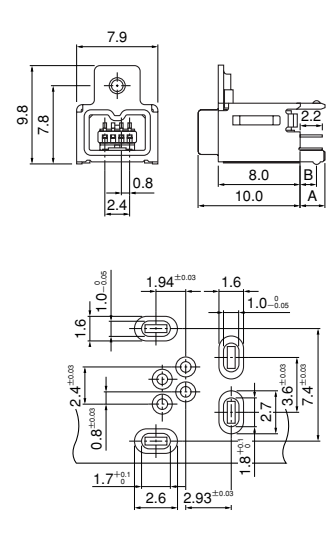
### Normal <Through-hole type> with upper flange<M3>



Model No.	Material and Finish
RV-SS4D-F30N-E ( )	Housing PPS, UL94V-0
	Contact Copper alloy, overall nickel-undercoated, Mating part: gold-plated Solder tail: tin-plated(reflow treatment)
	Shell cover Copper alloy, copper-undercoated, nickel-plated
	Shell Mild steel, nickel-undercoated, tin/copper alloy-plated

RoHS compliance This product displays (LF)(SN) on a label.

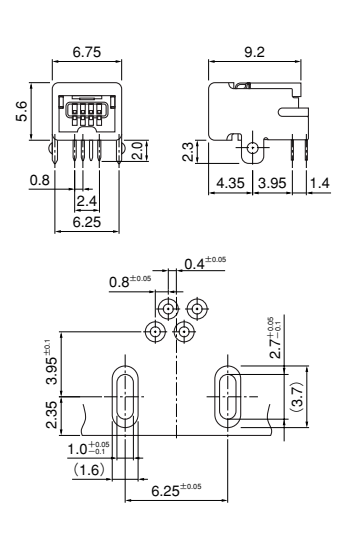
### Top entry <Through-hole type> with flange<M1.6>



Model No.	Material and Finish
RV-ST4D-F16N-D ( )	Housing PPS, UL94V-0
	Contact Copper alloy, overall nickel-undercoated, Mating part: gold-plated Solder tail: tin-plated(reflow treatment)
	Shell cover Copper alloy, copper-undercoated, nickel-plated
	Shell Mild steel, nickel-undercoated, tin/copper alloy-plated

RoHS compliance This product displays (LF)(SN) on a label.

### Reverse <Through-hole type> Small type

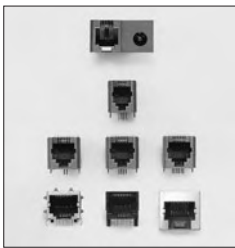


Model No.	Material and Finish
RV-SS4D-RS-H08-1	Housing PA9T
	Contact Copper alloy, overall nickel-undercoated, Mating part: gold-plated Solder tail: tin-plated
	Shell cover Copper alloy, nickel-undercoated, tin-plated
	Shell Copper alloy, tin-plated(reflow treatment)

RoHS compliance This product displays (LF) on a label.

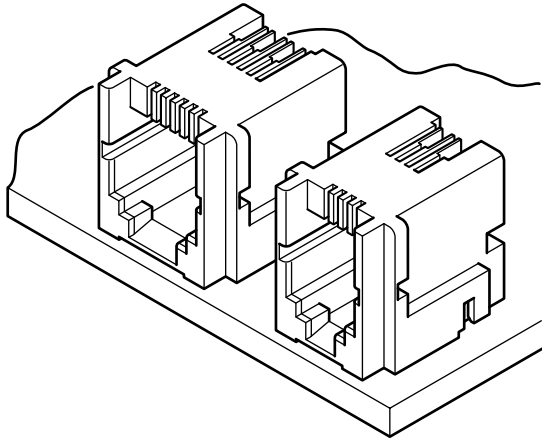
Type	Applicable PC board thickness (mm)	Dimensions (mm)		
		A	B	C
Normal type	0.8	2.15	0.8	-
	1.6	2.45	1.6	-
Reverse type	0.8	2.3	0.8	2.0
	1.6	3.1	1.6	2.8

Note: 1. Receptacles are not UL/CSA approved.  
 2. Model No. : ( ) denotes the applicable PC board thickness.  
 08 ... For 0.8mm thick PC board  
 16 ... For 1.6mm thick PC board



# MJ CONNECTOR

Modular jack connectors



- Upper contact point
- Metal hook
- Shielding effect
- Grounding
- Correspond to high-speed LAN transmission (MJ-88U-SD315K-T)

## Specifications

- Current rating: 1.3A AC, DC
- Voltage rating: 250V AC, DC
- Temperature range: -40°C to +80°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/20m Ω max.  
After environmental testing/40m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 1,000V AC/minute
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

Recognized E174260

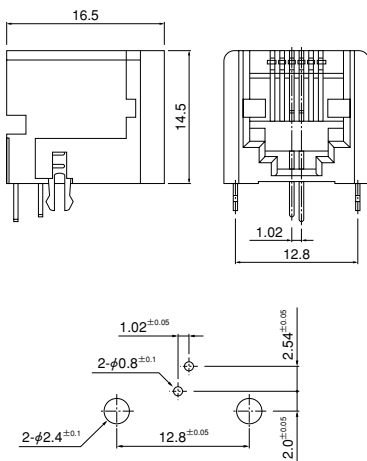
Certified LR20812

Conforms to FCC Standards

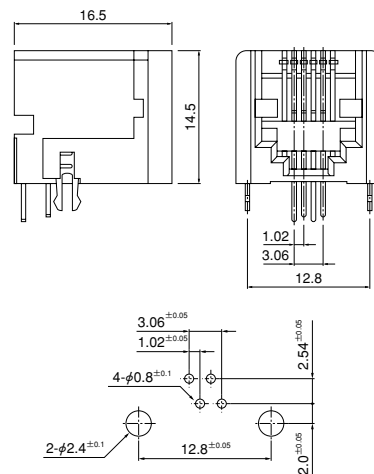
(6 circuits and 8 circuits MJ connector)

## Connector

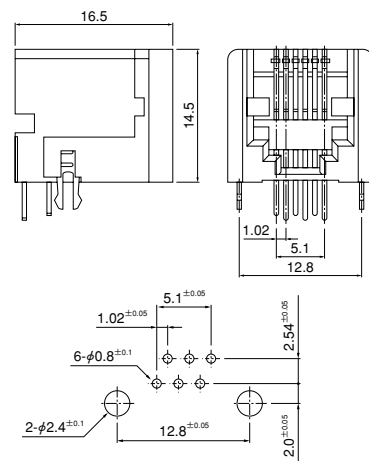
### Normal type 2/6 type



### 4/6 type



### 6/6 type

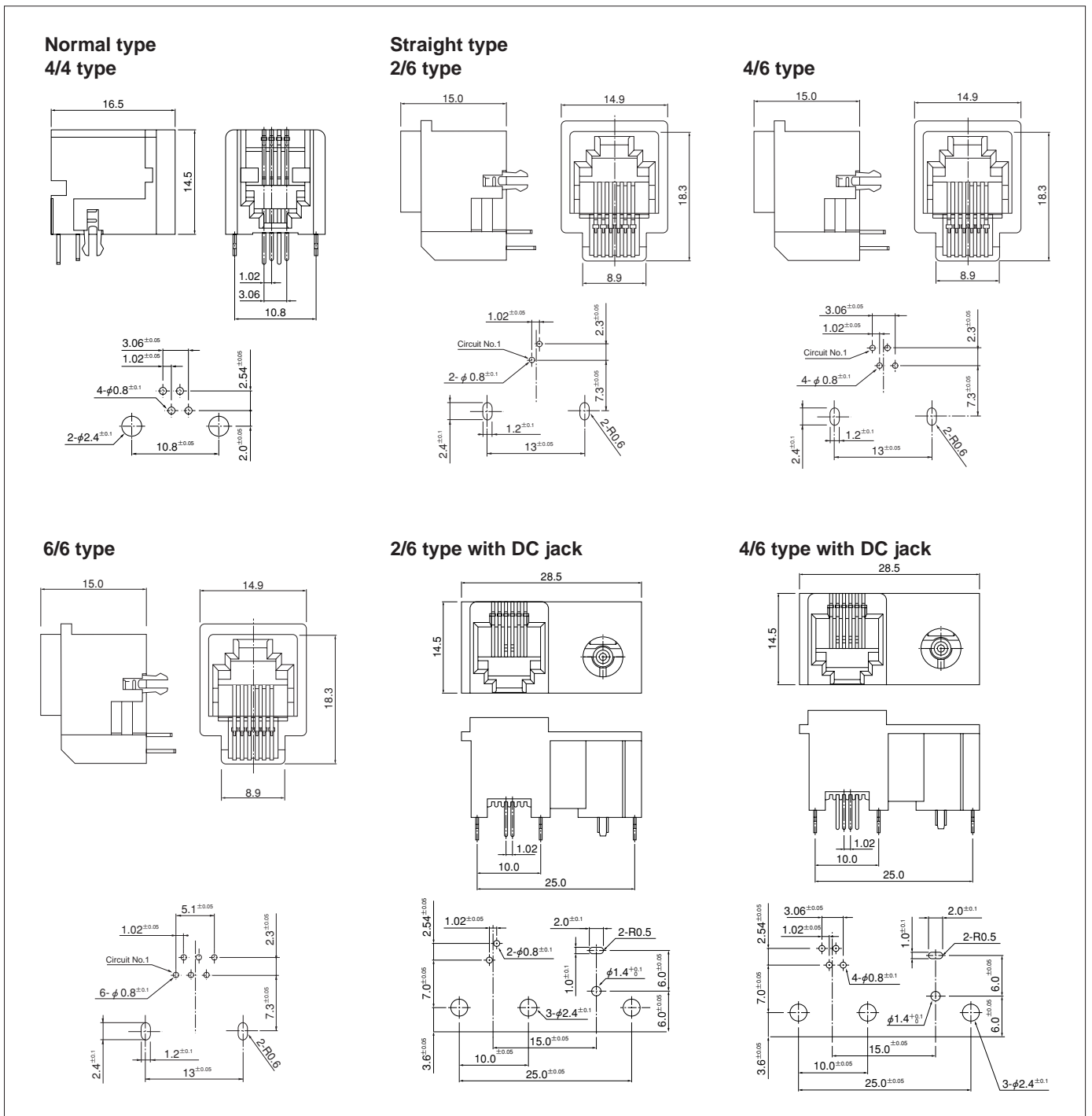


Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.

2. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.

# MJ CONNECTOR

## Connector and PC board layout (viewed from component side)



Type	Circuits	Model No.	Q'ty / box
Normal type	2/6	<b>MJ-62J-RD315</b>	270
	4/6	<b>MJ-64J-RD315</b>	270
	6/6	<b>MJ-66J-RD315</b>	270
	4/4	<b>MJ-44J-RD315</b>	306
Straight type	2/6	<b>MJ-62C-SD335</b>	180
	4/6	<b>MJ-64C-SD335</b>	180
	6/6	<b>MJ-66C-SD335</b>	180
	2/6 with DC jack	<b>MJ-62D-SD335</b>	108
	4/6 with DC jack	<b>MJ-64D-SD335</b>	108

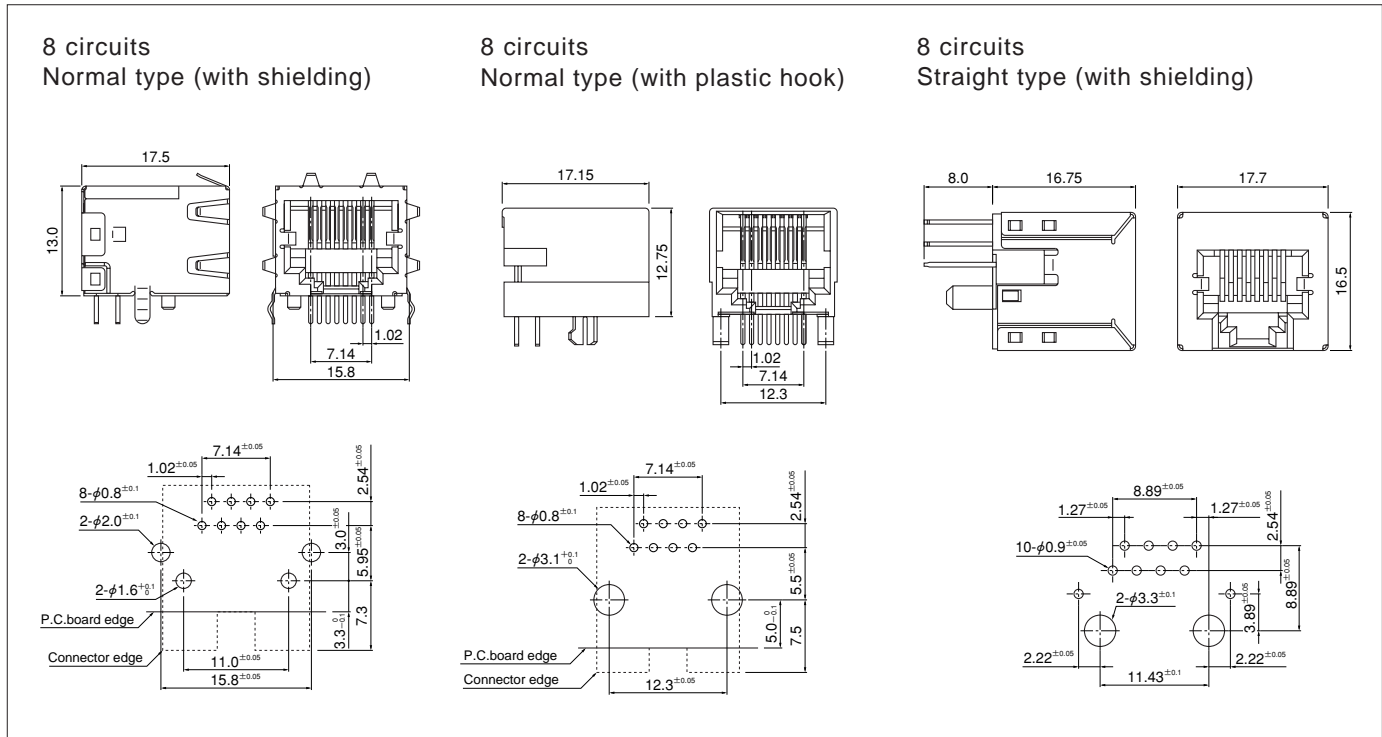
Material and Finish
Contact: Normal type/ Phosphor bronze, nickel-undercoated, Mating part; gold-plated 1.27μm min. Solder tail; tin-plated (reflow treatment)
Straight type/ Phosphor bronze, nickel-undercoated, Mating part; gold-plated 1.27μm min. Overall; gold-plated (flash)
Housing: Glass-filled PBT, UL94V-0 Hook pin: Brass, tin-plated (reflow treatment) Moving contact (spring): Copper alloy, tin-plated (reflow treatment) [with-DC-jack type only] Stationary contact (pin): Brass, nickel-undercoated, tin/copper alloy-plated [with-DC-jack type only]

Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.  
2. Hole dimensions differ according to the kind of PC board and piercing method.  
The dimensions above should serve as a guideline. Contact JST for details.

**RoHS compliance** This product displays (LF)(SN) on a label.  
The product with DC jack displays (LF) on a label.

# MJ CONNECTOR

## Connector and PC board layout (viewed from component side)



Type	Circuits	Model No.	Q'ty / box
Normal type (with shielding)	8	<b>MJ-88H-RD315K</b>	520
Normal type (with plastic hook)	8	<b>MJ-88R-RD315K</b>	520
Straight type (with shielding)	8	<b>MJ-88U-SD315K-T</b>	144

### Material and Finish

Contact: Phosphor bronze, nickel-undercoated,  
 Mating part: gold-plated 1.27μm min.  
 Solder tail: tin-plated (reflow treatment)  
 Housing: Glass-filled PBT, UL94V-0(Normal type)  
 Glass-filled LCP, UL94V-0(Straight type)  
 Shield cover: Phosphor bronze, tin-plated (reflow treatment) [Normal type, Straight type]  
 Shield pin: Phosphor bronze, copper-undercoated, tin-plated (reflow treatment) [Straight type]

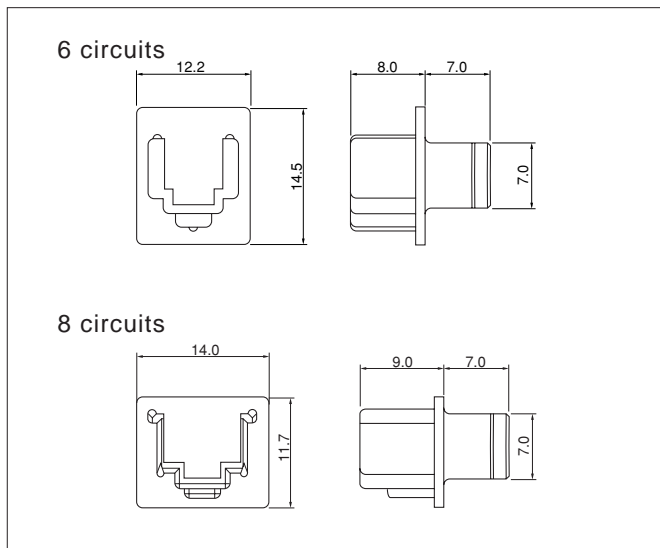
**RoHS compliance** This product displays (LF)(SN) on a label.

Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.

2. Hole dimensions differ according to the kind of PC board and piercing method.

The dimensions above should serve as a guideline. Contact JST for details.

## Cap for dust



Circuits	Model No.	Q'ty / box
6	<b>MJ-JP56K</b>	500
8	<b>MJ-JP68K</b>	1,000

### Material

MJ-JP56K: PA 66, UL94V-0  
 MJ-JP68K: PBT, UL94V-0

**RoHS compliance**  
 Note: Not UL/CSA approved.



# 3

## Wire to Wire Connectors

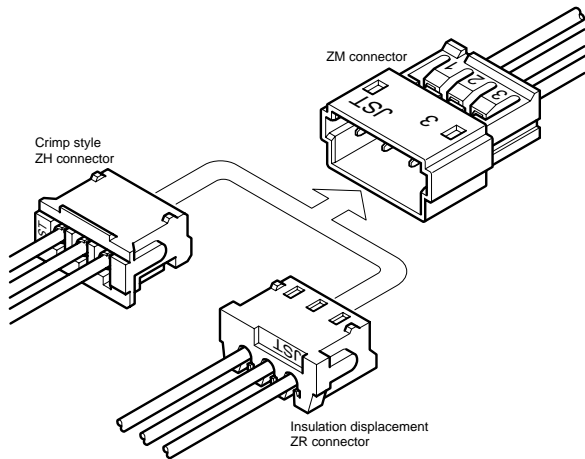
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# ZM CONNECTOR

1.5mm pitch/Crimp style Wire-to-wire connectors Matable with ZH and ZR receptacles



1.5mm pitch connectors allow higher densities.

- Compact design
- Housing-to-terminal locks
- Both crimp style and insulation displacement receptacles can be used
- Fully shrouded header resists "rocking" during mating

## Specifications

- Current rating: 0.7A AC, DC max. (AWG #28)
- Voltage rating: 50V AC, DC max. (See Note below.)
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/20m Ω max.  
After environmental testing/30m Ω max.
- Insulation resistance: 500M Ω min.
- Withstanding voltage: 500V AC/minute
- Applicable wire: AWG #30 to #28

Note: Contacts are exposed at the housing lances.  
Care should be taken so that these parts do not touch the metal section of the chassis.

- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

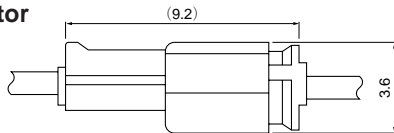
## Standards

Recognized E60389

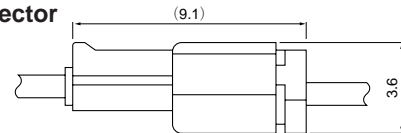
Certified LR20812

## Assembly layout

ZM/ZH connector

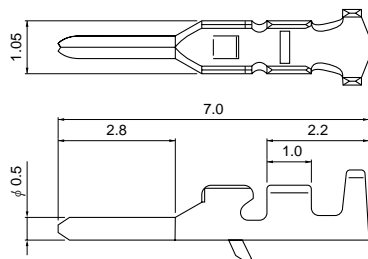


ZM/ZR connector

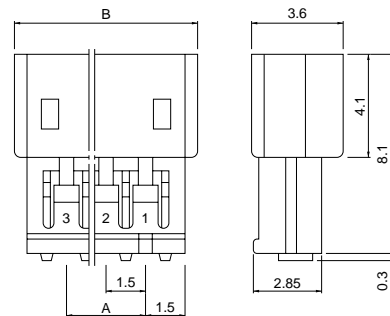


## Plug / ZM connector

### Contact



### Housing



Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty / reel
	mm <sup>2</sup>	AWG #		
<b>SMM-003T-P0.5</b>	0.05 ~ 0.08	30 ~ 28	0.7 ~ 0.9	16,000

### Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

### RoHS compliance

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SMM-003T-P0.5</b>	AP-K2N	MKS-LS · MKS-L	MK/SMM-003-05	APLMK SMM003-05
		*MKS-SC	SC/SMM-003-05	APLSC SMM003-05

Note: \*Strip-crimp applicator

Circuits	Model No.	Dimensions (mm)		Q'ty / bag
		A	B	
2	<b>ZMR-02</b>	1.5	5.5	2,000
3	<b>ZMR-03</b>	3.0	7.0	2,000
9	<b>ZMR-09</b>	12.0	16.0	1,000
13	<b>ZMR-13</b>	18.0	22.0	1,000

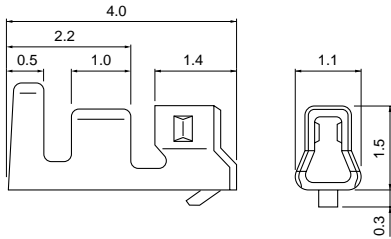
### Material

Glass-filled PA 66, UL94V-0

### RoHS compliance

## Receptacle / ZH connector (Crimp style)

### Contact



Model No.	Dimensions (mm)		Insulation (mm)	Q'ty / reel
	mm <sup>2</sup>	AWG #		
<b>SZH-003T-P0.5</b>	0.032 ~ 0.08	32 ~ 28	0.5 ~ 0.9	16,000

#### Material and Finish

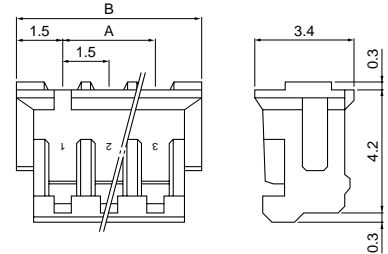
Phosphor bronze, tin-plated (reflow treatment)

#### RoHS compliance

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SZH-003T-P0.5</b>	AP-K2N	MKS-L	MK/SZH-003-05	APLMK SZH003-05
		*MKS-SC	SC/SZH-003-05	APLSC SZH003-05

Note: \*Strip-crimp applicator

### Housing



Circuits	Model No.	Dimensions (mm)		Q'ty / bag
		A	B	
2	<b>ZHR-2</b>	1.5	4.5	1,000
3	<b>ZHR-3</b>	3.0	6.0	1,000
9	<b>ZHR-9</b>	12.0	15.0	1,000
13	<b>ZHR-13</b>	18.0	21.0	1,000

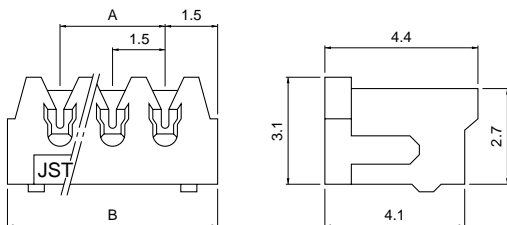
#### Material

PA 66, UL94V-0

#### RoHS compliance

## Receptacle / ZR connector (IDC)

### Receptacle

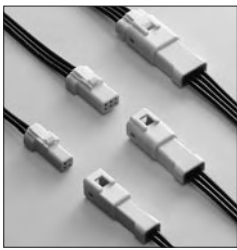


Circuits	Model No.		Dimensions (mm)		Q'ty / bag
	AWG #30	AWG #28	A	B	
2	<b>02ZR-3H-P</b>	<b>02ZR-8M-P</b>	1.5	4.5	2,000
3	<b>03ZR-3H-P</b>	<b>03ZR-8M-P</b>	3.0	6.0	2,000
9	<b>09ZR-3H-P</b>	<b>09ZR-8M-P</b>	12.0	15.0	2,000
13	<b>13ZR-3H-P</b>	<b>13ZR-8M-P</b>	18.0	21.0	2,000

#### Material

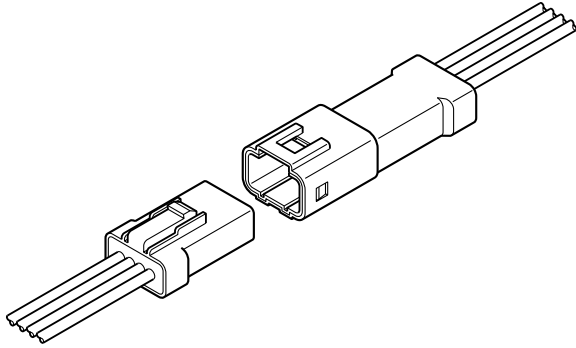
Contact: Phosphor bronze, tin-plated (reflow treatment)  
Housing: Glass-filled PA 66, UL94V-0

#### RoHS compliance



# JWPF CONNECTOR

**2.0mm pitch/Crimp style wire-to-wire connectors**



**Applicable for waterproof usage. This is the wire-to-wire connector that is more than grade 7 ingress protection of JIS C 0920 (IEC 60529 IPX7).**

- **Waterproof grade**
- **Contained seal ring**
- **Solid rubber seal**
- **Double-spring construction**
- **Housing-to-terminal locks**
- **Inner-housing lock**

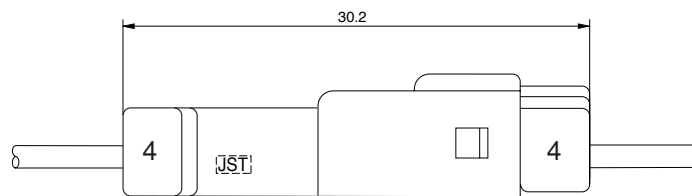
## Specifications

- Current rating: 3A AC, DC (AWG #22)
  - Voltage rating: 100V AC, DC
  - Temperature range: -40°C to +85°C  
(including temperature rise in applying electrical current)
  - Contact resistance: Initial value/5m Ω max.  
After environmental testing/10m Ω max.
  - Insulation resistance: 800M Ω min.
  - Withstanding voltage: 1,000V AC/minute
  - Applicable wire: AWG #26 to #22  
0.13 to 0.33mm<sup>2</sup>  
Insulation O.D./1.4 to 1.6mm
  - Waterproof grade: More than grade 7 ingress protection of JIS C 0920(IEC 60529 IPX7)
- \* RoHS compliant products are published.  
\* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.  
\* Contact JST for details.

## Standards

Recognized E60389

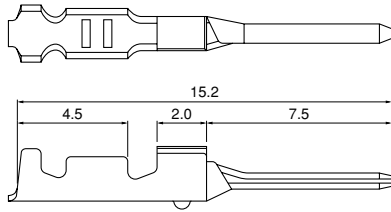
## Assembly layout



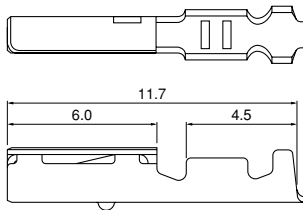
# JWPF CONNECTOR

## Contact

### Tab contact



### Receptacle contact



Model No.		Applicable wire		Insulation O.D. (mm)	Q'ty/ reel
Tab contact	Receptacle contact	mm <sup>2</sup>	AWG #		
SWPT-001T-P025	SWPR-001T-P025	0.13 ~ 0.33	26 ~ 22	1.4 ~ 1.6	8,200

### Material and Finish

Tab contact: Phosphor bronze, tin-plated (reflow treatment)  
Receptacle contact: Copper alloy, tin-plated (reflow treatment)

### RoHS compliance

Note: Contact JST for brass products.

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SWPT-001T-P025	AP-K2N	MKS-L	MK/SWPR/T-001-025	APLMK SWPR/T001-025
SWPR-001T-P025		-	-	-

## Housing

Material: PBT, UL94V-0, natural (white)

Circuits	Tab housing (for Tab contact)	Q'ty/ bag	Receptacle housing (for Receptacle contact)	Q'ty/ bag
2	<b>02T-JWPF-VSLE-S</b>  	1,000	<b>02R-JWPF-VSLE-S</b>  	1,000
3	<b>03T-JWPF-VSLE-S</b>  	1,000	<b>03R-JWPF-VSLE-S</b>  	1,000
4	<b>04T-JWPF-VSLE-S</b>  	1,000	<b>04R-JWPF-VSLE-S</b>  	1,000
8	<b>08T-JWPF-VSLE-D</b>  	1,000	<b>08R-JWPF-VSLE-D</b>  	1,000

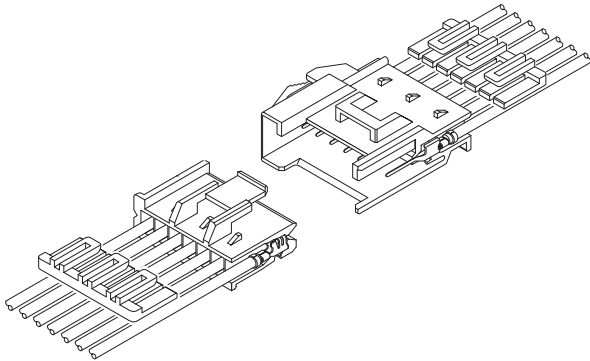
### RoHS compliance

Note: 1. Receptacle housing comes with seal rubber plate.  
2. Tab housing comes with seal rubber plate, seal ring and seal ring holder.



# XM CONNECTOR

2.5mm pitch/Crimp style wire-to-wire connectors



**The retainer provides added protection against non-insertion or disconnection.**

- Inner-housing lock
- Secondary retainers
- Housing lance
- Mountable on a variety of panels
- Contacts smoothly insert into the housings without colliding with internal obstacles

## Specifications

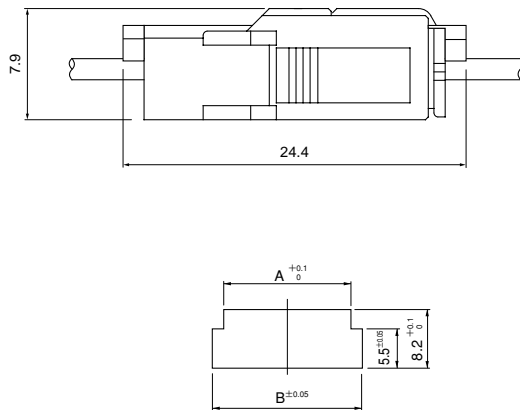
- Current rating: 3A AC, DC max.
- Voltage rating: 250V AC, DC max.
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/10m Ω max.  
After environmental testing/20m Ω max.
- Insulation resistance: 500M Ω min.
- Withstanding voltage: 1,500V AC/minute
- Applicable wire: AWG #28 to #20  
0.08 to 0.50mm<sup>2</sup>
- Applicable panel thickness: 0.5 to 1.8mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

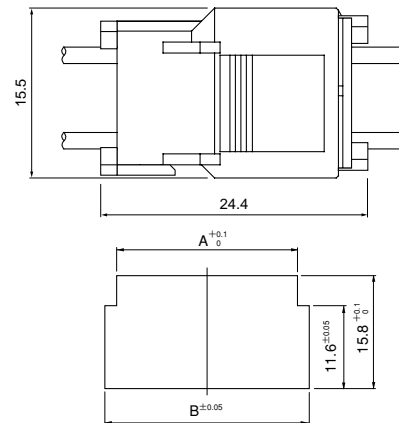
- UL Recognized E60389
- CS Certified LR20812

## Panel Layout and Assembly layout

(2 to 12 circuits)



(18 circuits)

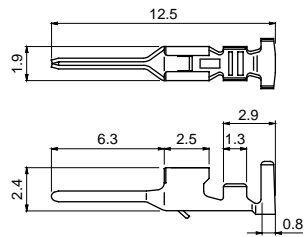


Circuits	Receptacle housing	Panel hole dimensions (mm)		General tolerance	Applicable panel thickness (mm)
		A <sup>+0.1/0</sup>	B <sup>±0.05</sup>		
2	XMR-02V	9.3	12.6	0.5 ~ 1.8	
3	XMR-03V	10.3	13.6		
4	XMR-04V	12.8	16.1		
5	XMR-05V	15.3	18.6		
6	XMR-06V	17.8	21.1		
7	XMR-07V	20.3	23.6		
8	XMR-08V	22.8	26.1		
9	XMR-09V	25.3	28.6		
10	XMR-10V	27.8	31.1		
11	XMR-11V	30.3	33.6		
12	XMR-12V	32.8	36.1		
18	XMR-18V	25.3	28.6		

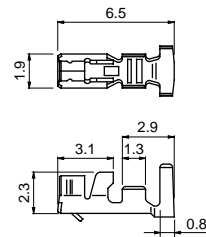
- Note: 1. Punch holes in the panel according to the sketch and table shown above. Burrs must be removed.  
 2. The strength of the panel must be considered when punching two or more holes.  
 3. The connector must be inserted from the same side as the hole is punched.

## Contact

### Pin contact



### Socket contact



Model No.		Applicable wire		Insulation O.D. (mm)	Q'ty / reel	
Pin contact	Socket contact	mm <sup>2</sup>	AWG #		Pin contact	Socket contact
<b>SXM-001T-P0.6</b>	<b>SXA-001T-P0.6</b>	0.08 ~ 0.33	28 ~ 22	1.2 ~ 1.9	7,000	8,000
<b>*SXM-01T-P0.6</b>	<b>SXA-01T-P0.6</b>	0.22 ~ 0.50	24 ~ 20	1.5 ~ 1.9	7,000	8,000
—	<b>SXA-001T-P0.6L</b>	0.13 ~ 0.33	26 ~ 22	1.3 ~ 1.9	—	8,000

### Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

### RoHS compliance

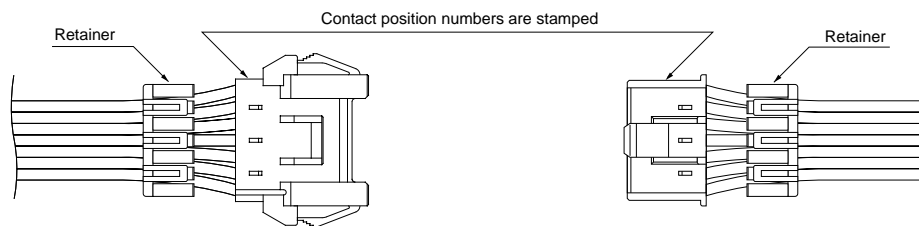
Note: 1. Contact JST for special products.  
2. \*Marked product is not UL/CSA approved.

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SXM-001T-P0.6</b>	AP-K2N	MKS-L	MK/SXA/M-001-06	APLMK SXA/M001-06
		*MKS-SC	SC/SXA/M-001-06	APLSC SXA/M001-06
<b>SXM-01T-P0.6</b>		MKS-L	MK/SXA/M-01-06	APLMK SXA/M01-06
		*MKS-SC	SC/SXA/M-01-06	APLSC SXA/M01-06

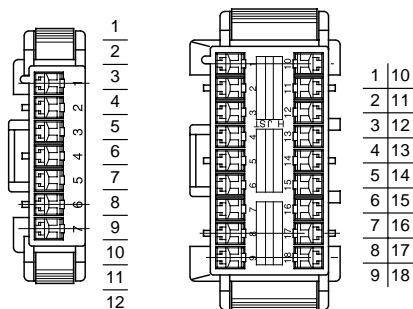
Note: \*Strip-crimp applicator

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SXA-001T-P0.6</b>	AP-K2N	MKS-L	MK/SXA/M-001-06	APLMK SXA/M001-06
		*MKS-SC	SC/SXA/M-001-06	APLSC SXA/M001-06
<b>SXA-01T-P0.6</b>		MKS-L	MK/SXA/M-01-06	APLMK SXA/M01-06
		*MKS-SC	SC/SXA/M-01-06	APLSC SXA/M01-06
<b>SXA-001T-P0.6L</b>	MKS-L	MK/SXA-001-06L	APLMK SXA001-06L	
	*MKS-SC	SC/SXA-001-06L	APLSC SXA001-06L	

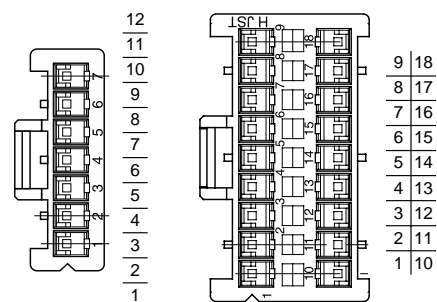
## Contact position location numbers



### Receptacle housing

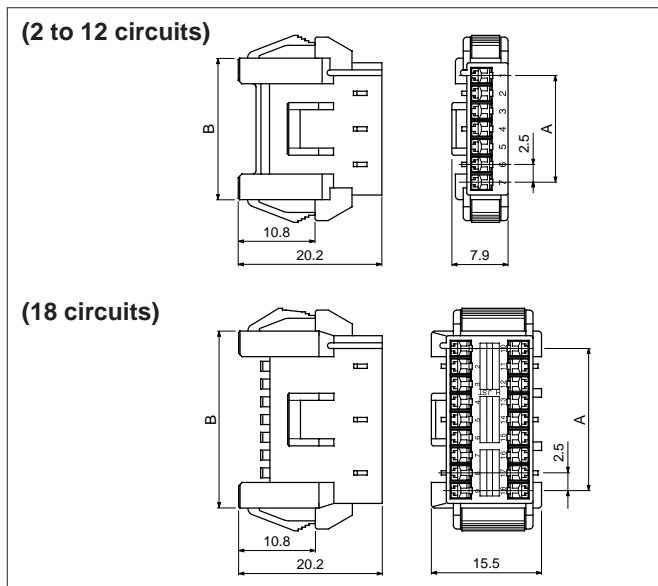


### Plug housing



# XM CONNECTOR

## Receptacle housing (for Pin contact)



Circuits	Model No.	Dimensions (mm)		Q'ty/bag
		A	B	
2	<b>XMR-02V</b>	2.5	8.9	1,000
3	<b>XMR-03V</b>	5.0	9.9	1,000
4	<b>XMR-04V</b>	7.5	12.4	500
5	<b>XMR-05V</b>	10.0	14.9	500
6	<b>XMR-06V</b>	12.5	17.4	500
7	<b>XMR-07V</b>	15.0	19.9	500
8	<b>XMR-08V</b>	17.5	22.4	500
9	<b>XMR-09V</b>	20.0	24.9	500
10	<b>XMR-10V</b>	22.5	27.4	500
11	<b>XMR-11V</b>	25.0	29.9	500
12	<b>XMR-12V</b>	27.5	32.4	500
18	<b>XMR-18V</b>	20.0	24.9	500

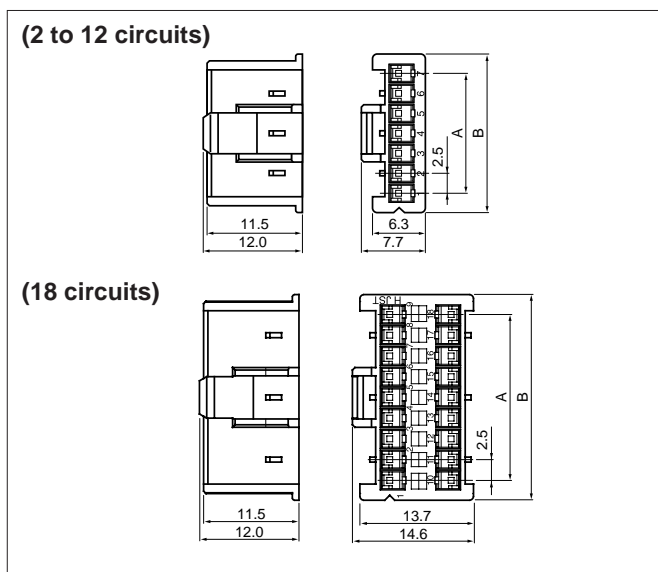
### Material

PA 66, UL94V-0

### RoHS compliance

Note: Receptacle housings without panel lock device are also available for 2, 3, 4, 6, 7, 8 and 9 circuits.

## Plug housing (for Socket contact)



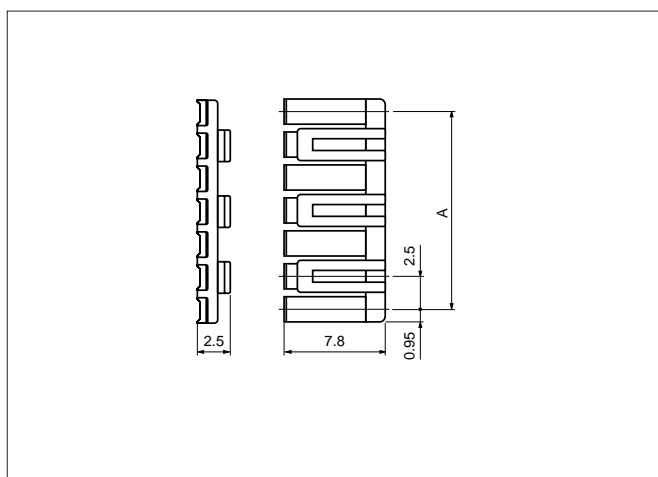
Circuits	Model No.	Dimensions (mm)		Q'ty/bag
		A	B	
2	<b>XMP-02V</b>	2.5	8.8	1,000
3	<b>XMP-03V</b>	5.0	9.8	1,000
4	<b>XMP-04V</b>	7.5	12.3	1,000
5	<b>XMP-05V</b>	10.0	14.8	500
6	<b>XMP-06V</b>	12.5	17.3	500
7	<b>XMP-07V</b>	15.0	19.8	500
8	<b>XMP-08V</b>	17.5	22.3	500
9	<b>XMP-09V</b>	20.0	24.8	500
10	<b>XMP-10V</b>	22.5	27.3	500
11	<b>XMP-11V</b>	25.0	29.8	500
12	<b>XMP-12V</b>	27.5	32.3	500
18	<b>XMP-18V</b>	20.0	24.8	500

### Material

PA 66, UL94V-0

### RoHS compliance

## Retainer



Circuits	Model No.	Dimensions A (mm)	Q'ty / bag
2	<b>XMS-02V</b>	2.5	1,000
3	<b>XMS-03V</b>	5.0	1,000
4	<b>XMS-04V</b>	7.5	1,000
5	<b>XMS-05V</b>	10.0	1,000
6	<b>XMS-06V</b>	12.5	1,000
7	<b>XMS-07V</b>	15.0	1,000
8	<b>XMS-08V</b>	17.5	1,000
9 - 18	<b>XMS-09V</b>	20.0	1,000
10	<b>XMS-10V</b>	22.5	1,000
11	<b>XMS-11V</b>	25.0	1,000
12	<b>XMS-12V</b>	27.5	1,000

### Material

Glass-filled PA 66, UL94V-0

### RoHS compliance

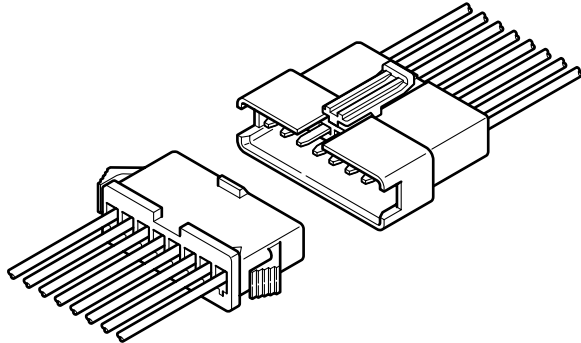
Note: Commonly used for 9-circuit and 18-circuit housings.





# SM CONNECTOR

2.5mm pitch/Disconnectable Crimp style wire-to-wire connectors



The SM series are 2.5mm pitch, wire-to-wire connectors that perform reliably in high-density, small current applications.

- High contact pressure
- Highly reliable housing construction
- Mountable on a variety of panels
- Arm lock mechanism

## Specifications

- Current rating: 3A AC, DC max.
- Voltage rating: 250V AC, DC max.
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/10m Ω max.  
After environmental testing/20m Ω max.
- Insulation resistance: 500M Ω min.
- Withstanding voltage: 1,500V AC/minute
- Applicable wire: AWG #28 to #22  
0.08 to 0.33mm<sup>2</sup>
- Applicable panel thickness: 0.5 to 2.0mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

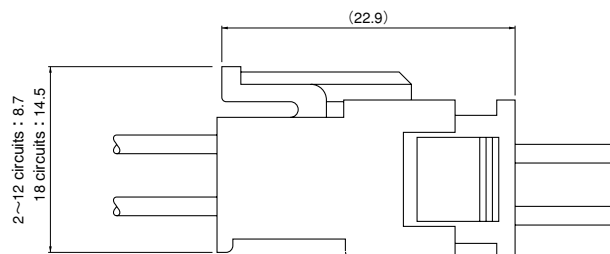
## Standards

Recognized E60389

Certified LR20812

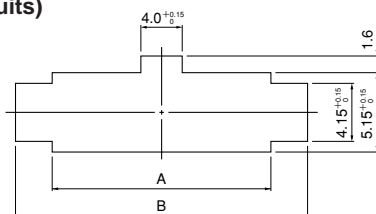
R50120150

## Assembly layout

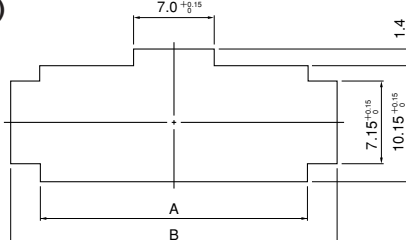


## Panel layout

(2 to 12 circuits)



(18 circuits)



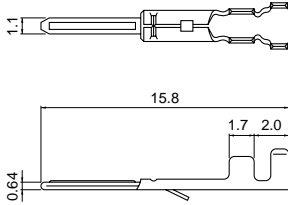
Circuits	Plug housing Model No.	Panel thickness (mm)					
		0.5~0.9		1.0~1.5		1.5~2.0	
		Panel hole dimensions (mm) General tolerance					
		A <sup>+0.15</sup> <sub>0</sub>	B <sup>±0.1</sup>	A <sup>+0.15</sup> <sub>0</sub>	B <sup>±0.1</sup>	A <sup>+0.15</sup> <sub>0</sub>	B <sup>±0.1</sup>
2	SMP-02V-B(N)C	5.7	9.6	5.7	9.8	5.7	10.0
3	SMP-03V-B(N)C	8.2	12.1	8.2	12.3	8.2	12.5
4	SMP-04V-B(N)C	10.7	14.6	10.7	14.8	10.7	15.0
5	SMP-05V-B(N)C	13.2	17.1	13.2	17.3	13.2	17.5
6	SMP-06V-B(N)C	15.7	19.6	15.7	19.8	15.7	20.0
7	SMP-07V-B(N)C	18.2	22.1	18.2	22.3	18.2	22.5
8	SMP-08V-B(N)C	20.7	24.6	20.7	24.8	20.7	25.0
9	SMP-09V-B(N)C	23.2	27.1	23.2	27.3	23.2	27.5
10	SMP-10V-B(N)C	25.7	29.6	25.7	29.8	25.7	30.0
11	SMP-11V-B(N)C	28.2	32.1	28.2	32.3	28.2	32.5
12	SMP-12V-B(N)C	30.7	34.6	30.7	34.8	30.7	35.0
18	SMP-18V-B(N)C	23.2	27.2	23.2	27.4	23.2	27.6

Note: 1. Punch holes in the panel according to the sketch and table shown above. Burrs must be removed.  
2. The strength of the panel must be considered when punching two or more holes.  
3. The connector must be inserted from the same side as the hole is punched.

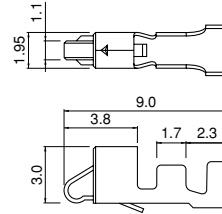
# SM CONNECTOR

## Contact

### Pin contact



### Socket contact



Model No.		Applicable wire		Insulation O.D. (mm)	Q'ty / reel
Pin contact	Socket contact	mm <sup>2</sup>	AWG #		
<b>SYM-001T-P0.6</b>	<b>SHF-001T-0.8BS</b>	0.08~0.33	28~22	1.2~1.8	Pin contact: 8,500 Socket contact: 5,000

### Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

### RoHS compliance

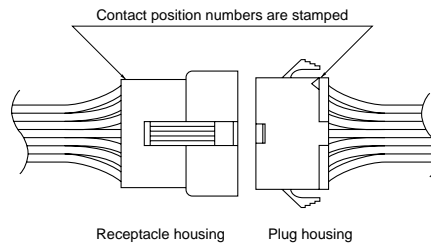
Note: 1. Contact JST for special products.  
2. Contact JST for brass products.

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SYM-001T-P0.6</b>	AP-K2N	MKS-LS-MKS-L	MK/SYM-001-06	APLMK SYM001-06
		*MKS-SC	SC/SYM-001-06	APLSC SYM001-06

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SHF-001T-0.8BS</b>	AP-K2N	MKS-LS-MKS-L	MK/SHF-001-08S	APLMK SHF001-08S
		*MKS-SC	SC/SHF-001-08S	APLSC SHF001-08S

Note: \*Strip-crimp applicator

## Contact position location numbers



### Receptacle housing

1	10
2	11
3	12
4	13
5	14
6	15
7	16
8	17
9	18
10	
11	
12	

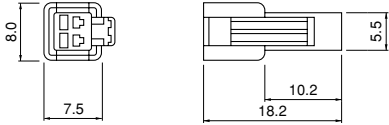
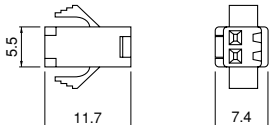
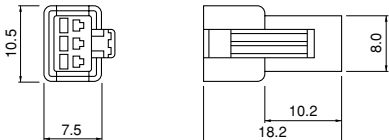
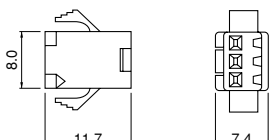
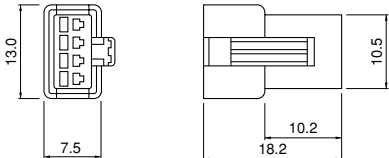
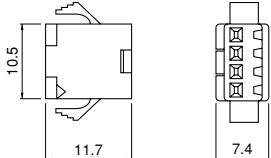
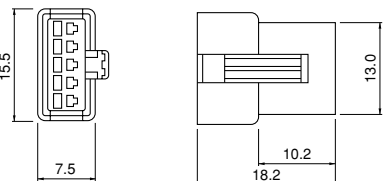
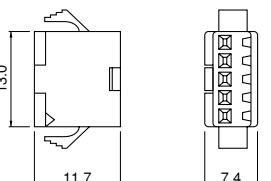
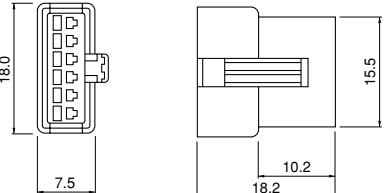
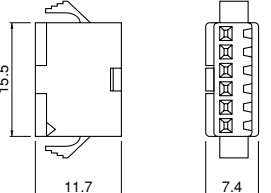
### Plug housing

1	10
2	11
3	12
4	13
5	14
6	15
7	16
8	17
9	18
10	
11	
12	

# SM CONNECTOR

## Housing

Material: PA 6, UL94V-0

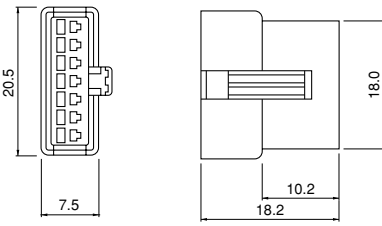
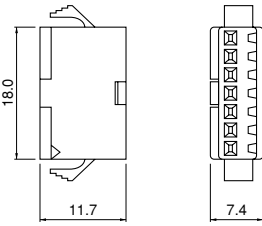
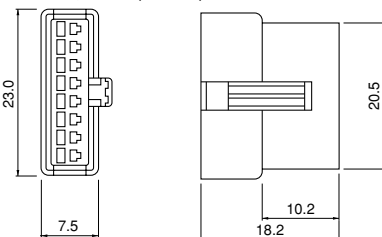
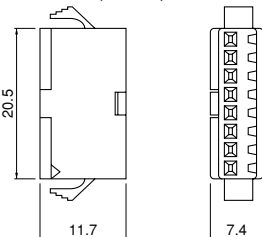
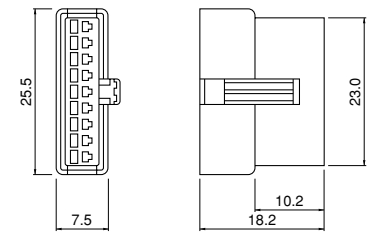
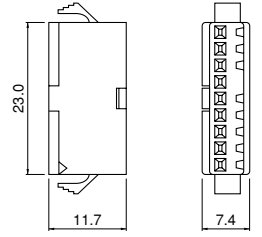
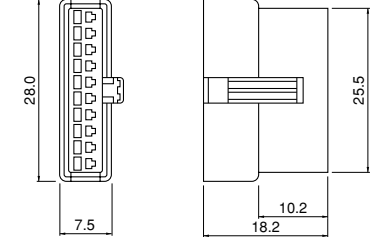
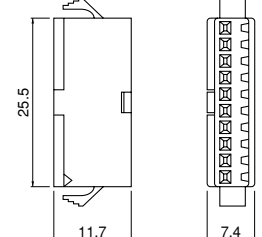
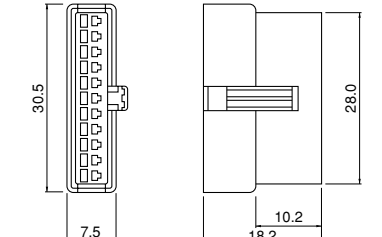
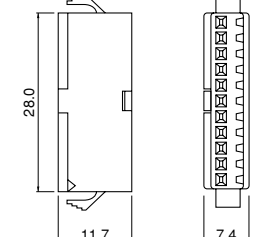
Circuits	Current rating	Receptacle housing(for pin contact)	Q'ty / bag	Plug housing(for socket contact)	Q'ty / bag
2	3A	<b>SMR-02V-B</b> , black <b>SMR-02V-N</b> , white (natural) 	1,000	<b>SMP-02V-BC</b> , black <b>SMP-02V-NC</b> , white (natural) 	1,000
3	3A	<b>SMR-03V-B</b> , black <b>SMR-03V-N</b> , white (natural) 	1,000	<b>SMP-03V-BC</b> , black <b>SMP-03V-NC</b> , white (natural) 	1,000
4	3A	<b>SMR-04V-B</b> , black <b>SMR-04V-N</b> , white (natural) 	500	<b>SMP-04V-BC</b> , black <b>SMP-04V-NC</b> , white (natural) 	1,000
5	3A	<b>SMR-05V-B</b> , black <b>SMR-05V-N</b> , white (natural) 	500	<b>SMP-05V-BC</b> , black <b>SMP-05V-NC</b> , white (natural) 	1,000
6	3A	<b>SMR-06V-B</b> , black <b>SMR-06V-N</b> , white (natural) 	500	<b>SMP-06V-BC</b> , black <b>SMP-06V-NC</b> , white (natural) 	500

RoHS compliance

# SM CONNECTOR

## Housing

Material: PA 6, UL94V-0

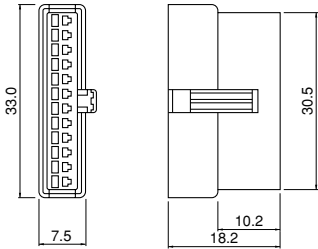
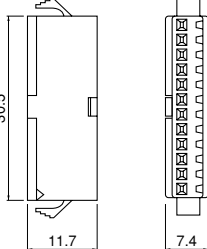
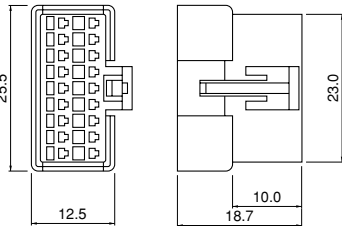
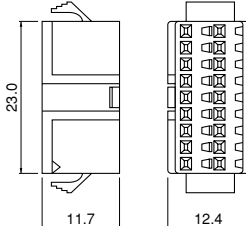
Circuits	Current rating	Receptacle housing(for pin contact)	Q'ty / bag	Plug housing(for socket contact)	Q'ty / bag
7	3A	<b>SMR-07V-B</b> , black <b>SMR-07V-N</b> , white (natural) 	500	<b>SMP-07V-BC</b> , black <b>SMP-07V-NC</b> , white (natural) 	500
8	3A	<b>SMR-08V-B</b> , black <b>SMR-08V-N</b> , white (natural) 	500	<b>SMP-08V-BC</b> , black <b>SMP-08V-NC</b> , white (natural) 	500
9	3A	<b>SMR-09V-B</b> , black <b>SMR-09V-N</b> , white (natural) 	500	<b>SMP-09V-BC</b> , black <b>SMP-09V-NC</b> , white (natural) 	500
10	3A	<b>SMR-10V-B</b> , black <b>SMR-10V-N</b> , white (natural) 	200	<b>SMP-10V-BC</b> , black <b>SMP-10V-NC</b> , white (natural) 	500
11	3A	<b>SMR-11V-B</b> , black <b>SMR-11V-N</b> , white (natural) 	200	<b>SMP-11V-BC</b> , black <b>SMP-11V-NC</b> , white (natural) 	500

RoHS compliance

# SM CONNECTOR

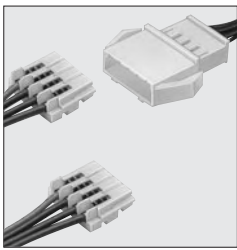
## Housing

Material: PA 6, UL94V-0

Circuits	Current rating	Receptacle housing(for pin contact)	Q'ty / bag	Plug housing(for socket contact)	Q'ty / bag
12	3A	<b>SMR-12V-B, black</b> <b>SMR-12V-N, white (natural)</b> 	500	<b>SMP-12V-BC, black</b> <b>SMP-12V-NC, white (natural)</b> 	500
18	2A	<b>SMR-18V-B, black</b> <b>SMR-18V-N, white (natural)</b> 	200	<b>SMP-18V-BC, black</b> <b>SMP-18V-NC, white (natural)</b> 	200

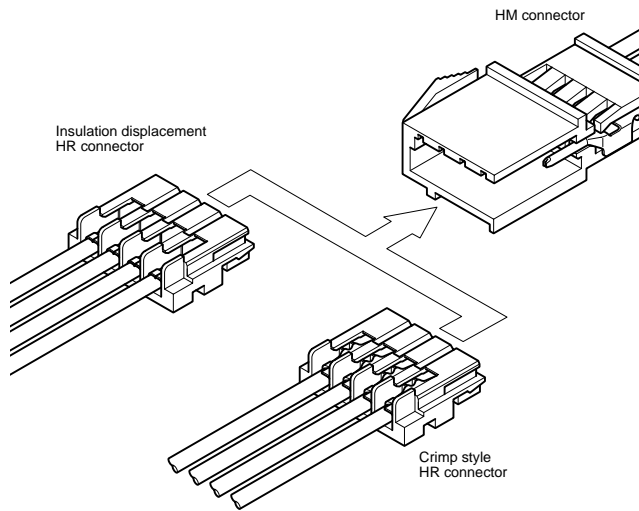
### RoHS compliance

Note: 1. SM connectors with any number of circuits can be used either panel mounted or free hanging.  
 2. Contact JST for special products.



# HM CONNECTOR

2.5mm pitch/Wire-to-wire connectors - Matable with HR receptacles



- Both crimp style and insulation displacement receptacles can be used
- Housing-to-terminal locks
- Mountable on a variety of panels
- Highly reliable housing construction

## Specifications

- Current rating: Crimp style HR connectors type  
3A AC, DC max.  
Insulation displacement HR connectors type  
2A AC, DC max.
- Voltage rating: 250V AC, DC max. (See Note below.)
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/10m Ω max.  
After environmental testing/20m Ω max.
- Insulation resistance: 500M Ω min.
- Withstanding voltage: 1,000V AC/minute
- Applicable wire: AWG #26 to #22  
0.13 to 0.33mm<sup>2</sup>
- Applicable panel thickness: 0.8 to 1.6mm

Note: Contacts are exposed at the housing lances.

Care should be taken so that these parts do not touch the metal section of the chassis.

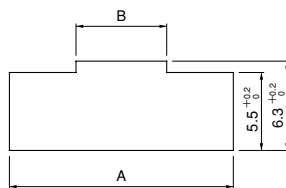
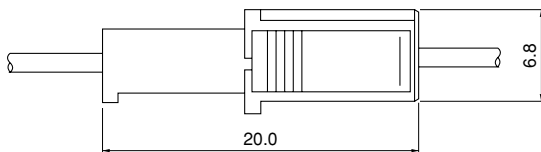
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

Recognized E60389

Certified LR20812

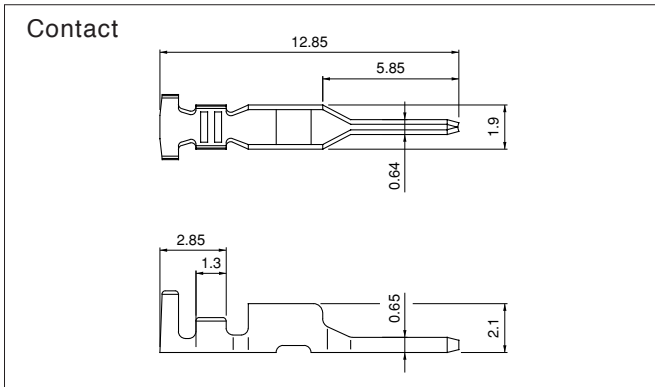
## Panel layout and Assembly layout



Circuits	Housing	Panel hole dimensions (mm) General tolerance		Applicable panel thickness (mm)
		A <sup>+0.2</sup> <sub>0</sub>	B <sup>+0.2</sup> <sub>0</sub>	
2	HMR-02V	13.3	3.9	0.8 ~ 1.6
3	HMR-03V	15.8	6.4	
4	HMR-04V	18.3	8.9	
8	HMR-08V	28.3	18.9	
12	HMR-12V	38.3	28.9	

- Note: 1. Punch holes in the panel according to the sketch and table shown above. Burrs must be removed.  
2. The strength of the panel must be considered when punching two or more holes.  
3. The connector must be inserted from the same side as the hole is punched.

## Plug / HM connector



Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty / reel
	mm <sup>2</sup>	AWG #		
<b>SMR-001T-0.6</b>	0.13~0.33	26~22	1.3~1.7	9,000

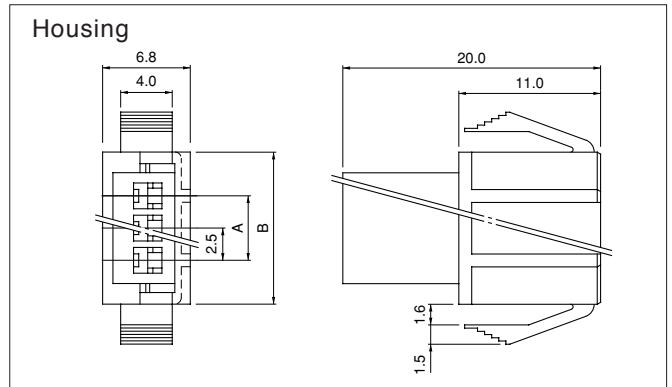
### Material and Finish

Brass, tin-plated (reflow treatment)

### RoHS compliance

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SMR-001T-0.6</b>	AP-K2N	MKS-L	MK/SHR/MR-001-06	APLMK SHR/MR001-06
		*MKS-SC	SC/SHR/MR-001-06	APLSC SHR/MR001-06

Note: \*Strip-crimp applicator



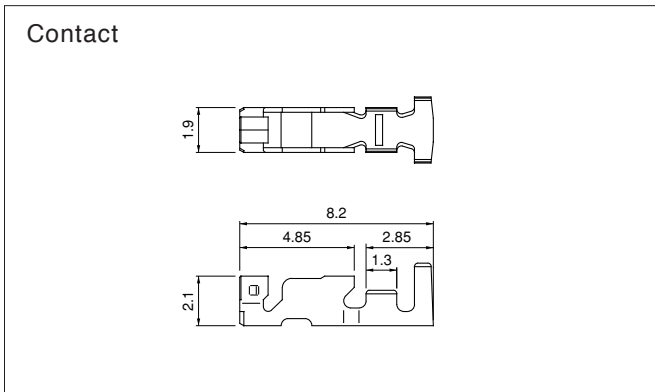
Circuits	Model No.	Dimensions (mm)		Q'ty / bag
		A	B	
2	<b>HMR-02V</b>	2.5	9.3	1,000
3	<b>HMR-03V</b>	5.0	11.8	500
4	<b>HMR-04V</b>	7.5	14.3	500
8	<b>HMR-08V</b>	17.5	24.3	500
12	<b>HMR-12V</b>	27.5	34.3	500

### Material

PA 66, UL94V-0

### RoHS compliance

## Receptacle / Crimp style HR connector



Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty / reel
	mm <sup>2</sup>	AWG #		
<b>SHR-001T-P0.6</b>	0.13~0.33	26~22	1.3~1.7	9,000

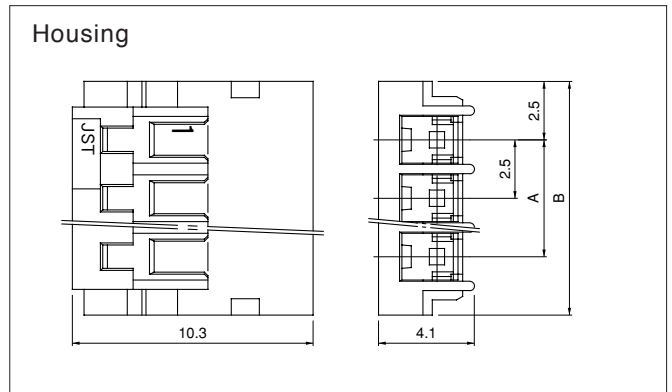
### Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

### RoHS compliance

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SHR-001T-P0.6</b>	AP-K2N	MKS-L	MK/SHR/MR-001-06	APLMK SHR/MR001-06
		*MKS-SC	SC/SHR/MR-001-06	APLSC SHR/MR001-06

Note: \*Strip-crimp applicator



Circuits	Model No.	Dimensions (mm)		Q'ty / bag
		A	B	
2	<b>HRP-02-S</b>	2.5	7.5	2,000
3	<b>HRP-03-S</b>	5.0	10.0	2,000
4	<b>HRP-04-S</b>	7.5	12.5	1,000
8	<b>HRP-08-S</b>	17.5	22.5	500
12	<b>HRP-12-S</b>	27.5	32.5	500

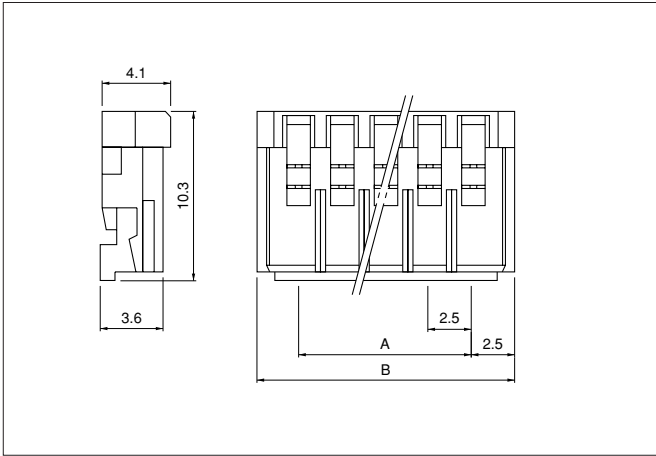
### Material

PA 66, UL94V-0

### RoHS compliance

# HM CONNECTOR

## Receptacle/Insulation displacement HR connector



Circuits	Model No.			Dimensions (mm)		Qty / bag
	# 28	# 26	# 24	A	B	
2	02HR-8M-P-N	02HR-6S-P-N	02HR-4K-P-N	2.5	7.5	1,000
3	03HR-8M-P-N	03HR-6S-P-N	03HR-4K-P-N	5.0	10.0	1,000
4	04HR-8M-P-N	04HR-6S-P-N	04HR-4K-P-N	7.5	12.5	1,000
8	08HR-8M-P-N	08HR-6S-P-N	08HR-4K-P-N	17.5	22.5	500
12	12HR-8M-P-N	12HR-6S-P-N	12HR-4K-P-N	27.5	32.5	500

### Material and Finish

Contact: Phosphor bronze, tin-plated (reflow treatment)  
Housing: PA 66, UL94V-0

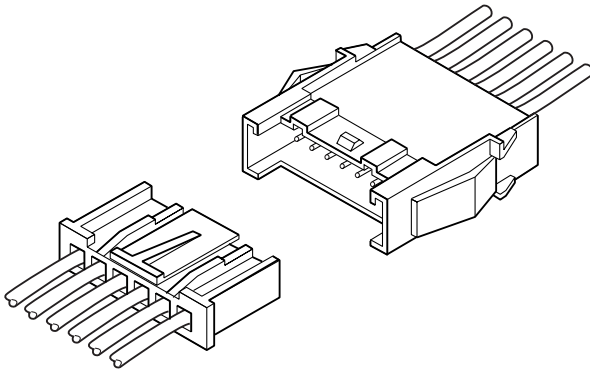
**RoHS compliance**





# XA CONNECTOR

2.5mm pitch/Disconnectable Crimp style wire-to-wire connectors



**2.5mm pitch wire-to-wire connector that can mate with the socket of XA connector (board-to-wire type). Reliable secondary retainer is available. Panel mount is applicable.**

- Possible to mate with the existing XA socket
- Inner type contact lance
- Mountable on a variety of panels
- Secondary retainer
- Secure lock construction

## Specifications

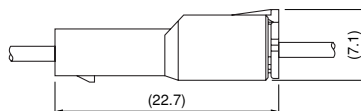
- Current rating: 3A AC, DC max. (AWG #20)
- Voltage rating: 250V AC, DC max.
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/10m Ω max.  
After environmental testing/20m Ω max.
- Insulation resistance: 500M Ω min.
- Withstanding voltage: 1,500V AC/minute
- Applicable wire: AWG #28 to #20
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

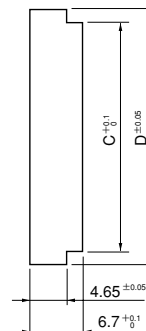
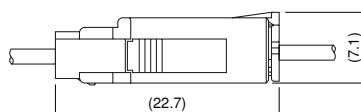
- ⚡ Recognized E60389
- Ⓢ Certified LR20812
- ⚠ R9851220

## Assembly layout and Panel layout

Without panel locks



With panel locks

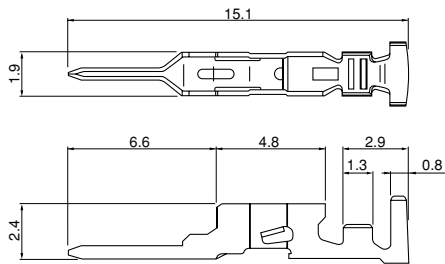


Note: C and D dimensions: Refer to receptacle housing.

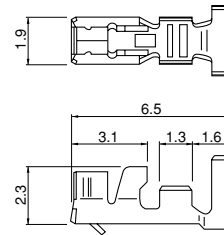
# XA CONNECTOR

## Contact

Pin contact



Socket contact



Model No.		Applicable wire		Insulation O.D.(mm)	Q'ty / reel	
Pin contact	Socket contact	mm <sup>2</sup>	AWG #		Pin contact	Socket contact
<b>SXAM-001T-P0.6</b>	<b>SXA-001T-P0.6</b>	0.08~0.33	28~22	1.2~1.9	7,000	8,000
<b>SXAM-01T-P0.6</b>	<b>SXA-01T-P0.6</b>	0.22~0.5	24~20	1.5~1.9	7,000	8,000

### Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

### RoHS compliance

Note: Contact JST for gold-plated products.

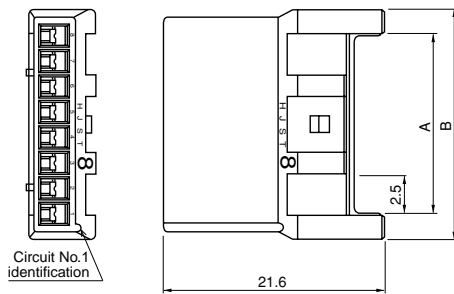
Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SXA-001T-P0.6</b>	AP-K2N	MKS-L	MK/SXAM/XA-001-06	APLMK SXAM/XA001-06
		*MKS-SC	SC/SXAM/XA-001-06	APLSC SXAM/XA001-06
<b>SXA-01T-P0.6</b>		MKS-L	MK/SXAM/XA-01-06	APLMK SXAM/XA01-06
		*MKS-SC	SC/SXAM/XA-01-06	APLSC SXAM/XA01-06

Note: \*Strip-crimp applicator

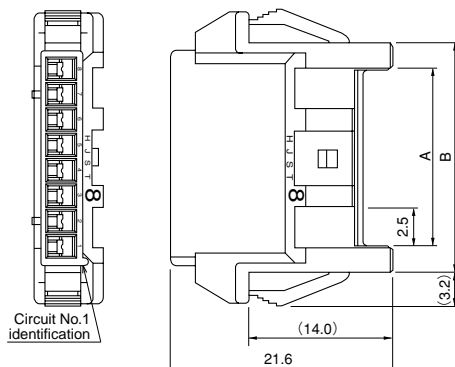
Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SXAM-001T-P0.6</b>	AP-K2N	MKS-L	MK/SXAM/XA-001-06	APLMK SXAM/XA001-06
		*MKS-SC	SC/SXAM/XA-001-06	APLSC SXAM/XA001-06
<b>SXAM-01T-P0.6</b>		MKS-L	MK/SXAM/XA-01-06	APLMK SXAM/XA01-06
		*MKS-SC	SC/SXAM/XA-01-06	APLSC SXAM/XA01-06

## Receptacle housing

Without panel locks



With panel locks



Circuits	Model No.		Dimensions (mm)				Q'ty / bag
	Without panel locks	With panel locks	A	B	C	D	
2	<b>XARR-02VF</b>	<b>XARR-02V</b>	2.5	7.5	7.9	11.2	1,000
3	<b>XARR-03VF</b>	<b>XARR-03V</b>	5.0	10.0	10.4	13.7	1,000
4	<b>XARR-04VF</b>	<b>XARR-04V</b>	7.5	12.5	12.9	16.2	1,000
5	<b>XARR-05VF</b>	<b>XARR-05V</b>	10.0	15.0	15.4	18.7	1,000
6	<b>XARR-06VF</b>	<b>XARR-06V</b>	12.5	17.5	17.9	21.2	500
7	—	<b>XARR-07V</b>	15.0	20.0	20.4	23.7	500
8	<b>XARR-08VF</b>	<b>XARR-08V</b>	17.5	22.5	22.9	26.2	500
9	<b>XARR-09VF</b>	<b>XARR-09V</b>	20.0	25.0	25.4	28.7	500
10	<b>XARR-10VF</b>	<b>XARR-10V</b>	22.5	27.5	27.9	31.2	500
11	—	<b>XARR-11V</b>	25.0	30.0	30.4	33.7	500
12	<b>XARR-12VF</b>	<b>XARR-12V</b>	27.5	32.5	32.9	36.2	500
13	—	<b>XARR-13V</b>	30.0	35.0	35.4	38.7	500
14	—	<b>XARR-14V</b>	32.5	37.5	37.9	41.2	500
15	—	<b>XARR-15V</b>	35.0	40.0	40.4	43.7	500

### Material

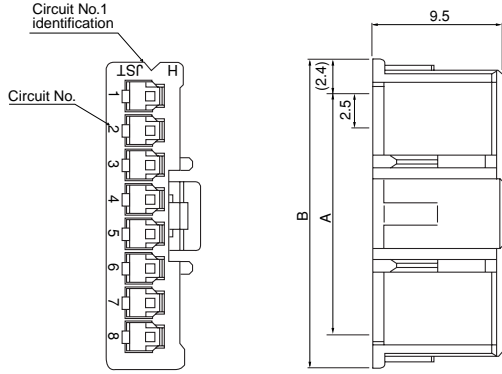
PA 66, UL94V-0, natural (white)

### RoHS compliance

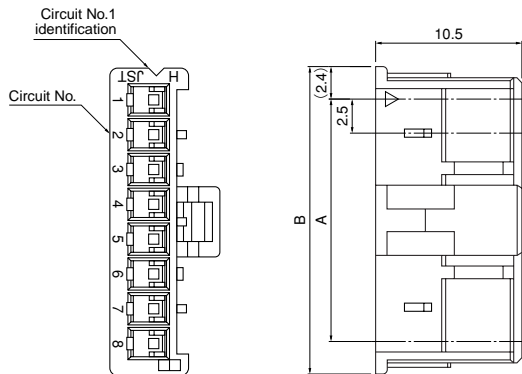
Note: C and D dimensions: Panel layout dimensions

## Plug housing

### Standard type



### Retainer mountable type



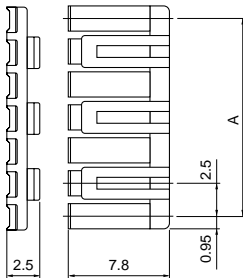
Circuits	Model No.		Dimensions (mm)		Q'ty / bag	
	Standard type	Retainer mountable type	A	B	Standard type	Retainer mountable type
2	<b>XAP-02V-1</b>	<b>XARP-02V</b>	2.5	7.3	1,000	1,000
3	<b>XAP-03V-1</b>	<b>XARP-03V</b>	5.0	9.8	1,000	1,000
4	<b>XAP-04V-1</b>	<b>XARP-04V</b>	7.5	12.3	1,000	1,000
5	<b>XAP-05V-1</b>	<b>XARP-05V</b>	10.0	14.8	1,000	1,000
6	<b>XAP-06V-1</b>	<b>XARP-06V</b>	12.5	17.3	1,000	1,000
7	<b>XAP-07V-1</b>	<b>XARP-07V</b>	15.0	19.8	1,000	1,000
8	<b>XAP-08V-1</b>	<b>XARP-08V</b>	17.5	22.3	1,000	1,000
9	<b>XAP-09V-1</b>	<b>XARP-09V</b>	20.0	24.8	1,000	1,000
10	<b>XAP-10V-1</b>	<b>XARP-10V</b>	22.5	27.3	1,000	1,000
11	<b>XAP-11V-1</b>	<b>XARP-11V</b>	25.0	29.8	1,000	1,000
12	<b>XAP-12V-1</b>	<b>XARP-12V</b>	27.5	32.3	1,000	1,000
13	<b>XAP-13V-1</b>	<b>XARP-13V</b>	30.0	34.8	1,000	1,000
14	<b>XAP-14V-1</b>	<b>XARP-14V</b>	32.5	37.3	500	1,000
15	<b>XAP-15V-1</b>	<b>XARP-15V</b>	35.0	39.8	500	1,000

#### Material

PA 66, UL94V-0, natural (white)

#### RoHS compliance

## Retainer



Circuits	Model No.	A	Q'ty / bag
2	<b>XMS-02V</b>	2.5	1,000
3	<b>XMS-03V</b>	5.0	1,000
4	<b>XMS-04V</b>	7.5	1,000
5	<b>XMS-05V</b>	10.0	1,000
6	<b>XMS-06V</b>	12.5	1,000
7	<b>XMS-07V</b>	15.0	1,000
8	<b>XMS-08V</b>	17.5	1,000
9	<b>XMS-09V</b>	20.0	1,000
10	<b>XMS-10V</b>	22.5	1,000
11	<b>XMS-11V</b>	25.0	1,000
12	<b>XMS-12V</b>	27.5	1,000
13	<b>XMS-13V</b>	30.0	1,000
14	<b>XMS-14V</b>	32.5	1,000
15	<b>XMS-15V</b>	35.0	1,000

#### Material

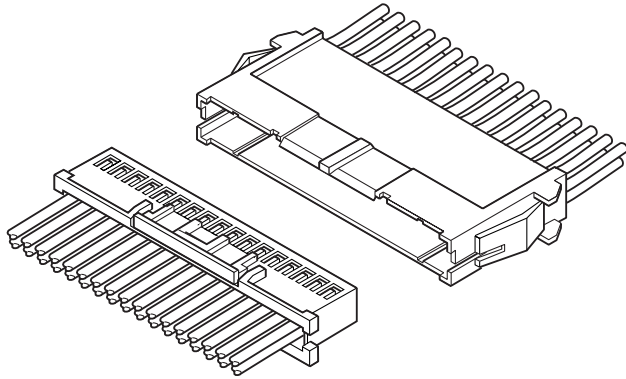
Glass-filled PA 66, UL94V-0, natural (ivory)

#### RoHS compliance



# XAD CONNECTOR

2.5mm pitch/Disconnectable Crimp style wire-to-wire connectors



**2.5mm pitch grid (dual in row) wire-to-wire connector that can mate with the socket of XAD connector (board-to-wire type).**

- Possible to mate with the existing XAD socket
- Inner type contact lance
- Mountable on a variety of panels
- Secure lock construction

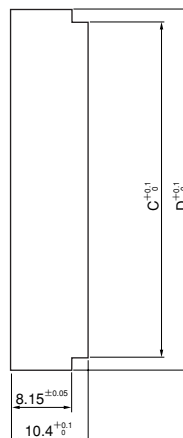
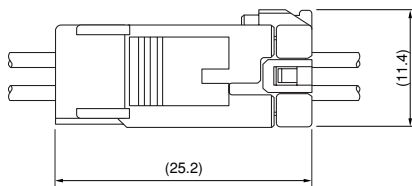
## Specifications

- Current rating: 3A AC, DC max. (AWG #20)
- Voltage rating: 250V AC, DC max.
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/10m Ω max.  
After environmental testing/20m Ω max.
- Insulation resistance: 500M Ω min.
- Withstanding voltage: 1,500V AC/minute
- Applicable wire: AWG #28 to #20
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

- Recognized E60389
- Certified LR20812

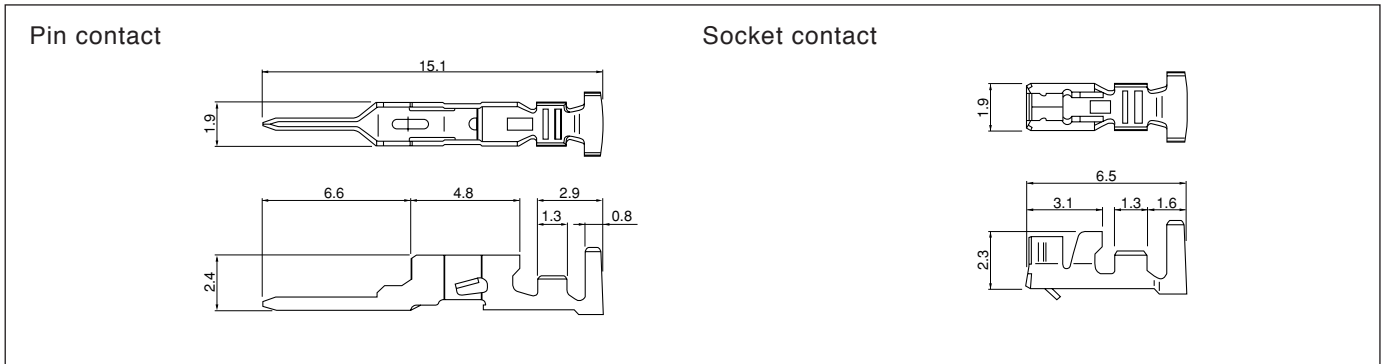
## Assembly layout and Panel layout



Note: C and D dimensions: Refer to receptacle housing.

# XAD CONNECTOR

## Contact



Model No.		Applicable wire		Insulation O.D.(mm)	Q'ty / reel	
Pin contact	Socket contact	mm <sup>2</sup>	AWG #		Pin contact	Socket contact
<b>SXAM-001T-P0.6</b>	<b>SXA-001T-P0.6</b>	0.08~0.33	28~22	1.2~1.9	7,000	8,000
<b>SXAM-01T-P0.6</b>	<b>SXA-01T-P0.6</b>	0.22~0.5	24~20	1.5~1.9	7,000	8,000
—	<b>SXA-001T-P0.6L</b>	0.13~0.33	26~22	1.3~1.7	—	8,000

### Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

### RoHS compliance

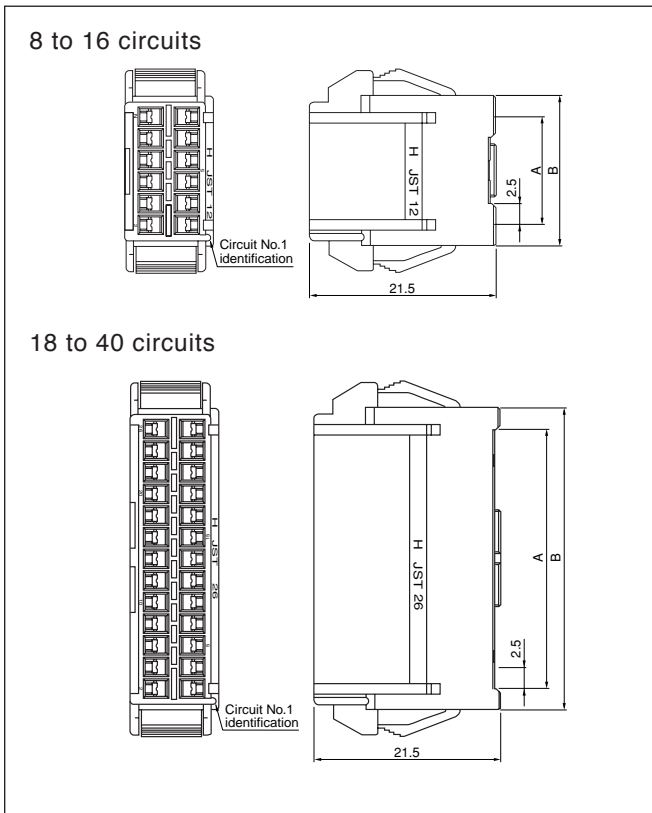
Note: Contact JST for gold-plated products.

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SXA-001T-P0.6</b>	AP-K2N	MKS-L	MK/SXAM/XA-001-06	APLMK SXAM/XA001-06
		*MKS-SC	SC/SXAM/XA-001-06	APLSC SXAM/XA001-06
<b>SXA-01T-P0.6</b>		MKS-L	MK/SXAM/XA-01-06	APLMK SXAM/XA01-06
		*MKS-SC	SC/SXAM/XA-01-06	APLSC SXAM/XA01-06
<b>SXA-001T-P0.6L</b>	MKS-L	MK/SXA-001-06L	APLMK SXA001-06L	
	*MKS-SC	SC/SXA-001-06L	APLSC SXA001-06L	

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SXAM-001T-P0.6</b>	AP-K2N	MKS-L	MK/SXAM/XA-001-06	APLMK SXAM/XA001-06
		*MKS-SC	SC/SXAM/XA-001-06	APLSC SXAM/XA001-06
<b>SXAM-01T-P0.6</b>		MKS-L	MK/SXAM/XA-01-06	APLMK SXAM/XA01-06
		*MKS-SC	SC/SXAM/XA-01-06	APLSC SXAM/XA01-06

Note: \*Strip-crimp applicator

## Receptacle housing



Circuits	Model No.	Dimensions (mm)				Q'ty/bag
		A	B	C	D	
8	<b>XADR-08V</b>	7.5	12.5	12.9	16.2	1,000
10	<b>XADR-10V</b>	10.0	15.0	15.4	18.7	500
12	<b>XADR-12V</b>	12.5	17.5	17.9	21.2	500
14	<b>XADR-14V</b>	15.0	20.0	20.4	23.7	500
16	<b>XADR-16V</b>	17.5	22.5	22.9	26.2	300
18	<b>XADR-18V</b>	20.0	25.0	25.4	28.7	300
20	<b>XADR-20V</b>	22.5	27.5	27.9	31.2	300
22	<b>XADR-22V</b>	25.0	30.0	30.4	33.7	300
24	<b>XADR-24V</b>	27.5	32.5	32.9	36.2	300
26	<b>XADR-26V</b>	30.0	35.0	35.4	38.7	300
28	<b>XADR-28V</b>	32.5	37.5	37.9	41.2	300
30	<b>XADR-30V</b>	35.0	40.0	40.4	43.7	300
32	<b>XADR-32V</b>	37.5	42.5	42.9	46.2	300
34	<b>XADR-34V</b>	40.0	45.0	45.4	48.7	200
36	<b>XADR-36V</b>	42.5	47.5	47.9	51.2	200
40	<b>XADR-40V</b>	47.5	52.5	52.9	56.2	200

### Material

PA 66, UL94V-0, natural (white)

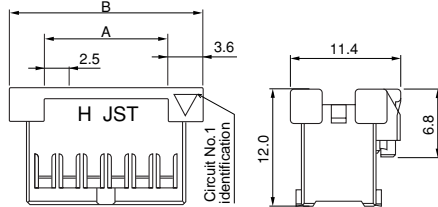
### RoHS compliance

Note: C and D dimensions: Panel layout dimensions

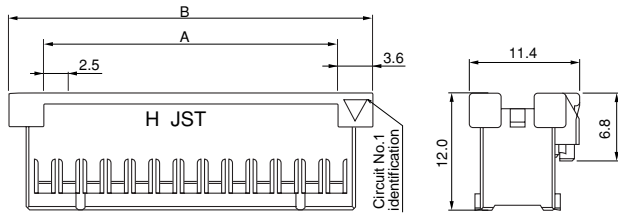
# XAD CONNECTOR

## Plug housing

8 to 16 circuits



18 to 40 circuits

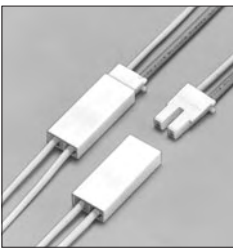


Circuits	Model No.	Dimensions (mm)		Qty/bag
		A	B	
8	<b>XADRP-08V</b>	7.5	14.7	1,000
10	<b>XADRP-10V</b>	10.0	17.2	1,000
12	<b>XADRP-12V</b>	12.5	19.7	1,000
14	<b>XADRP-14V</b>	15.0	22.2	1,000
16	<b>XADRP-16V</b>	17.5	24.7	1,000
18	<b>XADRP-18V</b>	20.0	27.2	1,000
20	<b>XADRP-20V</b>	22.5	29.7	500
22	<b>XADRP-22V</b>	25.0	32.2	500
24	<b>XADRP-24V</b>	27.5	34.7	500
26	<b>XADRP-26V</b>	30.0	37.2	500
28	<b>XADRP-28V</b>	32.5	39.7	500
30	<b>XADRP-30V</b>	35.0	42.2	500
32	<b>XADRP-32V</b>	37.5	44.7	500
34	<b>XADRP-34V</b>	40.0	47.2	500
36	<b>XADRP-36V</b>	42.5	49.7	500
40	<b>XADRP-40V</b>	47.5	54.7	250

### Material

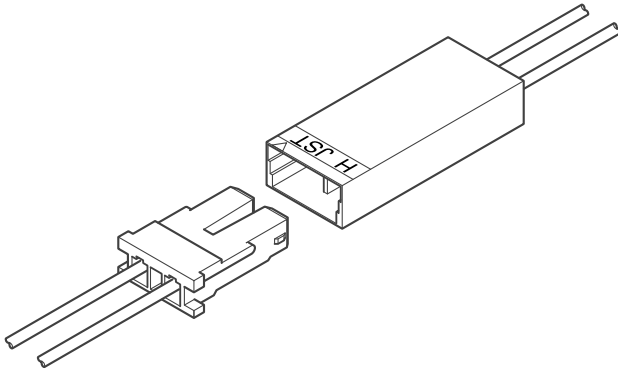
PA 66, UL94V-0, natural (white)

*RoHS compliance*



# BHS CONNECTOR

3.5mm pitch/Disconnectable Crimp style Wire-to-wire connectors



**Wire-to-wire version connectors, designed for connecting liquid crystal display back light lamp to their starters.**

- Compact and applicable to high voltage
- Adopt wide large for socket contact

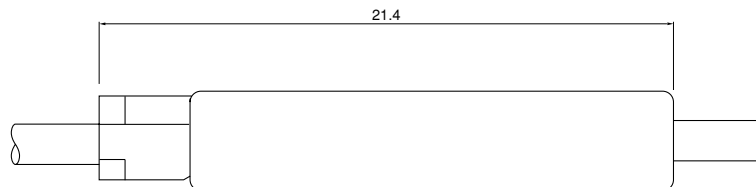
## Specifications

- Current rating: 1.0A AC, DC
  - Voltage rating: 1,400V AC, DC
  - Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
  - Contact resistance: Initial value/10m  $\Omega$  max.  
After environmental testing/20m  $\Omega$  max.
  - Insulation resistance: 1,000M  $\Omega$  min.
  - Withstanding voltage: 3,800V AC/minute
  - Applicable wire: Socket contact Conductor AWG #28 to #24  
Insulation O.D./ 0.9 to 1.7mm  
Pin contact Conductor AWG #28 to #24  
Insulation O.D./ 0.9 to 1.8mm
- \* RoHS compliant products are published.  
\* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.  
\* Contact JST for details.

## Standards

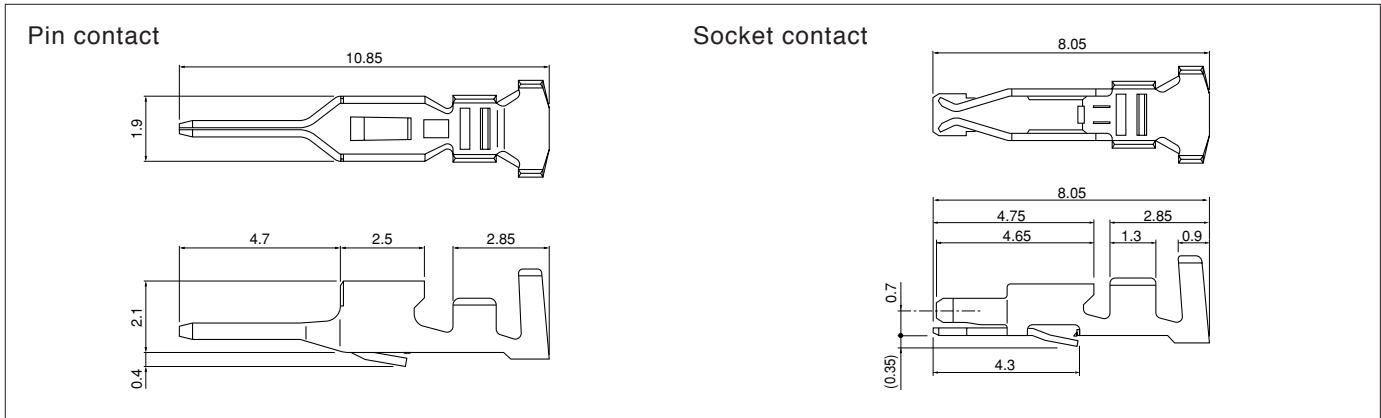
- Ⓜ Recognized E60389
- Ⓢ Certified LR20812

## Assembly layout



# BHS CONNECTOR

## Contact



Model No.		Applicable wire		Insulation O.D. (mm)		Q'ty / reel	
Pin contact	Socket contact	mm <sup>2</sup>	AWG #	Pin contact	Socket contact	Pin contact	Socket contact
<b>SBHSM-002T-P0.5</b>	<b>SBHS-002T-P0.5A</b>	0.08~0.22	28~24	0.9~1.8	0.9~1.7	5,000	10,000

### Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

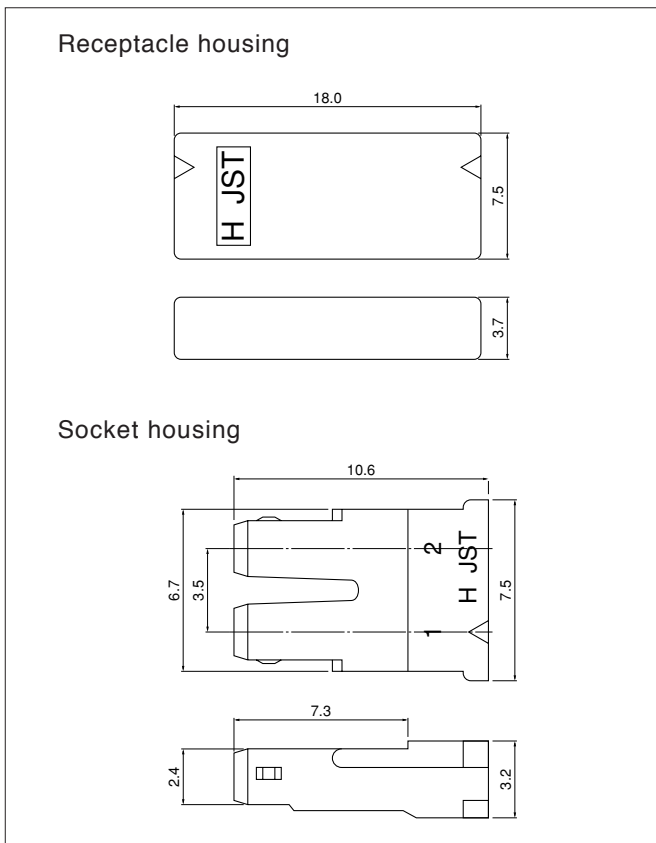
### RoHS compliance

Note: Contact JST for SBHS-002T-P0.5.

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SBHSM-002T-P0.5</b>	AP-K2N	MKS-L	MK/SBHSM-002-05	APLMK SBHSM002-05
		-	-	-

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SBHS-002T-P0.5A</b>	AP-K2N	MKS-L	MK/SBHS-002-05	APLMK SBHS002-05
		-	-	-

## Housing



Model No.		Q'ty / bag
Receptacle housing	Socket housing	
<b>BHSMR-02VS</b>	<b>BHSR-02VS-1 (N)</b>	1,000

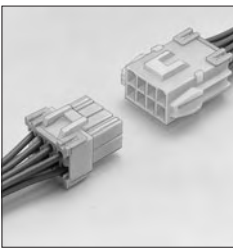
### Material

PA 66, UL94V-0, natural (white)

### RoHS compliance

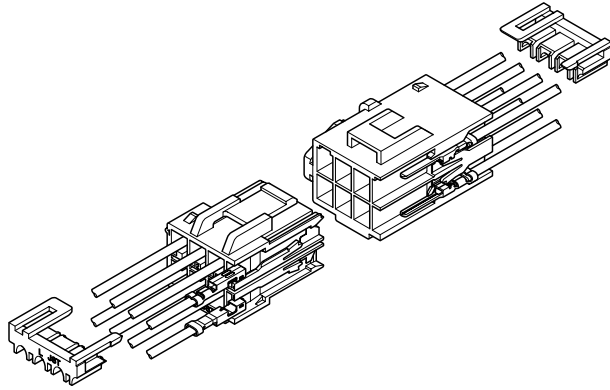
Note: Contact JST for BHSR-02VS-1.





# HL CONNECTOR

3.96mm pitch/Disconnectable Crimp style Wire-to-wire connectors



- Low insertion force contact
- Housing lance
- Inner-housing lock
- Secondary retainers
- Panel lock construction

## Standards

- Recognized E60389
- Certified LR20812
- R9551072

## Specifications

- Current rating: 7A AC, DC max.
- Voltage rating: 300V AC, DC max.
- Temperature range: -25°C to +90°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/7m Ω max.  
After environmental testing/10m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 1,500V AC/minute
- Applicable wire: AWG #22 to #18  
0.3 to 0.75mm<sup>2</sup>
- Applicable panel thickness: 0.7 to 2.0mm
- \* RoHS compliant products are published.
- \* Temperature Range:  
The aforementioned temperature range of this connector is described in JST Standard Product Specification.  
Maximum temperature registered in UL is 105°C.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

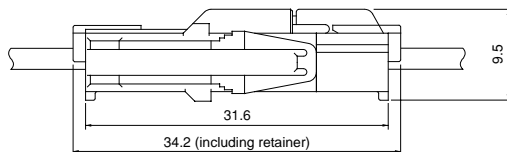
Note: The current rating varies depending on the number of circuits and the wire size used in each connector. The table below lists the current rating as a function of the number of circuits and wire size.

Current unit: A

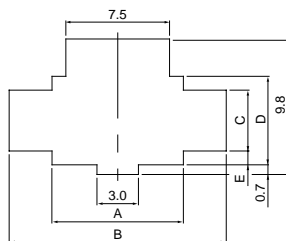
Circuits	Wire size (AWG)		
	#18	#20	#22
2	7	5	4
3	6	4	4
4	6	4	4
8	4	3	3
9	4	3	3
12	3	2	2

## Panel layout and Assembly layout

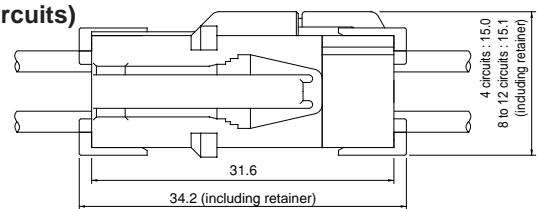
(2 and 3 circuits)



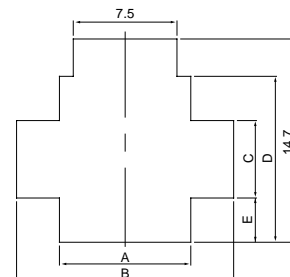
Shape I



(4, 8 and 12 circuits)



Shape II



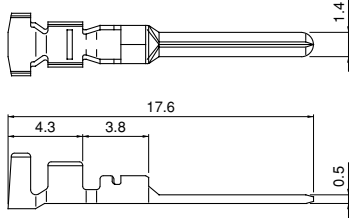
Circuits	Receptacle housing	Panel hole shape	Panel hole dimensions (mm)			General tolerance		Applicable panel thickness (mm)
			A ±0.13	B ±0.13	C ±0.1	D ±0.13	E ±0.1	
2	HLR-02V	I	9.5	15.7	4.4	6.4	1.0	0.7 ~ 2.0
3	HLR-03V	I	13.5	19.7	4.4	6.4	1.0	
4	HLR-04V	II	9.5	15.7	5.6	12.0	3.2	
8	HLR-08V	II	17.4	23.6	5.6	12.0	3.2	
9	HLR-09V	II	17.4	23.6	5.6	12.0	3.2	
12	HLR-12V	II	25.3	31.6	5.6	12.0	3.2	

- Note: 1. Punch holes in the panel according to the sketch and table shown above. Burrs must be removed.  
2. The strength of the panel must be considered when punching two or more holes.  
3. The connector must be inserted from the same side as the hole is punched.

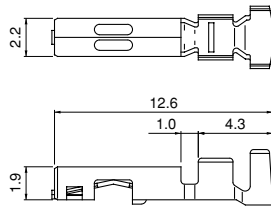
# HL CONNECTOR

## Contact

### Pin contact



### Socket contact



Model No.		Applicable wire		Insulation O.D. (mm)	Q'ty / reel
Pin contact	Socket contact	mm <sup>2</sup>	AWG #		
<b>SSM-21T-P1.4</b>	<b>SSF-21T-P1.4</b>	0.3 ~ 0.75	22 ~ 18	1.5 ~ 2.2	6,000

### Material and Finish

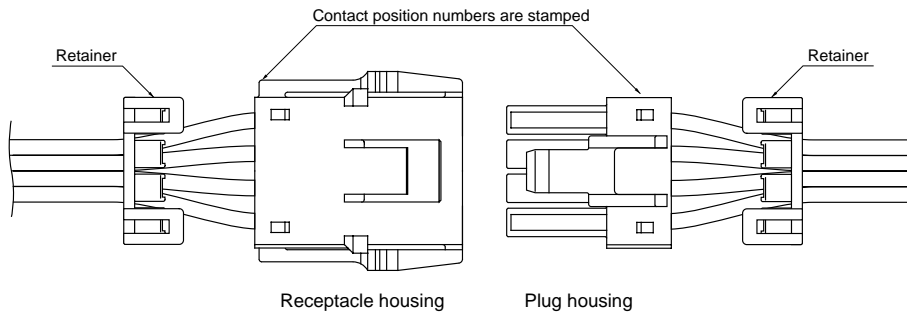
Phosphor bronze, tin-plated (reflow treatment)

### RoHS compliance

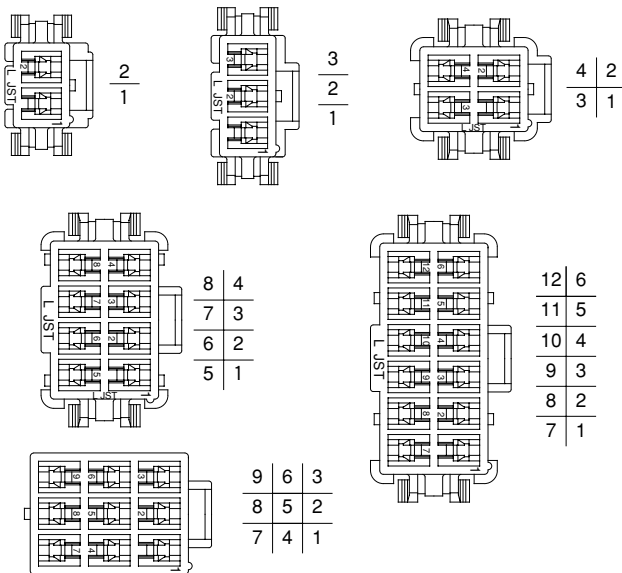
Note: Contact JST for special products.

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SSM-21T-P1.4</b>	AP-K2N	MKS-L	MK/SSF/M-21-14	APLMK SSF/M21-14
<b>SSF-21T-P1.4</b>		—	—	—

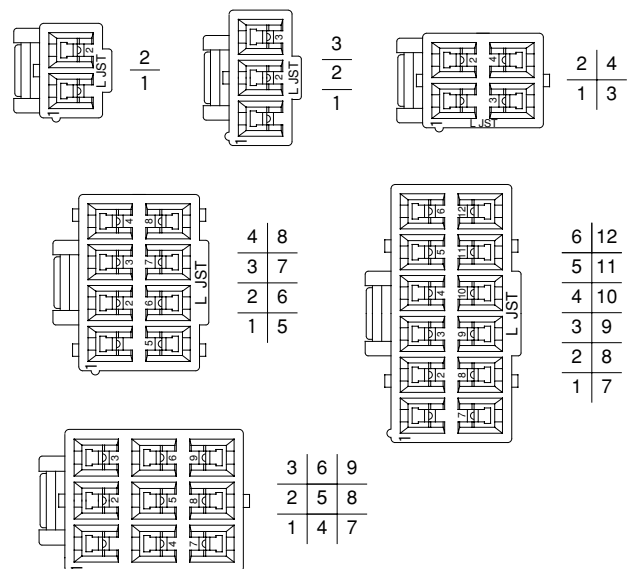
## Contact position location numbers



### Receptacle housing



### Plug housing



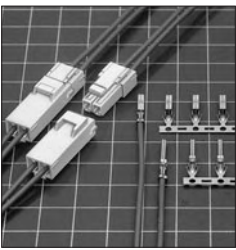
# HL CONNECTOR

## Housing

Material: Housing...PA 66, UL94V-0, white  
Retainer...Glass-filled PA 66, UL94V-0, ivory

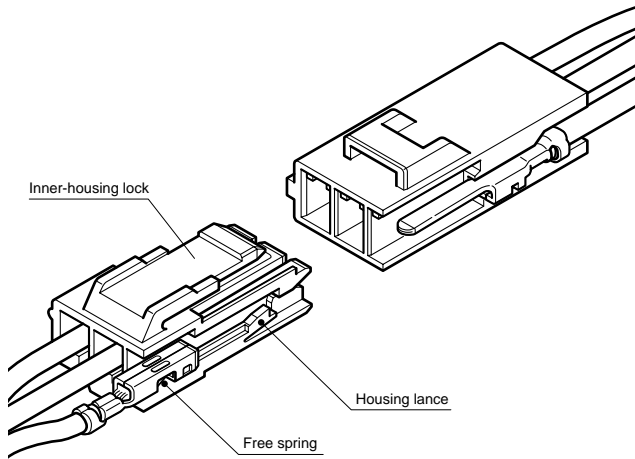
Circuits	Voltage rating	Current rating	Receptacle housing(for pin contact)	Q'ty / bag	Plug housing(for socket contact)	Q'ty / bag	Retainer	Q'ty / bag
2	300V	7A	<b>HLR-02V</b> 	1,000	<b>HLP-02V</b> 	1,000	<b>HLS-02V</b> (commonly used for 2-circuit housing and 4-circuit housing) 	1,000
			<b>HLR-02VF</b> 					
3	300V	6A	<b>HLR-03V</b> 	500	<b>HLP-03V</b> 	1,000	<b>HLS-03V</b> 	1,000
4	300V	6A	<b>HLR-04V</b> 	500	<b>HLP-04V</b> 	500	<b>HLS-02V</b> (commonly used for 2-circuit housing and 4-circuit housing) 	1,000
			<b>HLR-04VF</b> 					
8	300V	4A	<b>HLR-08V</b> 	500	<b>HLP-08V</b> 	500	<b>HLS-08V</b> 	1,000
9	300V	4A	<b>HLR-09VF</b> 	500	<b>HLP-09V</b> 	500	—	—
12	300V	3A	<b>HLR-12V</b> 	500	<b>HLP-12V</b> 	500	<b>HLS-12V</b> 	1,000

RoHS compliance



# SL CONNECTOR

3.96mm pitch/Disconnectable Crimp style Wire-to-wire connectors



- Low insertion force contact
- Housing lance
- Inner-housing lock

## Specifications

- Current rating: 7A AC, DC max.
- Voltage rating: 300V AC, DC max.
- Temperature range: -25°C to +90°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/7m Ω max.  
After environmental testing/10m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 1,500V AC/minute
- Applicable wire: AWG #26 to #18  
0.13 to 0.75mm<sup>2</sup>
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

Note: The current rating varies depending on the number of circuits and the wire size used in each connector. The table below lists the current rating as a function of the number of circuits and the wire size.

Current unit: A

Circuits	Wire size (AWG)				
	#18	#20	#22	#24	#26
1	7	5	4	3	2
2	7	5	4	3	2
3	6	4	4	3	2
4	6	4	4	3	2
6	6	4	4	3	2

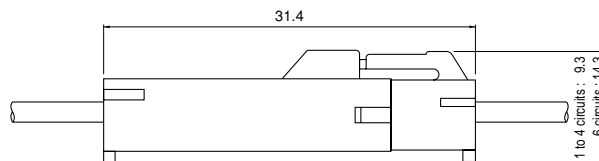
## Standards

Recognized E60389

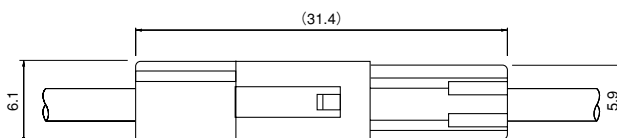
Certified LR20812

R9351104

## Assembly layout



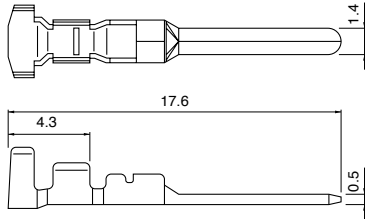
Both side lock product



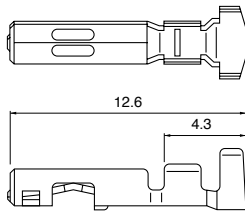
# SL CONNECTOR

## Contact

### Pin contact



### Socket contact



Model No.		Applicable wire		Insulation O.D. (mm)	Q'ty / reel
Pin contact	Socket contact	mm <sup>2</sup>	AWG #		
<b>SSM-01T-P1.4</b>	<b>SSF-01T-P1.4</b>	0.13 ~ 0.5	26 ~ 20	1.3 ~ 2.5	6,000
<b>SSM-21T-P1.4</b>	<b>SSF-21T-P1.4</b>	0.3 ~ 0.75	22 ~ 18	1.5 ~ 2.5	

### Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

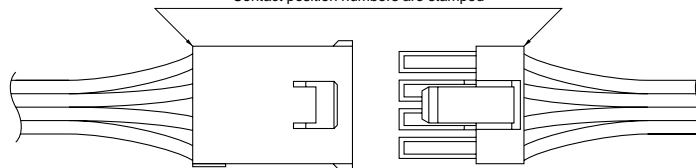
### RoHS compliance

Note: Contact JST for special products.

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SSM-01T-P1.4</b>	AP-K2N	MKS-L	MK/SSF/M-01-14	APLMK SSF/M01-14
<b>SSF-01T-P1.4</b>		—	—	—
<b>SSM-21T-P1.4</b>		MKS-L	MK/SSF/M-21-14	APLMK SSF/M21-14
<b>SSF-21T-P1.4</b>		—	—	—

## Contact position location numbers

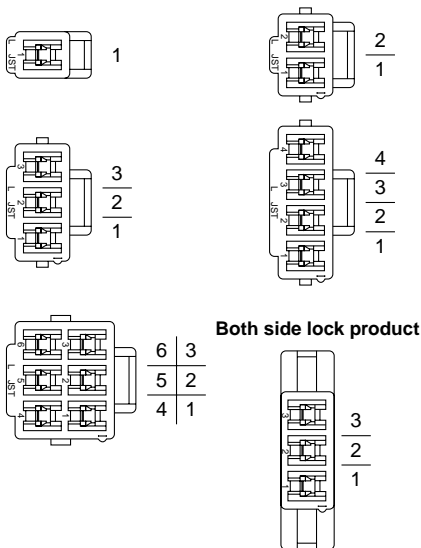
Contact position numbers are stamped



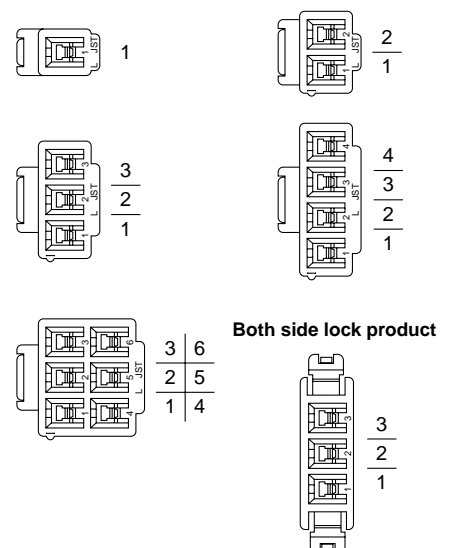
Receptacle housing

Plug housing

### Receptacle housing



### Plug housing



# SL CONNECTOR

## Housing

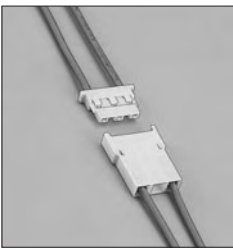
Material: PA 66, UL94V-0, white

Circuits	Voltage rating	Current rating	Receptacle housing(for pin contact)	Q'ty / bag	Plug housing(for socket contact)	Q'ty / bag
1	300V	7A	<b>SLR-01VF</b> 	1,000	<b>SLP-01V</b> 	1,000
2	300V	7A	<b>SLR-02VF</b> 	500	<b>SLP-02V</b> 	500
3	300V	6A	<b>SLR-03VF</b> 	500	<b>SLP-03V</b> 	500
4	300V	6A	<b>SLR-04VF</b> 	500	<b>SLP-04V</b> 	500
6	300V	6A	<b>SLR-06VF</b> 	500	<b>SLP-06V</b> 	500
3	300V	6A	<b>Both side lock product</b> <b>*SLR-03VF-MD</b> 	500	<b>Both side lock product</b> <b>*SLP-03V-MD</b> 	500

**RoHS compliance**

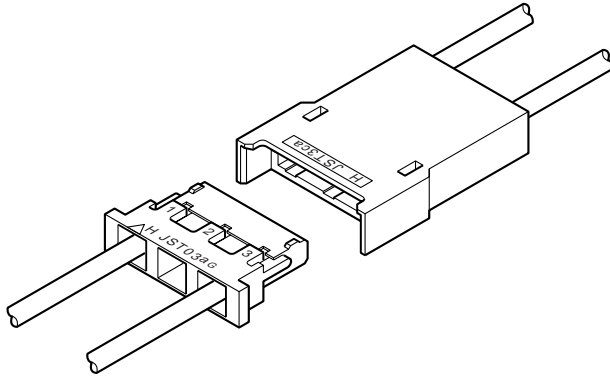
Note: 1. SLR-03VF-MD and SLP-03V-MD are not CSA/TÜV approved.

2. \*Contact JST for special products.



# BHM CONNECTOR

4.0/8.0mm pitch/Disconnectable Crimp style Wire-to-wire connectors





**Wire-to-wire version connectors, designed for liquid crystal display back light lamps.**

- **Contact lances**
- **Box shaped housing**

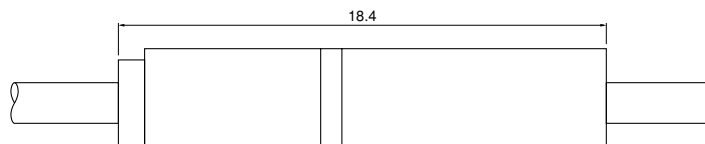
## Specifications

- Current rating: 1.0A AC, DC max.
  - Voltage rating: 600V AC, DC max.
  - Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
  - Contact resistance: Initial value/10m  $\Omega$  max.  
After environmental testing/20m  $\Omega$  max.
  - Insulation resistance: 1,000M  $\Omega$  min.
  - Withstanding voltage: 1,800V AC/minute
  - Applicable wire: AWG #28 to #22  
0.08 to 0.33mm<sup>2</sup>
- \* RoHS compliant products are published.  
\* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.  
\* Contact JST for details.

## Standards

-  Recognized E60389
-  Certified LR20812

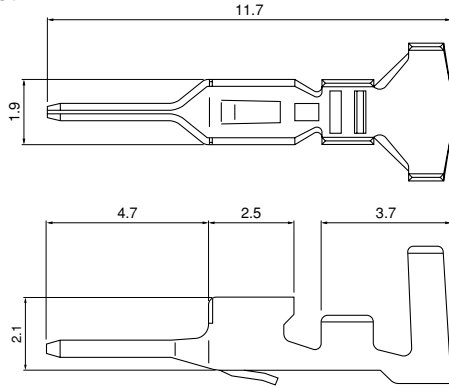
## Assembly layout



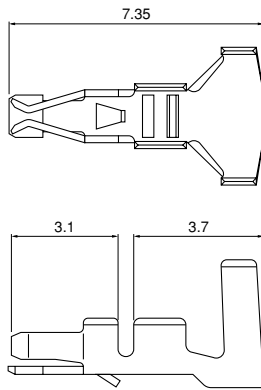
# BHM CONNECTOR

## Contact

### Pin contact



### Socket contact



Model No.		Applicable wire		Insulation O.D. (mm)	Q'ty / reel
Pin contact	Socket contact	mm <sup>2</sup>	AWG #		
<b>SBHM-001T-P0.5</b>	<b>SBH-001T-P0.5</b>	0.08 ~ 0.33	28 ~ 22	1.6 ~ 2.4	4,000

### Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

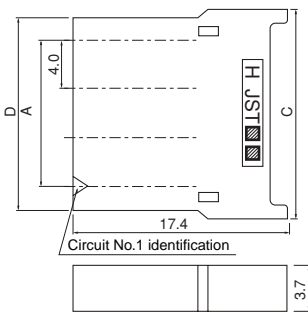
### RoHS compliance

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SBHM-001T-P0.5</b>	AP-K2N	MKS-L	MK/SBH/M-001-05	APLMK SBH/M001-05
		*MKS-SC1-1	SC/SBH/M-001-05	APLSC SBH/M001-05
<b>SBH-001T-P0.5</b>		MKS-L	MK/SBH/M-001-05	APLMK SBH/M001-05
		*MKS-SC1-1	SC/SBH/M-001-05	APLSC SBH/M001-05

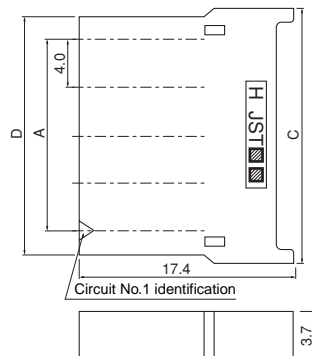
Note: \*Strip-crimp applicator

## Housing

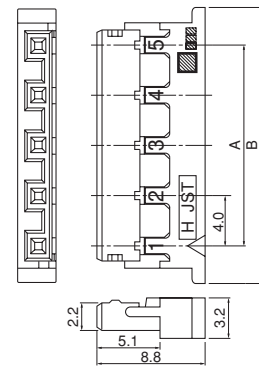
### Receptacle housing (2 to 4 circuits)



### (5 circuits)



### Socket housing



Circuits	Model No.		Dimensions (mm)				Q'ty / bag
	Receptacle housing	Socket housing	A	B	C	D	
2	<b>BHMR-02V</b>	<b>BHR-02VS-1</b>	4.0	9.8	9.1	7.8	1,000
3	<b>BHMR-03V</b>	<b>BHR-03VS-1</b>	8.0	13.8	13.1	11.8	1,000
4	<b>BHMR-04V</b>	<b>BHR-04VS-1</b>	12.0	17.8	17.1	15.8	1,000
5	<b>BHMR-05V-R</b>	<b>BHR-05VS-1</b>	16.0	21.8	21.1	19.8	1,000

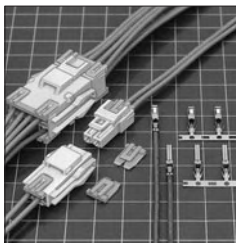
### Material

PA 66, UL94V-0, natural (white)

### RoHS compliance

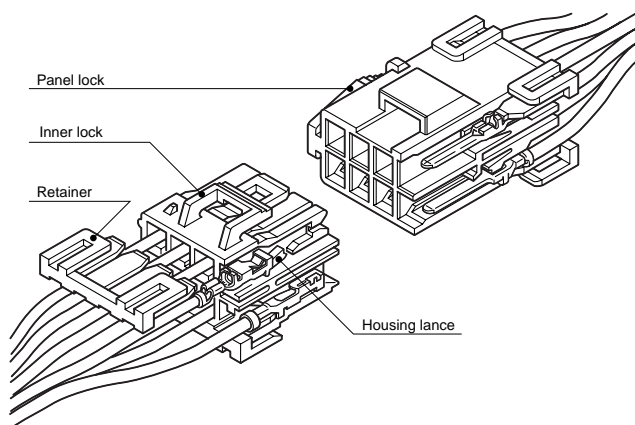
Note: BHMR-05V-R and BHR-05VS-1 have ribs against prying.





# YL CONNECTOR

## 4.5mm pitch/Disconnectable Crimp style Wire-to-wire connectors



**The retainer features added protection against non-insertion or disconnection.**

- Housing lance
- Secondary retainers
- Inner-housing lock
- Panel lock construction

### Standards

- Recognized E60389
- Certified LR20812
- R9351052

### Specifications

- Current rating: 10A AC, DC max. (7A when retainers are mounted)
- Voltage rating: 300V AC, DC max.
- Temperature range: -25°C to +90°C (including temperature rise in applying electrical current)
- Contact resistance: Initial value/7m Ω max. After environmental testing/10m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 1,500V AC/minute
- Applicable wire: AWG #26 to #16 0.13 to 1.25mm<sup>2</sup>
- Applicable panel thickness: 0.7 to 2.0mm
- \* RoHS compliant products are published.
- \* Temperature Range: The aforementioned temperature range of this connector is described in JST Standard Product Specification. Maximum temperature registered in UL is 105°C.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

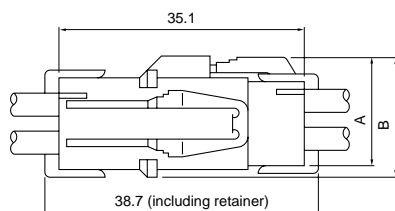
Note: The current rating varies depending on the number of circuits and the wire size used in each connector. The table below lists the current rating as a function of the number of circuits and the wire size.

Current unit: A

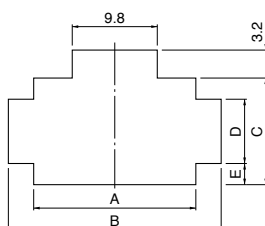
Circuits	Wire size (AWG)					
	#16	#18	#20	#22	#24	#26
1	10	7	5	4	3	2
2	10	7	5	4	3	2
3	9	6	4	4	3	2
4	9	6	4	4	3	2
6	8	5	3	3	2	2
8	7	4	3	3	2	2
9	6	4	3	3	2	2
12	6	3	2	2	2	2
15	5	3	2	2	2	1
16	5	3	2	2	2	1
21	5	3	2	2	2	1

Note: Secondary retainers cannot be used with AWG #16 wires.

### Assembly layout and Panel Layout



Type	Circuits	Dimensions (mm)	
		A	B
Single row	2 · 3	9.5	10.8
2-row	4 · 6 · 8 · 12 · 16	15.3	16.6
3-row	9 · 12 · 15 · 21	20.5	21.8



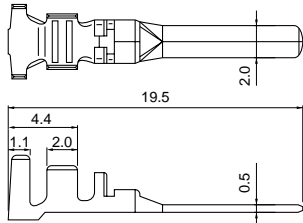
Circuits	Receptacle housing Model No.	Panel thickness (mm)	0.7 to 2.0			0.7 to 0.8		0.9 to 1.3		1.4 to 2.0	
			A	B	C	D <sup>±0.1</sup>	E <sup>±0.1</sup>	D <sup>±0.1</sup>	E <sup>±0.1</sup>	D <sup>±0.1</sup>	E <sup>±0.1</sup>
2	YLR-02V	10.7	16.8	7.1	4.4	1.35	5.0	1.05	5.6	0.75	
3	YLR-03V	15.3	21.3	7.1	4.4	1.35	5.0	1.05	5.6	0.75	
4	YLR-04V	10.7	16.8	12.9	7.1	2.9	7.7	2.6	8.3	2.3	
6	YLR-06V	15.3	21.3	12.9	7.1	2.9	7.7	2.6	8.3	2.3	
8	YLR-08V	19.8	25.8	12.9	7.1	2.9	7.7	2.6	8.3	2.3	
9	YLR-09V	15.3	21.3	18.2	7.1	5.55	7.7	5.25	8.3	4.95	
12	YLR-12V	19.8	25.8	18.2	7.1	5.55	7.7	5.25	8.3	4.95	
	YLR-12VA	28.9	34.8	12.9	7.1	2.9	7.7	2.6	8.3	2.3	
15	YLR-15V	24.4	30.3	18.2	7.1	5.55	7.7	5.25	8.3	4.95	
16	YLR-16V	37.9	43.8	12.9	7.1	2.9	7.7	2.6	8.3	2.3	
21	YLR-21V	33.5	39.3	18.2	7.1	5.55	7.7	5.25	8.3	4.95	

1. Punch holes in the panel according to the sketch and table shown above. Burrs must be removed.
2. The strength of the panel must be considered when punching two or more holes.
3. The connector must be inserted from the same side as the hole is punched.

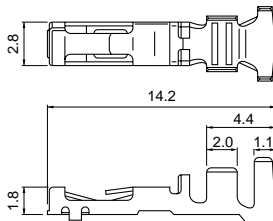
# YL CONNECTOR

## Contact

### Pin contact



### Socket contact



Model No.		Applicable wire		Insulation O.D. (mm)	Q'ty/reel
Pin contact	Socket contact	mm <sup>2</sup>	AWG #		
<b>SYM-01T-P0.5A</b>	<b>SYF-01T-P0.5A</b>	0.13 ~ 0.5	26 ~ 20	1.3 ~ 2.5	4,000 (SYM-01T-P0.5A) 5,000
<b>SYM-41T-P0.5A</b>	<b>SYF-41T-P0.5A</b>	0.5 ~ 1.25 *0.3+0.3~ 0.5+0.5	20 ~ 16 *22+22~ 20+20	2.0 ~ 3.4 *1.5+1.5~ 2.0+2.0	

### Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

### RoHS compliance

Note: 1. Contact JST for special products.

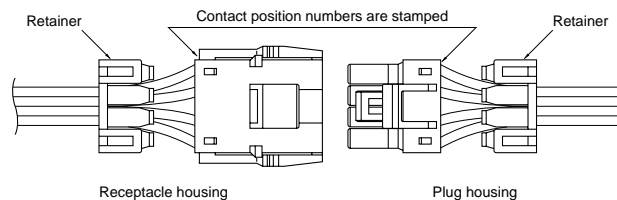
2. Retainers cannot be used with electric wire whose insulation O.D. exceeds 2.7mm and AWG #16.

3. \*Marked products are not TÜV approved.

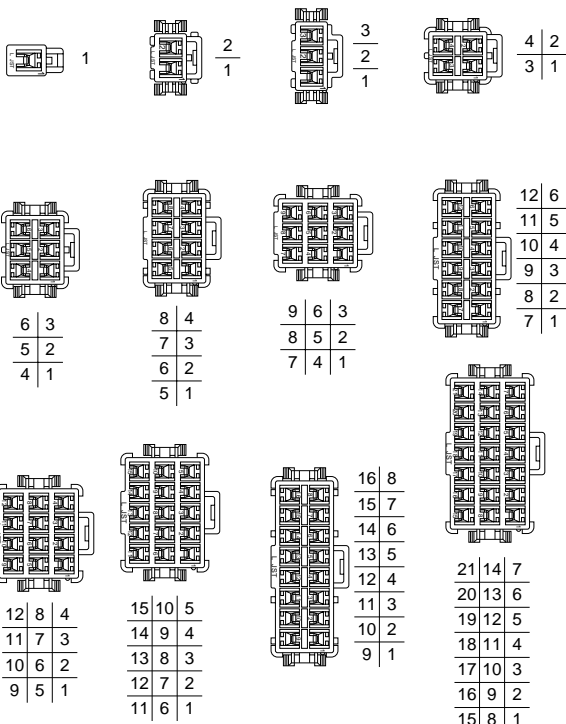
Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SYM-01T-P0.5A</b>	AP-K2N	MKS-L	MK/SYF/M-01-05	APLMK SYF/M01-05
<b>SYF-01T-P0.5A</b>		*MKS-SC-YL	SC/SYF/M-01-05	APLSC SYF/M01-05
<b>SYM-41T-P0.5A</b>		MKS-L	MK/SYF/M-41-05	APLMK SYF/M41-05
<b>SYF-41T-P0.5A</b>		*MKS-SC-YL	SC/SYF/M-41-05	APLSC SYF/M41-05

Note: \*Strip-crimp applicator

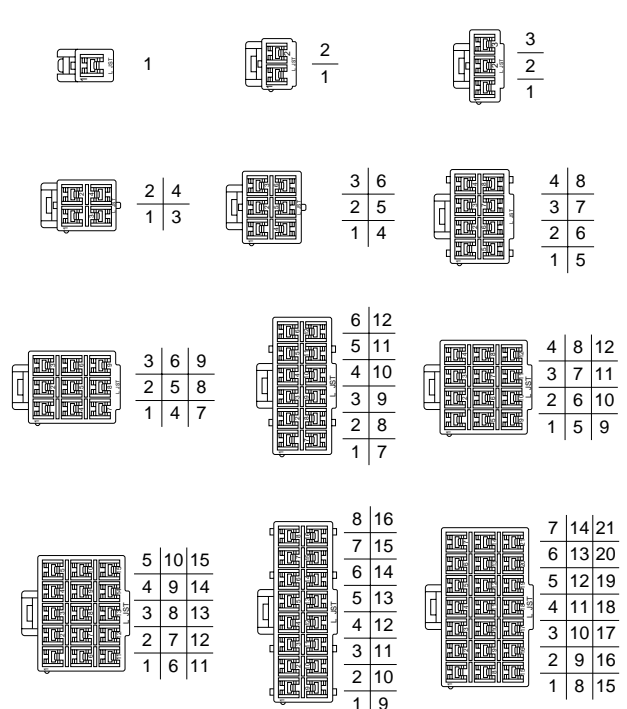
## Contact position location numbers



### Receptacle housing



### Plug housing



# YL CONNECTOR

## Housing

Material: Housing...PA 66, UL94V-0, white  
Retainer...Glass-filled PA 66, UL94V-0, ivory

Circuits	Voltage rating	Current rating	Receptacle housing(for pin contact)	Plug housing(for socket contact)	Retainer
1	300V	7A (10A)	<b>YLR-01VF</b> 	<b>YLP-01V</b> 	<b>YLS-01V</b> 
2	300V	7A (10A)	<b>YLR-02V</b> 	<b>YLP-02V</b> 	<b>YLS-02V</b> 
			<b>YLR-02VF</b> 		
3	300V	6A (9A)	<b>YLR-03V</b> 	<b>YLP-03V</b> 	<b>YLS-03V</b> (commonly used for 3-circuit housing and 6-circuit housing) 
			<b>YLR-03VF</b> 		

**RoHS compliance**

Note: Current rating in parentheses is for use with AWG #16 wire. (Retainers are not mountable.)

# YL CONNECTOR

## Housing

Material: Housing...PA 66, UL94V-0, white  
Retainer...Glass-filled PA 66, UL94V-0, ivory

Circuits	Voltage rating	Current rating	Receptacle housing(for pin contact)	Plug housing(for socket contact)	Retainer
4	300V	6A (9A)	<b>YLR-04V</b> 	<b>YLP-04V</b> 	<b>YLS-02V</b> 
			<b>YLR-04VF</b> 		
6	300V	5A (8A)	<b>YLR-06V</b> 	<b>YLP-06V</b> 	<b>YLS-03V</b> (commonly used for 3-circuit housing and 6-circuit housing) 
			<b>YLR-06VF</b> 		
8	300V	4A (7A)	<b>YLR-08V</b> 	<b>YLP-08V</b> 	<b>YLS-08V</b> 
			<b>YLR-08VF</b> 		
9	300V	4A (6A)	<b>YLR-09V</b> 	<b>YLP-09V</b> 	—

RoHS compliance

Note: Current rating in parentheses is for use with AWG #16 wire. (Retainers are not mountable.)

# YL CONNECTOR

## Housing

Material: Housing...PA 66, UL94V-0, white  
Retainer...Glass-filled PA 66, UL94V-0, ivory

Circuits	Voltage rating	Current rating	Receptacle housing(for pin contact)		Plug housing(for socket contact)		Retainer	
			Part No.	Q'ty / bag	Part No.	Q'ty / bag	Part No.	Q'ty / bag
12	300V	3A (6A)	<b>YLR-12VA</b> 	200	<b>YLP-12VA</b> 	200	<b>YLS-12V</b> 	1,000
			<b>YLR-12V</b> 	200	<b>YLP-12V</b> 	200	—	—
15	300V	3A (5A)	<b>YLR-15V</b> 	200	<b>YLP-15V</b> 	200	—	—
16	300V	3A (5A)	<b>YLR-16V</b> 	100	<b>YLP-16V</b> 	200	<b>YLS-16V</b> 	1,000

### RoHS compliance

Note: Current rating in parentheses is for use with AWG #16 wire. (Retainers are not mountable.)

# YL CONNECTOR

## Housing

Material: Housing...PA 66, UL94V-0, white

Circuits	Voltage rating	Current rating	Receptacle housing(for pin contact)		Plug housing(for socket contact)		Retainer	
			YLR-21V	Q'ty / bag	YLP-21V	Q'ty / bag		Q'ty / bag
21	300V	3A (5A)		100		200	—	—

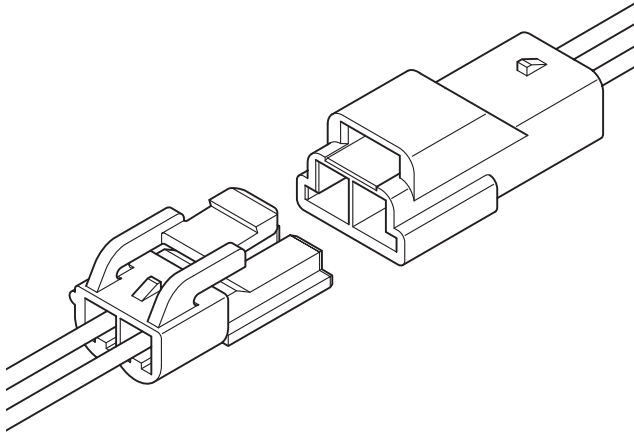
**RoHS compliance**

Note: Current rating in parentheses is for use with AWG #16 wire. (Retainers are not mountable.)



# YLN CONNECTOR

4.5mm pitch/Disconnectable Crimp style Wire-to-wire connectors



The YLN connector adds variations in shape to the existing color variations of the YL connector in order to improve identification of connectors. Moreover, this connector has a mechanism to prevent incomplete mating by utilizing the inertial force generated when the plug and receptacle are mated and therefore, ensures complete mating.

- Design to prevent incidental mating with the YL connector
- Inertial force mechanism
- Interchangeability
- Finger friendly design

## Specifications

- Current rating: 10A max. AC, DC  
(7A when retainers are mounted)
- Voltage rating: 300V max. AC, DC
- Temperature range: -25°C to +90°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/7m Ω max.  
After environmental testing/10m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 1,500V AC/minute
- Applicable wire: AWG #26 to #16  
0.13 to 1.25mm<sup>2</sup>
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

Note: The current rating differs depending on the number of circuits and the wire size used in each connector. The table below lists the current rating as a function of the number of circuits and the wire size.

Current unit : A

Circuits	Wire size (AWG)					
	#16	#18	#20	#22	#24	#26
2	10	7	5	4	3	2
3	9	6	4	4	3	2
4	9	6	4	4	3	2
6	8	5	3	3	2	2

Note: Secondary retainers cannot be used with AWG #16 wires.

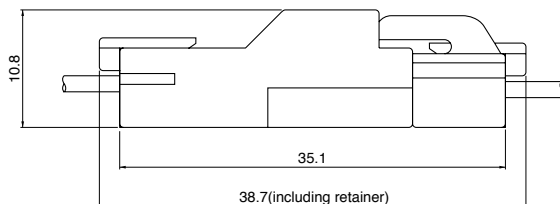
## Standards

Recognized E60389

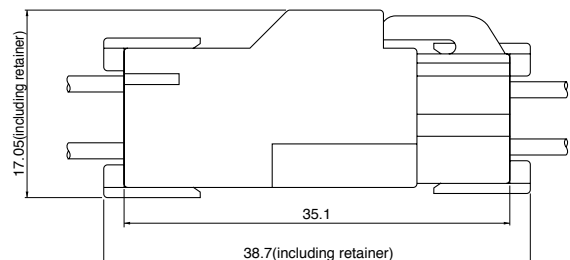
Certified LR20812

## Assembly layout

(2, 3 circuits)



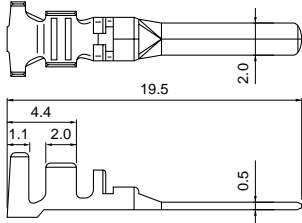
(4, 6 circuits)



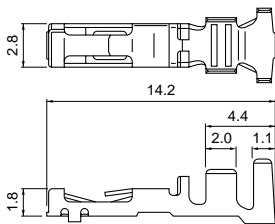
# YLN CONNECTOR

## Contact

### Pin contact



### Socket contact



Model No.		Applicable wire		Insulation O.D. (mm)	Q'ty / reel
Pin contact	Socket contact	mm <sup>2</sup>	AWG #		
<b>SYM-01T-P0.5A</b>	<b>SYF-01T-P0.5A</b>	0.13 ~ 0.5	26 ~ 20	1.3 ~ 2.5	4,000 (SYM-01T-P0.5A) 5,000
<b>SYM-41T-P0.5A</b>	<b>SYF-41T-P0.5A</b>	0.5 ~ 1.25	20 ~ 16	2.0 ~ 3.4	
		0.3+0.3 ~ 0.5+0.5	22+22 ~ 20+20	1.5+1.5 ~ 2.0+2.0	

### Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

### RoHS compliance

Note: 1. Contact JST for special products.

2. Retainers cannot be used with electric wire whose insulation O.D. exceeds 2.7mm and AWG #16.

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SYM-01T-P0.5A</b>	AP-K2N	MKS-L	MK/SYF/M-01-05	APLMK SYF/M01-05
<b>SYF-01T-P0.5A</b>		*MKS-SC-YL	SC/SYF/M-01-05	APLSC SYF/M01-05
<b>SYM-41T-P0.5A</b>		MKS-L	MK/SYF/M-41-05	APLMK SYF/M41-05
<b>SYF-41T-P0.5A</b>		*MKS-SC-YL	SC/SYF/M-41-05	APLSC SYF/M41-05

Note: \*Strip-crimp applicator

## Housing

Material: Housing...PA 66, UL94V-0, natural (white)

Retainer...Glass-filled PA 66, UL94V-0, natural (ivory)

Circuits	Voltage rating	Current rating	Receptacle housing(for pin contact)	Plug housing(for socket contact)	Retainer
2	300V	7A (10A)	<b>YLN-02VF</b> 	<b>YLN-02V</b> 	<b>YLS-02V</b> (Used with both housings with 2 and 4 circuits) 
3	300V	6A (9A)	<b>YLN-03VF</b> 	<b>YLN-03V</b> 	<b>YLS-03V</b> (Used with both housings with 3 and 6 circuits) 
4	300V	6A (9A)	<b>YLN-04VF</b> 	<b>YLN-04V</b> 	<b>YLS-02V</b> (Used with both housings with 2 and 4 circuits) 
6	300V	5A (8A)	<b>YLN-06VF</b> 	<b>YLN-06V</b> 	<b>YLS-03V</b> (Used with both housings with 3 and 6 circuits) 

### RoHS compliance

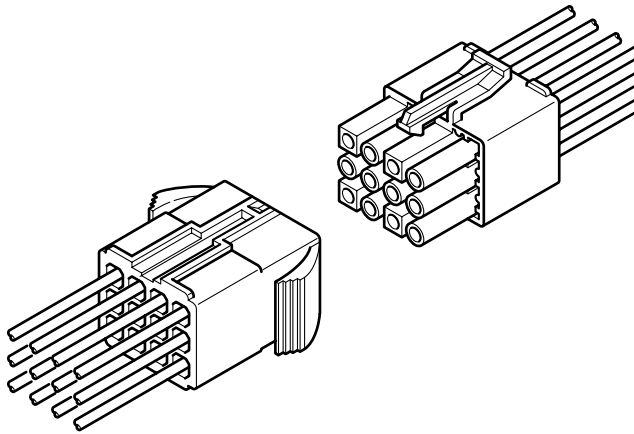
Note: Current rating in parentheses is for use with AWG #16 wire. (Retainers are not mountable.)





# EL CONNECTOR

4.5mm pitch/Disconnectable Crimp style Wire-to-wire connectors



The contacts for the compact EL connector can be easily inserted into the connector housings. The plug housing and the receptacle housing can be smoothly mated even if they are mechanically distorted.

- Easy insertion and secure installation of contacts
- A smooth connection even when pried during mating
- Durable arm lock mechanism
- Two contact styles
- Interchangeability with ML connector

## Specifications

- Current rating: 10A AC, DC max.
- Voltage rating: 300V AC, DC max.
- Temperature range: -25°C to +90°C (including temperature rise in applying electrical current)
- Contact resistance: Initial value/7m Ω max. After environmental testing/10m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 1,500V AC/minute
- Applicable wire: AWG #26 to #16 0.13 to 1.25mm<sup>2</sup>
- Applicable panel thickness: 0.8 to 2.0mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

Note: The current rating varies depending on the number of circuits and the wire size used in each connector. The table below lists the current rating as a function of the number of circuits and the wire size.

Current unit : A

Circuits	Wire size (AWG)					
	#16	#18	#20	#22	#24	#26
2	10	6	5	4	4	3
3	10	6	5	4	4	3
4	10	6	5	4	4	3
6	8	5	4	3	3	3
9	6	4	3	3	2	2
12	6	4	3	3	2	2
15	6	4	3	3	2	2

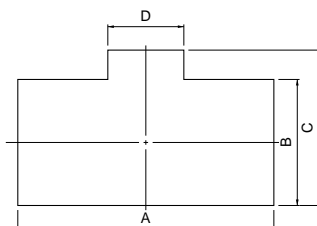
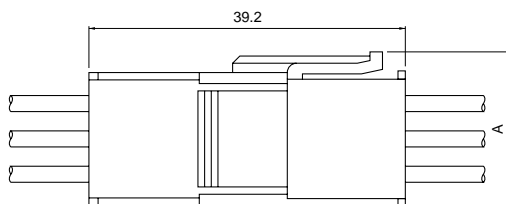
## Standards

Recognized E60389

Certified LR20812

R75052

## Assembly layout and Panel layout



Circuits	Dimensions A (mm)
2 ~ 4 (Single-line arrangement)	10.4
4 (Double-line arrangement)	15.0
6	14.9
9 ~ 15	19.4

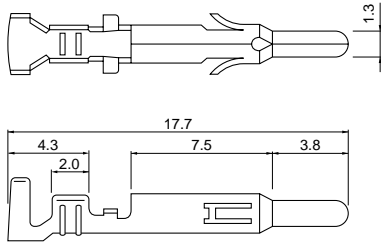
Circuits	Receptacle housing Model No.	Panel hole dimensions (mm)				General tolerance ±0.13	Applicable panel thickness (mm)
		A	B	C	D		
2	<b>ELR-02V</b>	15.0	6.0	6.85	5.2	0.8~2.0	
3	<b>ELR-03V</b>	19.7	6.0	6.85	5.2		
4	<b>ELR-04V</b>	24.2	6.0	6.85	5.2		
	<b>ELR-04NV</b>	15.6	10.6	11.6	5.2		
6	<b>ELR-06V</b>	19.7	10.2	11.1	5.2		
9	<b>ELR-09V</b>	19.7	14.8	15.7	5.2		
12	<b>ELR-12V</b>	24.2	14.8	15.7	5.2		
15	<b>ELR-15V</b>	28.7	14.8	15.7	5.2		

- Note: 1. Punch holes in the panel according to the sketch and table shown above. Burrs must be removed.  
 2. The strength of the panel must be considered when punching two or more holes.  
 3. The connector must be inserted from the same side as the hole is punched.

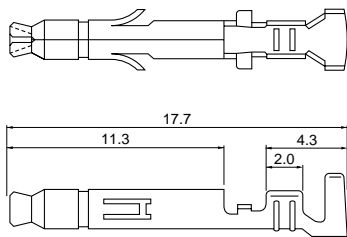
# EL CONNECTOR

## Contact

### Pin contact



### Socket contact



Model No.		Applicable wire		Insulation O.D. (mm)	Q'ty/reel
Pin contact	Socket contact	mm <sup>2</sup>	AWG #		
SLM-01T-P1.3E	SLF-01T-P1.3E	0.13 ~ 0.5	26 ~ 20	1.3 ~ 2.7	6,000
SLM-41T-P1.3E	SLF-41T-P1.3E	0.5 ~ 1.25	20 ~ 16	1.9 ~ 3.4	4,000
*SLM-42T-P1.3E	*SLF-42T-P1.3E	0.3+0.3 ~ 0.5+0.5	22+22 ~ 20+20	1.7+1.7 ~ 2.0+2.0	

### Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

### RoHS compliance

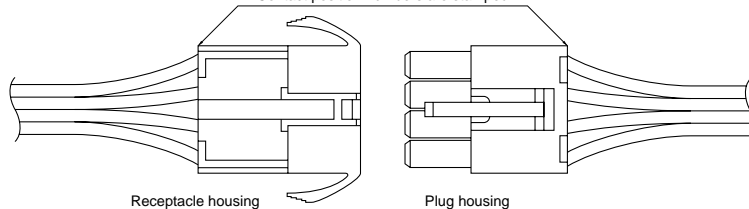
- Note: 1. Contact denoted by \* is used for two wires.  
 2. Contact JST for special products.  
 3. Contact JST for brass products.

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SLM-01T-P1.3E	AP-K2N	MKS-L	MK/SLF/M-01-13E	APLMK SLF/M01-13E
SLF-01T-P1.3E		*MKS-SC	SC/SLF/M-01-13E	APLSC SLF/M01-13E
SLM-42T-P1.3E		MKS-L	MK/SLF/M-42-13E	APLMK SLF/M42-13E
SLF-42T-P1.3E		—	—	—
SLM-41T-P1.3E		MKS-L	MK/SLF/M-41-13E	APLMK SLF/M41-13E
SLF-41T-P1.3E		*MKS-SC	SC/SLF/M-41-13E	APLSC SLF/M41-13E

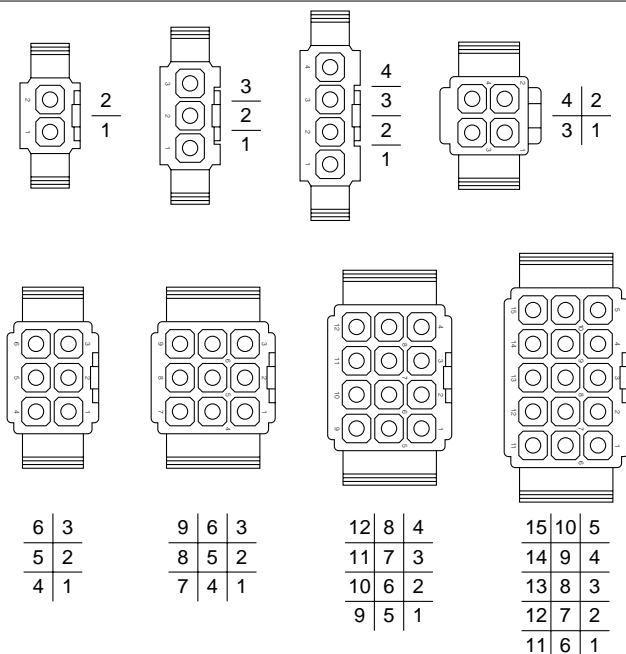
Note: \*Strip-crimp applicator

## Contact position location numbers

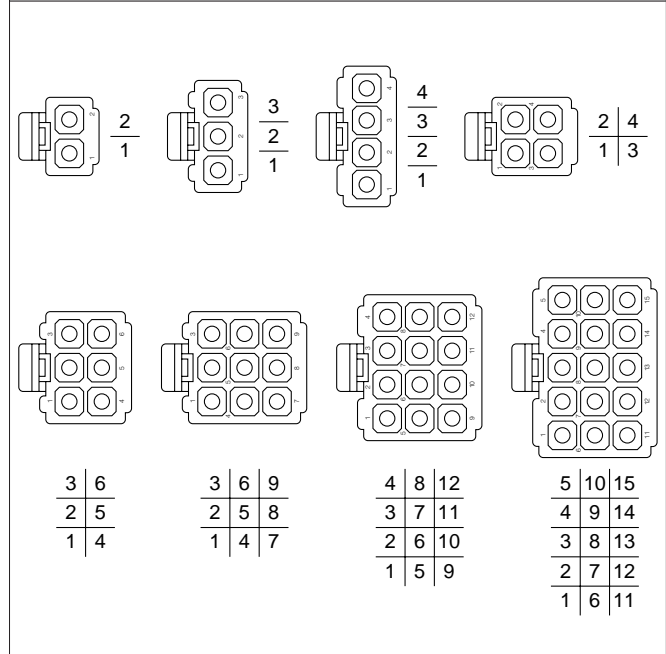
Contact position numbers are stamped



### Receptacle housing



### Plug housing



# EL CONNECTOR

## Housing

Material: PA 6, UL94V-0, white

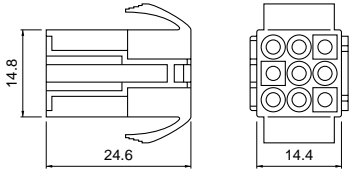
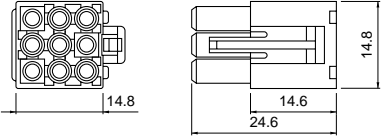
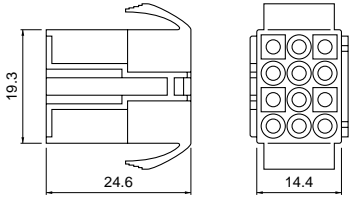
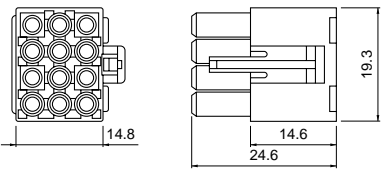
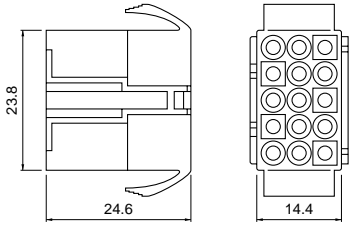
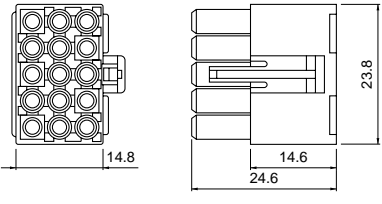
Circuits	Voltage rating	Current rating	Receptacle housing(for pin contact)		Plug housing(for socket contact)	
2	300V	10A	<b>ELR-02V</b> 	Q'ty/ bag 500	<b>ELP-02V</b> 	Q'ty/ bag 500
			<b>ELR-02VF</b> 	Q'ty/ bag 500		
3	300V	10A	<b>ELR-03V</b> 	Q'ty/ bag 500	<b>ELP-03V</b> 	Q'ty/ bag 500
4	300V	10A	<b>ELR-04V</b> 	Q'ty/ bag 500	<b>ELP-04V</b> 	Q'ty/ bag 500
			<b>ELR-04NV</b> 	Q'ty/ bag 500		
			<b>ELR-04NVF</b> 			
6	300V	8A	<b>ELR-06V</b> 	Q'ty/ bag 500	<b>ELP-06V</b> 	Q'ty/ bag 500

RoHS compliance

# EL CONNECTOR

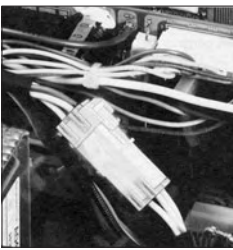
## Housing

Material: PA 6, UL94V-0, white

Circuits	Voltage rating	Current rating	Receptacle housing(for pin contact)		Plug housing(for socket contact)	
9	300V	6A	<b>ELR-09V</b> 	Q'ty/ bag  500	<b>ELP-09V</b> 	Q'ty/ bag  500
12	300V	6A	<b>ELR-12V</b> 	Q'ty/ bag  500	<b>ELP-12V</b> 	Q'ty/ bag  500
15	300V	6A	<b>ELR-15V</b> 	Q'ty/ bag  500	<b>ELP-15V</b> 	Q'ty/ bag  500

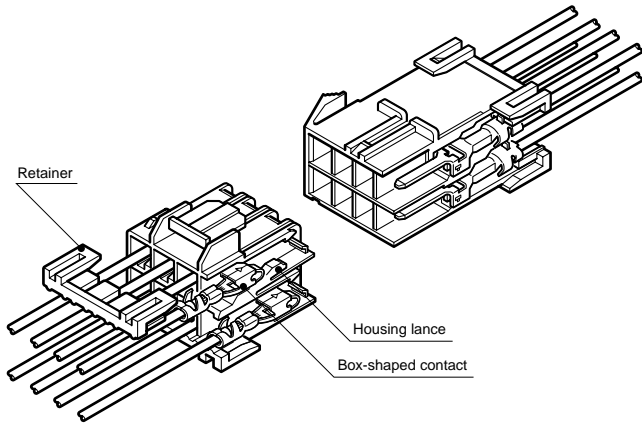
### RoHS compliance

Note: 1. ELR-02VF and ELR-04NVF are exclusively for free hanging. The other circuits can be used either for panel mounted or free hanging.  
The panel hole dimensions are given on the next page.  
2. Contact JST for special products.



# ZL CONNECTOR

5.0mm pitch/Disconnectable Crimp style Wire-to-wire connectors



**ZL connectors are reliable, smoothly mating wire-to-wire connectors.**

- **Housing lances**
- **Retainer**
- **Box-shaped contacts**
- **Mountable on a variety of panels**

## Specifications

- Current rating: 10A AC, DC max.
- Voltage rating: 300V AC, DC max.
- Temperature range: -25°C to +90°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/7m Ω max.  
After environmental testing/10m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 1,500V AC/minute
- Applicable wire: AWG #26 to #16  
0.13 to 1.25mm<sup>2</sup>
- Applicable panel thickness: 0.7 to 2.4mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

Note: The current rating varies depending on the number of circuits and the wire size used in each connector.  
The table below lists the current rating as a function of the number of circuits and wire size.

Current unit: A

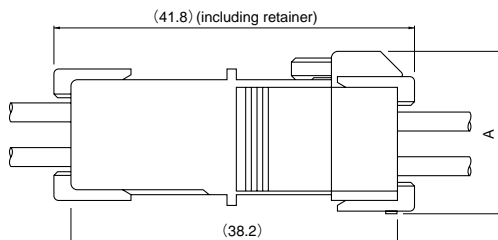
Circuits	Wire size (AWG)					
	#16	#18	#20	#22	#24	#26
2	10	6	5	4	3	2
4	9	5	4	3	3	2
6	8	4	3	3	2	2
8	6	4	3	3	2	2
12	6	4	3	3	2	2
16	5	3	2	2	1	1

## Standards

Ⓜ Recognized E60389

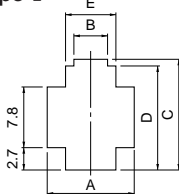
Ⓢ Certified LR20812

## Assembly layout and Panel layout

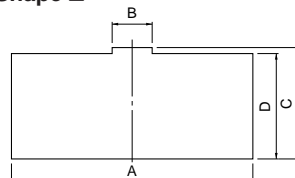


Circuits	Dimensions A (mm)
2 • 4	18.2
6 • 8 • 12 • 16	17.5

Shape I



Shape II



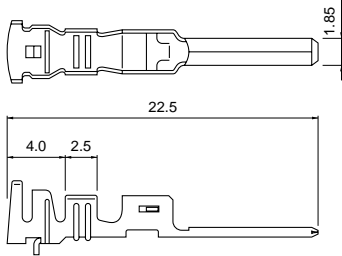
Circuits	Receptacle housing	Panel hole shape	Panel hole dimensions (mm) General tolerance ±0.13					Applicable panel thickness (mm)
			A	B	C	D	E	
2	ZLR-02V	I	11.5	4.4	13.95	13.2	6.5	0.7 ~ 2.4
4	ZLR-04V	I	16.5	5.2	13.95	13.2	11.6	
6	ZLR-06V	II	21.5	5.2	13.95	13.2	—	
8	ZLR-08V	II	26.5	5.2	13.95	13.2	—	
12	ZLR-12V	II	36.5	5.2	13.95	13.2	—	
16	ZLR-16V	II	46.5	5.2	13.95	13.2	—	

- Note: 1. Punch holes in the panel according to the sketch and table shown above. Burrs must be removed.  
2. The strength of the panel must be considered when punching two or more holes.  
3. The connector must be inserted from the same side as the hole is punched.

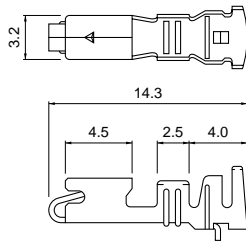
# ZL CONNECTOR

## Contact

### Pin contact



### Socket contact



Model No.		Applicable wire		Insulation O.D. (mm)	Q'ty/reel
Pin contact	Socket contact	mm <sup>2</sup>	AWG #		
<b>SZM-01T-P0.7</b>	<b>SZF-01T-P0.7</b>	0.13 ~ 0.5	26 ~ 20	1.3 ~ 2.7	3,000
<b>SZM-41T-P0.7</b>	<b>SZF-41T-P0.7</b>	0.75 ~ 1.25	18 ~ 16	1.9 ~ 3.1	
		0.3+0.3 ~ 0.5+0.5	22+22 ~ 20+20	1.7+1.7 ~ 2.0+2.0	

### Material and Finish

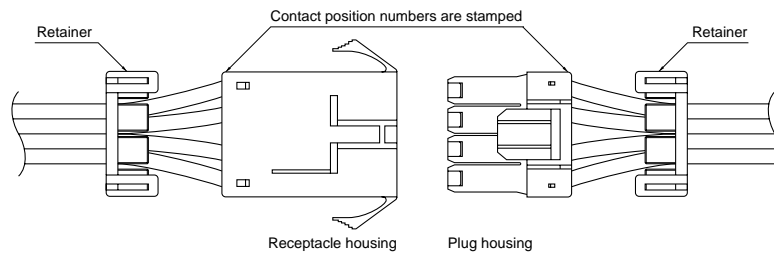
Phosphor bronze, tin-plated (reflow treatment)

### RoHS compliance

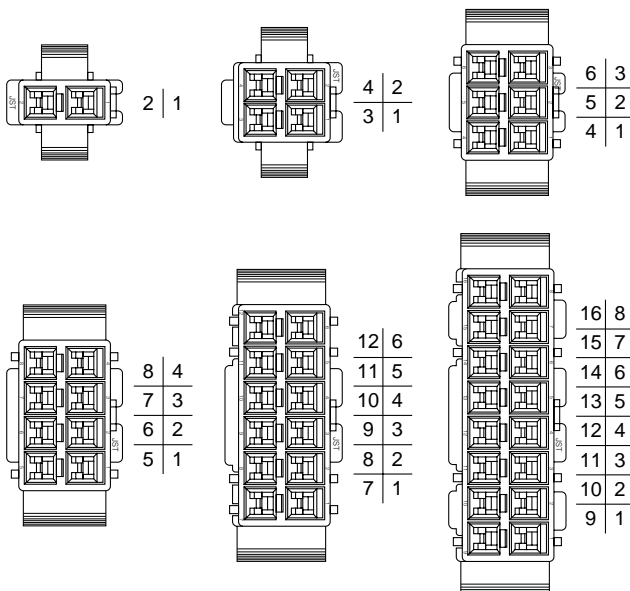
Note: 1. Contact JST for special products.  
2. Contact JST for brass products.

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SZM-01T-P0.7</b>	AP-K2N	MKS-L	MK/SZF/M-01-07	APLMK SZF/M01-07
<b>SZF-01T-P0.7</b>		—	—	—
<b>SZM-41T-P0.7</b>		MKS-L	MK/SZF/M-41-07	APLMK SZF/M41-07
<b>SZF-41T-P0.7</b>		—	—	—

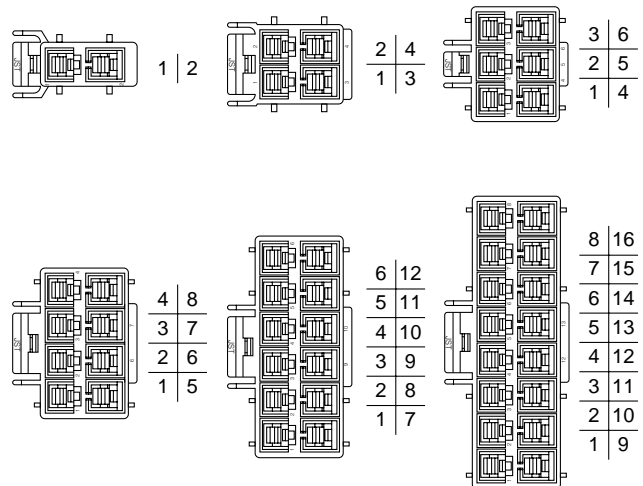
## Contact position location numbers



### Receptacle housing



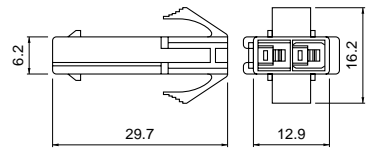
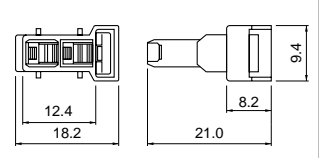
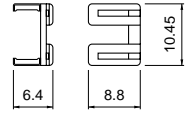
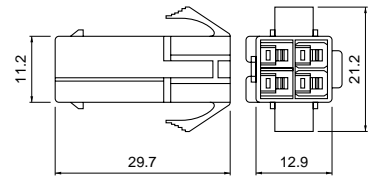
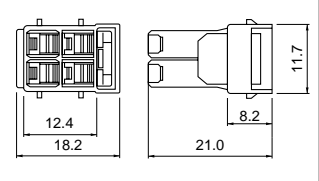
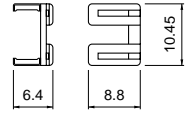
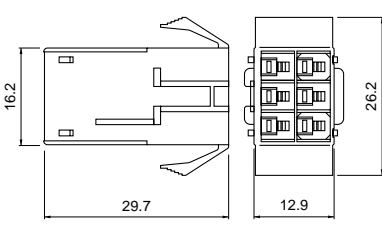
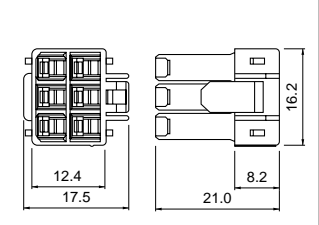
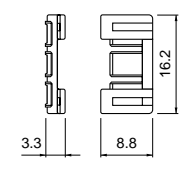
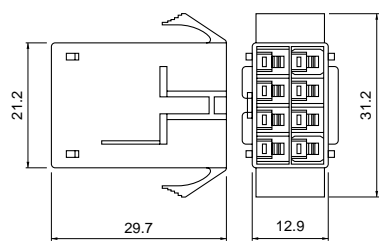
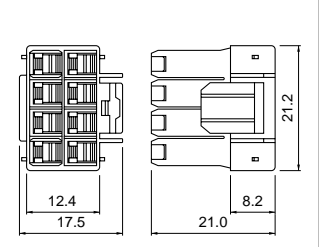
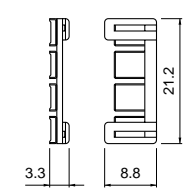
### Plug housing



# ZL CONNECTOR

## Contact

Material: Housing...PA 6, UL94V-0, white  
Retainer...Glass-filled PA 66, UL94V-0, ivory

Circuits	Voltage rating	Current rating	Receptacle housing(for pin contact)		Plug housing(for socket contact)		Retainer	
2	300V	10A	<b>ZLR-02V</b> 	Q'ty/ bag 500	<b>ZLP-02V</b> 	Q'ty/ bag 500	<b>ZLS-02V</b> (Used with both housings with 2 and 4 circuits) 	Q'ty/ bag 1,000
4	300V	9A	<b>ZLR-04V</b> 	Q'ty/ bag 500	<b>ZLP-04V</b> 	Q'ty/ bag 500	<b>ZLS-03V</b> 	Q'ty/ bag 1,000
6	300V	8A	<b>ZLR-06V</b> 	Q'ty/ bag 500	<b>ZLP-06V</b> 	Q'ty/ bag 500	<b>ZLS-03V</b> 	Q'ty/ bag 1,000
8	300V	6A	<b>ZLR-08V</b> 	Q'ty/ bag 500	<b>ZLP-08V</b> 	Q'ty/ bag 500	<b>ZLS-08V</b> 	Q'ty/ bag 1,000

RoHS compliance

# ZL CONNECTOR

## Contact

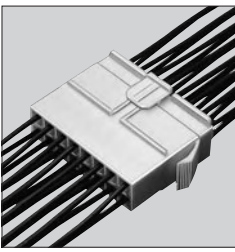
Material: Housing...PA 6, UL94V-0, white  
Retainer...Glass-filled PA 66, UL94V-0, ivory

Circuits	Voltage rating	Current rating	Receptacle housing(for pin contact)		Plug housing(for socket contact)		Retainer	
12	300V	6A	<b>ZLR-12V</b> 	Q'ty/ bag 200	<b>ZLP-12V</b> 	Q'ty/ bag 200	<b>ZLS-12V</b> 	Q'ty/ bag 1,000
16	300V	5A	<b>ZLR-16V</b> 	Q'ty/ bag 200	<b>ZLP-16V</b> 	Q'ty/ bag 200	<b>ZLS-16V</b> 	Q'ty/ bag 1,000

### RoHS compliance

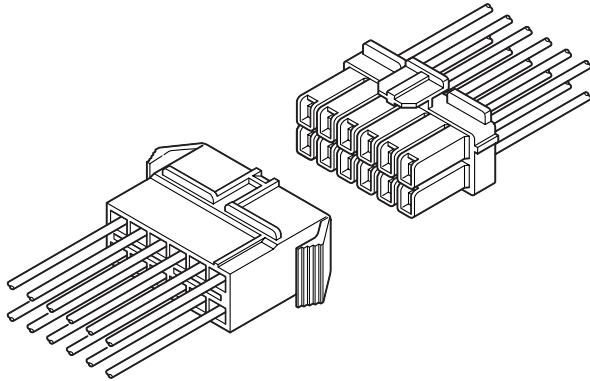
Note: 1. ZL connectors with any number of circuits can be used either panel mounted or free hanging. The panel hole dimensions are given on the next page.  
2. Contact JST for special products.





# XL CONNECTOR

5.0mm pitch/Disconnectable Crimp style Wire-to-wire connectors



**XL connectors are reliable wire-to-wire connectors, used for such electrical and electronic equipment as home appliances, vending machines, and office machines.**

- **Reliable housing construction**
- **Easy contact insertion**
- **Box-shaped contact**
- **Two kinds of connections**

## Specifications

- Current rating: 10A AC, DC max.
- Voltage rating: 300V AC, DC max.
- Temperature range: -25°C to +90°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/7m Ω max.  
After environmental testing/10m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 1,500V AC/minute
- Applicable wire: AWG #26 to #16  
0.13 to 1.25mm<sup>2</sup>
- Applicable panel thickness: 0.7 to 2.4mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

Note: The current rating varies depending on the number of circuits and the wire size used in each connector.  
The table below lists the current rating as a function of the number of circuits and wire size.

Current unit: A

Circuits	Wire size (AWG)					
	#16	#18	#20	#22	#24	#26
2	10	6	5	4	3	3
4	9	5	4	3	3	2
8	6	4	3	3	2	2
12	6	4	3	3	2	2
16	5	3	2	2	1	1

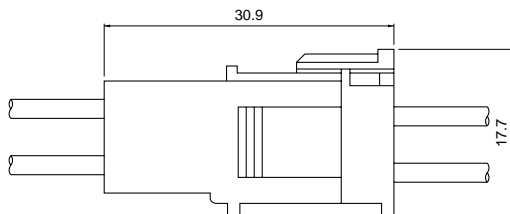
## Standards

Recognized E60389

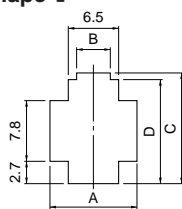
Certified LR20812

R75052

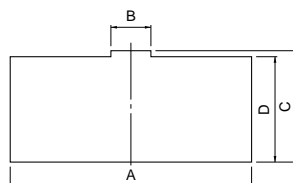
## Assembly layout and Panel layout



Shape I



Shape II



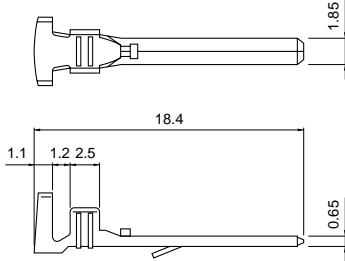
Circuits	Receptacle housing	Panel hole shape	Panel hole dimensions (mm)				General tolerance ±0.13	Applicable panel thickness (mm)
			A	B	C	D		
2	<b>XLR-02V</b>	I	11.5	4.4	13.95	13.2	0.7 ~ 2.4	
4	<b>XLR-04V</b>	II	16.5	5.2	13.95	13.2		
8	<b>XLR-08V</b>	II	26.5	5.2	13.95	13.2		
12	<b>XLR-12V</b>	II	36.5	5.2	13.95	13.2		
16	<b>XLR-16V</b>	II	46.5	5.2	13.95	13.2		

- Note: 1. Punch holes in the panel according to the sketch and table shown above. Burrs must be removed.  
2. The strength of the panel must be considered when punching two or more holes.  
3. The connector must be inserted from the same side as the hole is punched.

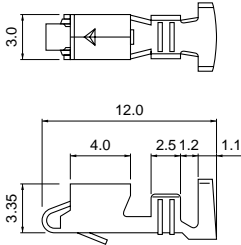
# XL CONNECTOR

## Contact

### Pin contact



### Socket contact



Model No.		Applicable wire		Insulation O.D. (mm)	Q'ty / reel
Pin contact	Socket contact	mm <sup>2</sup>	AWG #		
<b>SYM-01T-P0.7</b>	<b>SXF-01T-P0.7</b>	0.13 ~ 0.5	26 ~ 20	1.3 ~ 2.7	Pin contact SYM-01T-P0.7 : 6,000 SYM-41T-P0.7 : 4,000
<b>SYM-41T-P0.7</b>	<b>SXF-41T-P0.7</b>	0.5 ~ 1.25	20 ~ 16	1.9 ~ 3.1	
		0.3+0.3 ~ 0.5+0.5	22+22 ~ 20+20	1.7+1.7 ~ 2.0+2.0	Socket contact: : 3,000

### Material and Finish

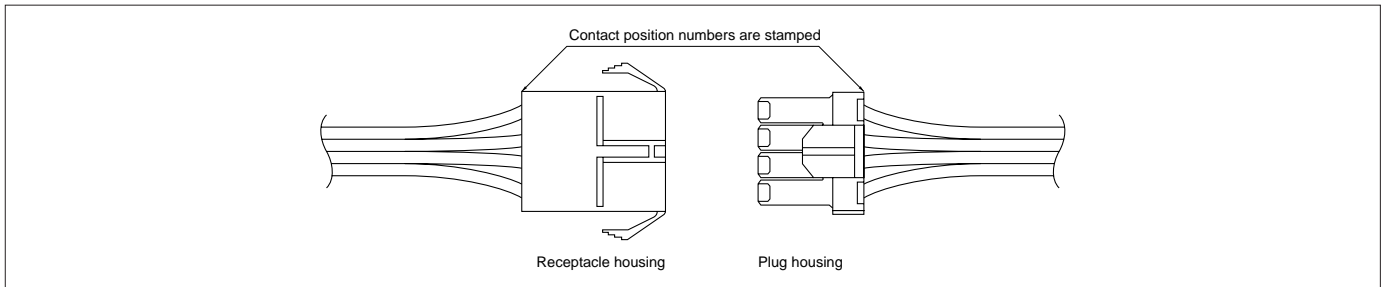
Phosphor bronze, tin-plated (reflow treatment)

### RoHS compliance

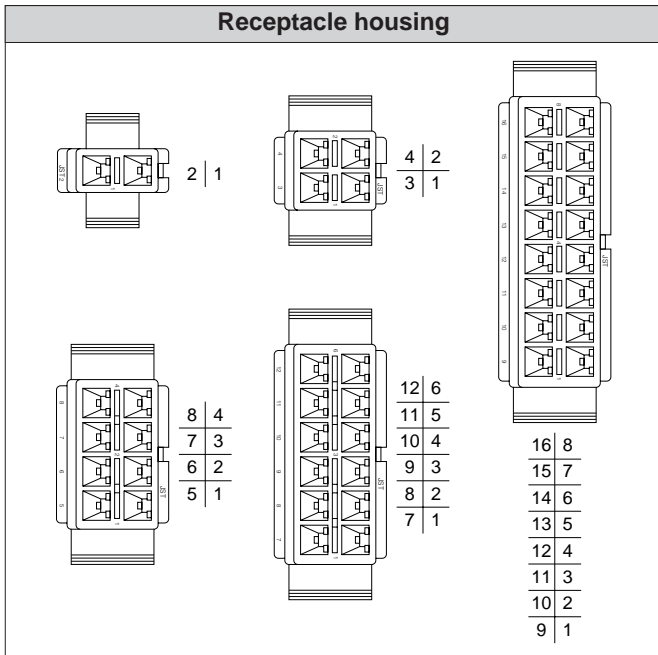
Note: 1. Contact JST for special products.  
2. Contact JST for brass products.

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SYM-01T-P0.7</b>	AP-K2N	MKS-L	MK/SYM-01-07	APLMK SYM01-07
		—	—	—
<b>SXF-01T-P0.7</b>	AP-K2N	MKS-L	MK/SXF-01-07	APLMK SXF01-07
		—	—	—
<b>SYM-41T-P0.7</b>	AP-K2N	MKS-L	MK/SYM-41-07	APLMK SYM41-07
		—	—	—
<b>SXF-41T-P0.7</b>	AP-K2N	MKS-L	MK/SXF-41-07	APLMK SXF41-07
		—	—	—

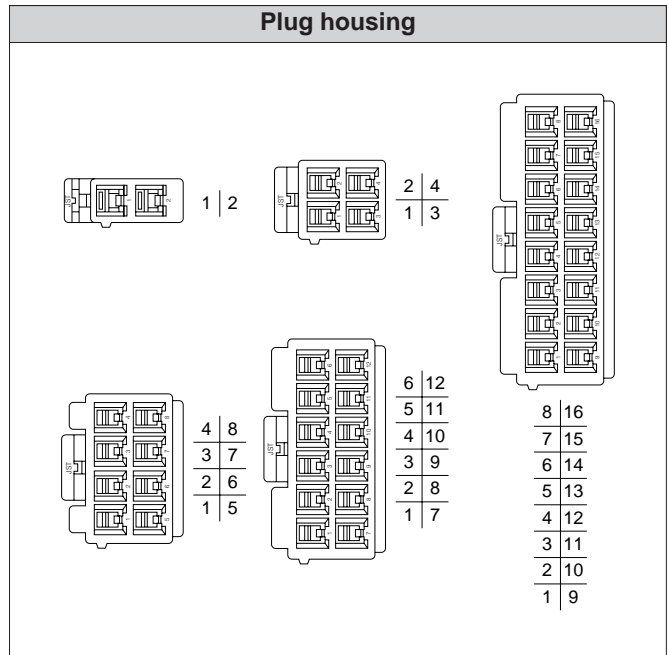
## Contact position location numbers



### Receptacle housing



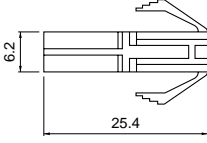
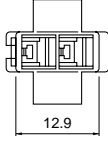
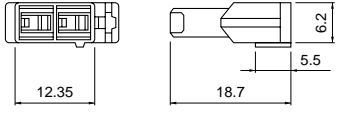
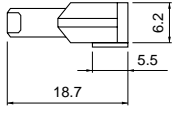
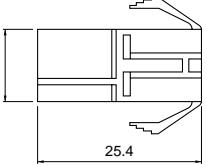
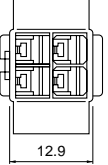
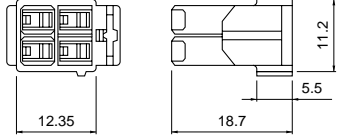
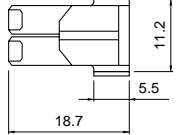
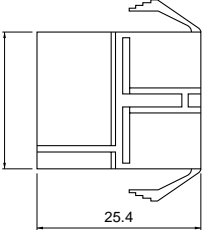
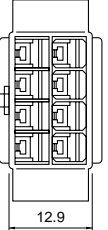
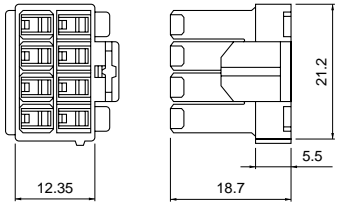
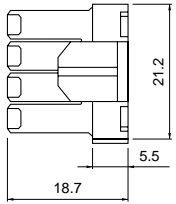
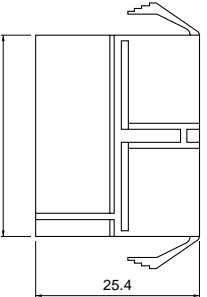
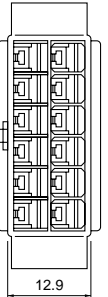
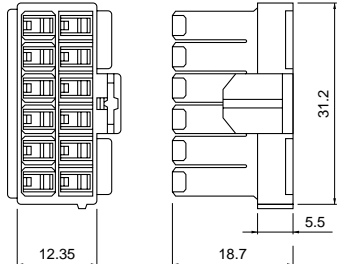
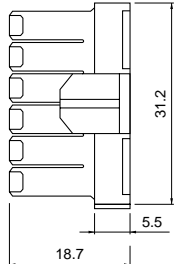
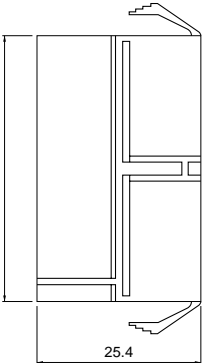
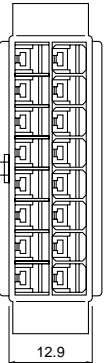
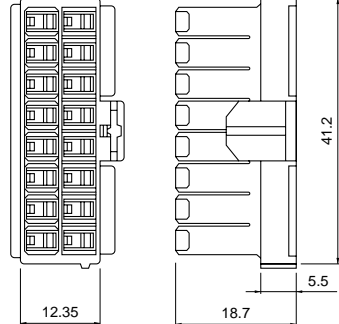
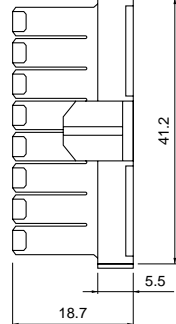
### Plug housing



# XL CONNECTOR

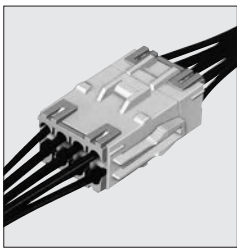
## Housing

Material: PA 66, UL94V-0, white

Circuits	Voltage rating	Current rating	Receptacle housing(for pin contact)		Q'ty/ bag	Plug housing(for socket contact)		Q'ty/ bag
2	300V	10A	<b>XLR-02V</b> 		500	<b>XLP-02V</b> 		500
4	300V	9A	<b>XLR-04V</b> 		500	<b>XLP-04V</b> 		500
8	300V	6A	<b>XLR-08V</b> 		500	<b>XLP-08V</b> 		500
12	300V	6A	<b>XLR-12V</b> 		200	<b>XLP-12V</b> 		200
16	300V	5A	<b>XLR-16V</b> 		100	<b>XLP-16V</b> 		200

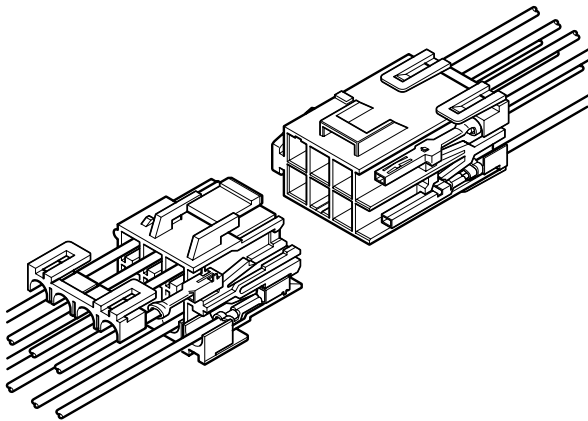
### RoHS compliance

Note: 1. XL connectors with any number of circuits can be used either panel mounted or free hanging. The panel hole dimensions are given on the next page.  
 2. Contact JST for special products.



# VL CONNECTOR

6.2mm pitch/Disconnectable Crimp style Wire-to-wire connectors



The VL connector is a 6.2mm pitch wire-to-wire connector designed for circuits requiring up to 20A (1 or 2-circuit with AWG #12 wire).

- Housing lances for contact retention
- Secondary retainer
- Suited for circuits with high power requirements
- Panel lock construction

## Standards

Recognized E60389

Certified LR20812

R9351103

## Specifications

- Current rating: 20A AC, DC max.
- Voltage rating: 600V AC, DC max. (300V in accordance with the Electrical Appliance and Material Safety Law in Japan)
- Temperature range: -25°C to +90°C (including temperature rise in applying electrical current)
- Contact resistance: Initial value/7m Ω max. After environmental testing/10m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 2,000V AC/minute
- Applicable wire: AWG #22 to #12  
0.3 to 3.5mm<sup>2</sup>
- Applicable panel thickness: 0.5 to 2.0mm
- \* RoHS compliant products are published.
- \* Temperature Range:  
The aforementioned temperature range of this connector is described in JST Standard Product Specification. Maximum temperature registered in UL is 105°C.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

Note: The current rating varies depending on the number of circuits and the wire size used in each connector. The table below lists the current rating as a function of the number of circuits and the wire size.

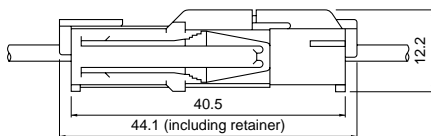
Current unit: A

Circuits	Wire size (AWG)					
	#12	#14	#16	#18	#20	#22
1	20	15	10	8	6	4
2	20	15	10	8	6	4
3	19	14	9	8	6	4
4	18	13	9	7	6	4
6	16	12	8	7	5	3
8	16	11	7	6	5	3
12	15	10	7	6	4	3

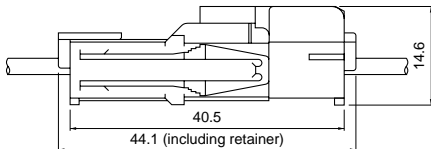
## Assembly layout and Panel layout

(2, 3 and single-row 4 circuits)

<Inner-housing lock>

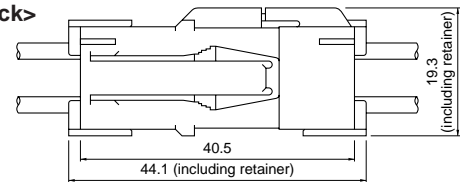


<Outer-housing lock>

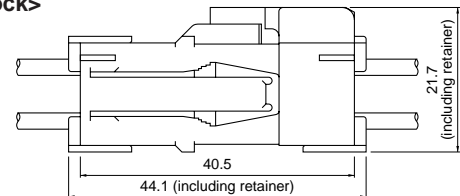


(4, 6, 8 and 12 circuits)

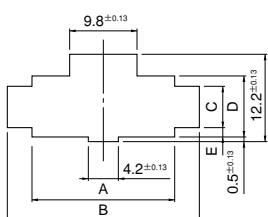
<Inner-housing lock>



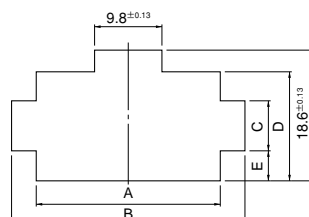
<Outer-housing lock>



Shape I



Shape II

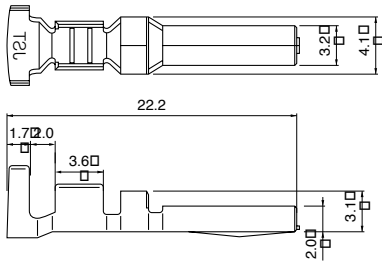


Circuits	Receptacle housing Model No.	Panel hole shape	Panel hole dimensions (mm)					Applicable panel thickness (mm)
			General tolerance A, B, D: ±0.13 C, E: ±0.1					
2	VLR-02V	I	13.8	20.6	5.7	8.5	1.4	0.5 ~ 2.0
3	VLR-03V	I	20.0	26.8	5.7	8.5	1.4	
4	VLR-04V	II	13.8	20.6	7.0	15.4	4.2	
4 (Single-row)	VLR-04VN	I	26.2	33.0	5.7	8.5	1.4	
6	VLR-06V	II	20.0	26.8	7.0	15.4	4.2	
8	VLR-08V	II	26.2	33.0	7.0	15.4	4.2	
12	VLR-12V	II	38.9	45.4	7.0	15.4	4.2	

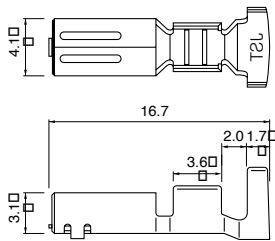
- Note: 1. Punch holes in the panel according to the sketch and table shown above. Burrs must be removed.  
2. The strength of the panel must be considered when punching two or more holes.  
3. The connector must be inserted from the same side as the hole is punched.

## Contact

### Pin contact



### Socket contact



Model No.		Applicable wire		Insulation O.D. (mm)	Q'ty / reel
Pin contact	Socket contact	mm <sup>2</sup>	AWG #		
*SVM-42T-P2.0	*SVF-42T-P2.0	0.3 ~ 1.25	22 ~ 16	1.7 ~ 3.2	2,000
		0.3+0.3 ~ 0.5+0.75	22+22 ~ 20+18	1.7+1.7 ~ 2.5+2.7	
SVM-61T-P2.0	SVF-61T-P2.0	0.5 ~ 2.0	20 ~ 14	1.9 ~ 3.4	
		0.5+0.5 ~ 0.75+1.25	20+20 ~ 18+16	1.9+1.9 ~ 2.1+2.7	
SVM-81T-P2.0	SVF-81T-P2.0	3.5	12	4.1	

### Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

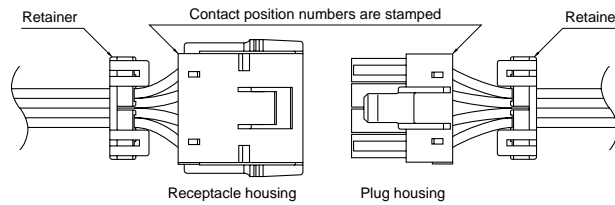
### RoHS compliance

Note: 1. Contact JST for special products.

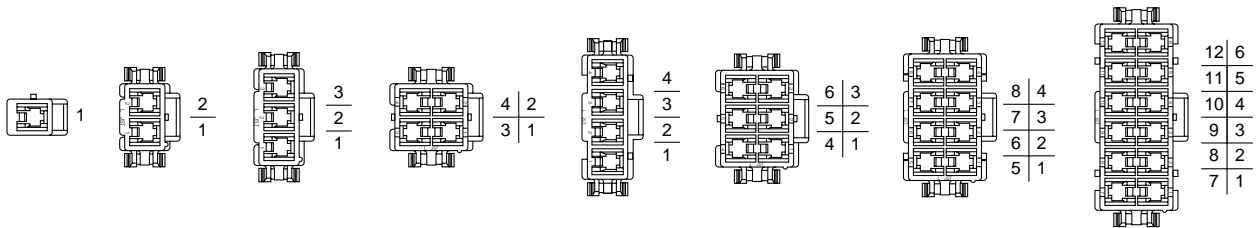
2. \*Marked products are not TÜV approved.

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SVM-42T-P2.0	AP-K2N	MKS-L	MK/SVF/M-42-20	APLMK SVF/M42-20
SVF-42T-P2.0		—	—	—
SVM-61T-P2.0		MKS-L	MK/SVF/M-61-20	APLMK SVF/M61-20
SVF-61T-P2.0		—	—	—
SVM-81T-P2.0		MKS-L	MK/SVF/M-81-20	APLMK SVF/M81-20
SVF-81T-P2.0		—	—	—

## Contact position location numbers

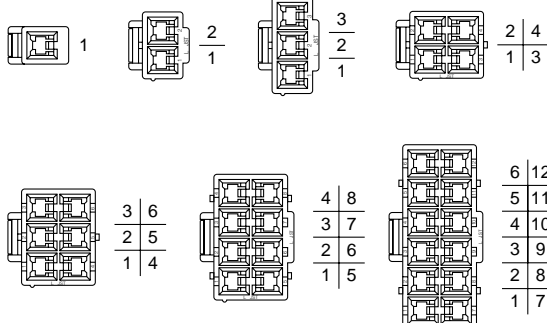


### Receptacle housing

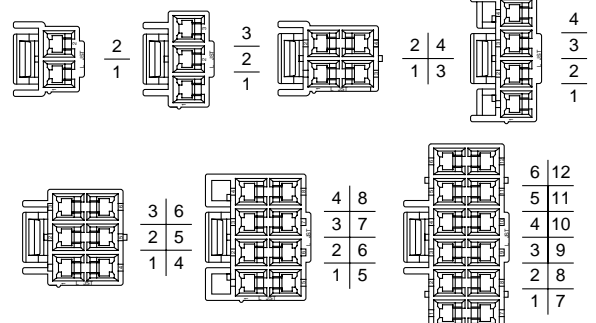


### Plug housing

#### <Inner-housing lock>



#### <Outer-housing lock>



# VL CONNECTOR

## Housing

Material: Housing...PA 66, UL94V-0, white  
Retainer...Glass-filled PA 66, UL94V-0, ivory

Circuits	Voltage rating	Current rating	Receptacle housing(for pin contact)		Plug housing(for socket contact)		Retainer	
1	600V	20A	<b>VLR-01VF</b> 	Q'ty/ bag 500	<b>VLP-01V</b> 	Q'ty/ bag 500	<b>VLS-01V</b> 	Q'ty/ bag 1,000
2	600V	20A	<b>VLR-02V</b> 	Q'ty/ bag 500	<b>VLP-02V</b> 	Q'ty/ bag 500	<b>VLS-02V</b> (commonly used for 2-circuit housing and 4-circuit housing) 	Q'ty/ bag 1,000
					<b>VLP-02V-1</b> 			
3	600V	19A	<b>VLR-03V</b> 	Q'ty/ bag 500	<b>VLP-03V</b> 	Q'ty/ bag 500	<b>VLS-03V</b> (commonly used for 3-circuit housing and 6-circuit housing) 	Q'ty/ bag 1,000
					<b>VLP-03V-1</b> 			
4	600V	18A	<b>VLR-04V</b> 	Q'ty/ bag 500	<b>VLP-04V</b> 	Q'ty/ bag 500	<b>VLS-02V</b> 	Q'ty/ bag 1,000
					<b>VLP-04V-1</b> 			
			<b>VLR-04VN</b> 	Q'ty/ bag 500	<b>VLP-04VN-1</b> 	Q'ty/ bag 500	<b>VLS-08V</b> (commonly used for 4-circuit housing and 8-circuit housing) 	Q'ty/ bag 1,000

### RoHS compliance

Note: 1. VLR-01VF is exclusively for free hanging. The other circuits can be used either for panel mounted or free hanging.  
2. Contact JST for special products.

# VL CONNECTOR

## Housing

Material: Housing...PA 66, UL94V-0, white  
Retainer...Glass-filled PA 66, UL94V-0, ivory

Circuits	Voltage rating	Current rating	Receptacle housing(for pin contact)	Plug housing(for socket contact)	Retainer
6	600V	16A	<b>VLR-06V</b> 	<b>VLP-06V</b> 	<b>VLS-03V</b> (commonly used for 3-circuit housing and 6-circuit housing) 
				Q'ty/ bag 500	
8	600V	16A	<b>VLR-08V</b> 	<b>VLP-08V</b> 	<b>VLS-08V</b> (commonly used for 4-circuit housing and 8-circuit housing) 
				Q'ty/ bag 100	
12	600V	15A	<b>VLR-12V</b> 	<b>VLP-12V</b> 	<b>VLS-12V</b> 
				Q'ty/ bag 100	

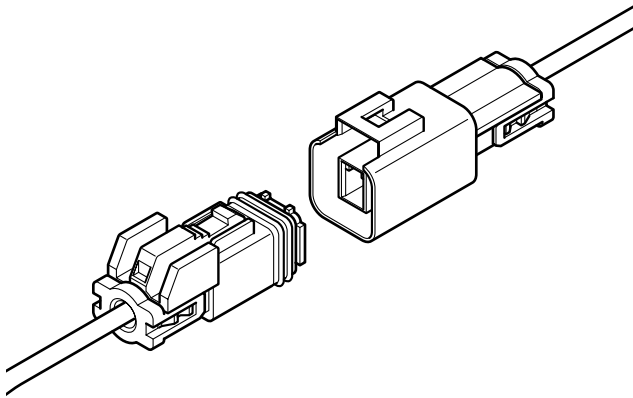
RoHS compliance

Note: Contact JST for special products.



# MWP CONNECTOR

7.0mm pitch/Disconnectable Crimp style Wire-to-wire connectors



**Waterproof wire-to-wire connector for electric power supply.**

- Low insertion force contact
- Housing lance
- Inner-housing lock
- Slider locking mechanism
- Interchangeability

## Specifications

- Current rating: 7A AC, DC max.
- Voltage rating: 300V AC, DC max.
- Temperature range: -40°C to +105°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/7m Ω max.  
After environmental testing/10m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 1,500V AC/minute
- Applicable wire: AWG #26 to #18  
0.13 to 0.75mm<sup>2</sup>  
Insulation O.D./2.1 to 2.5mm
- Waterproof grade: Grade 4 ingress protection of JIS C 0920(IEC 60529 IPX4)
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

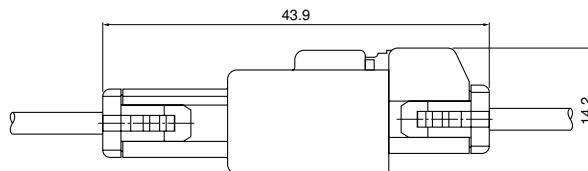
*Note: The current rating varies depending on the number of circuits and the wire size used in each connector.*

*The table below lists the current rating as a function of the number of circuits and wire size.*

Current unit: A

Circuits	Wire size (AWG)				
	#18	#20	#22	#24	#26
1	7	5	4	3	2
2	7	5	4	3	2

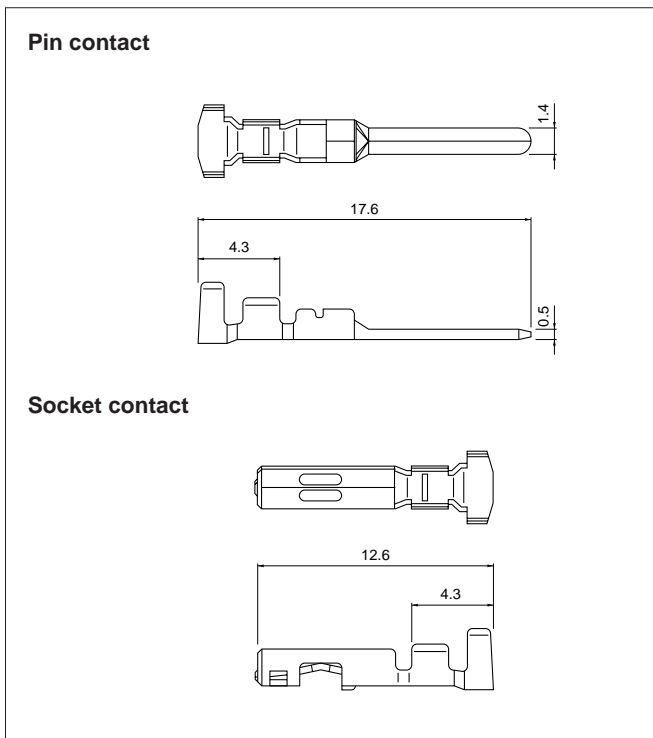
## Assembly layout





# MWP CONNECTOR

## Contact



Model No.		Applicable wire		Insulation O.D. (mm)	Q'ty/reel
Pin contact	Socket contact	mm <sup>2</sup>	AWG #		
<b>SSM-01T-P1.4</b>	<b>SSF-01T-P1.4</b>	0.13 ~ 0.5	26 ~ 20	2.1 ~ 2.5	6,000
<b>SSM-21T-P1.4</b>	<b>SSF-21T-P1.4</b>	0.3 ~ 0.75	22 ~ 18		

### Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

### RoHS compliance

Note: Contact JST for special products.

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SSM-01T-P1.4</b>	AP-K2N	MKS-L	MK/SSF/M-01-14	APLMK SSF/M01-14
<b>SSF-01T-P1.4</b>		—	—	—
<b>SSM-21T-P1.4</b>		MKS-L	MK/SSF/M-21-14	APLMK SSF/M21-14
<b>SSF-21T-P1.4</b>		—	—	—

## Housing

Material: PBT, UL94V-0, white

Circuits	Voltage rating	Current rating	Receptacle housing(for socket contact)		Plug housing(for pin contact)	
			Model	Q'ty/box	Model	Q'ty/box
1	300V	7A	<b>01R-MWPV-SSRR</b> 	252	<b>01P-MWPV-SSR</b> 	228
2	300V	7A	<b>02R-MWPV-SSRR</b> 	144	<b>02P-MWPV-SSR</b> 	144

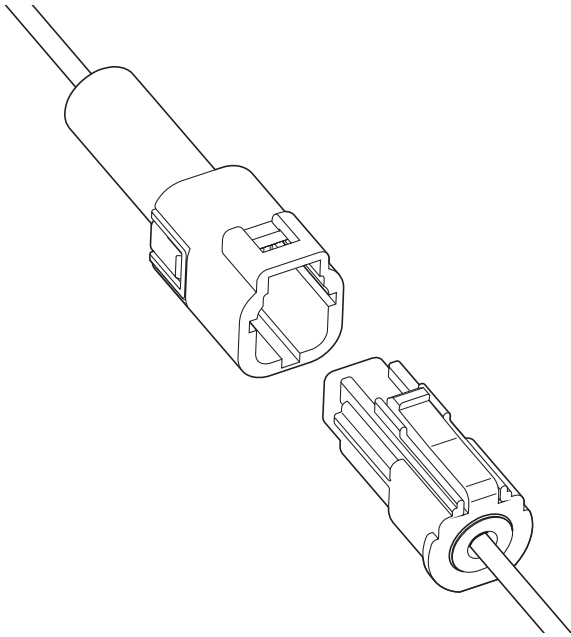
### RoHS compliance

Note: 1. Model ( )P-MWPV-SSR comes with the wire end seal and slider.  
 2. Model ( )R-MWPV-SSRR comes with the rubber ring, wire end seal and slider.



# WPK CONNECTOR

**Disconnectable Crimp style Wire-to-wire connectors**



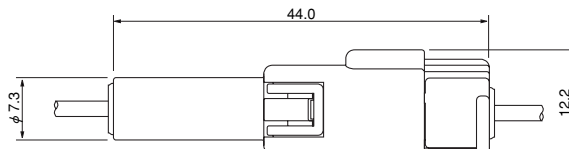
***This connector is compact and excels in waterproof and durability. This wire-to-wire connector can be used for the place of which especially waterproof is required. Its waterproof grade is 7 ingress protection of JIS C 0920 (IEC 60529 IPX7).***

- **Waterproof performance**
- **Contained seal ring**
- **Proven contact configuration**
- **Inner-housing lock**
- **Compact design**

## Specifications

- Current rating: 7A AC, DC (0.85mm<sup>2</sup>)
  - Voltage rating: 12V AC, DC
  - Temperature range: -40°C to +105°C  
(including temperature rise in applying electrical current)
  - Contact resistance: Initial value/5m Ω max.  
After environmental testing/10m Ω max.
  - Insulation resistance: 100M Ω min.
  - Withstanding voltage: 1,000V AC/minute
  - Applicable wire: 0.5 to 0.85mm<sup>2</sup>  
Insulation O.D./1.6 to 1.9mm
  - Waterproof grade: Grade 7 ingress protection of JIS C 0920  
(IEC 60529 IPX7)
- \* RoHS compliant products are published.  
\* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.  
\* Contact JST for details.

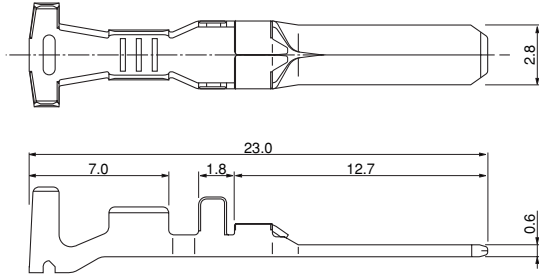
## Assembly layout



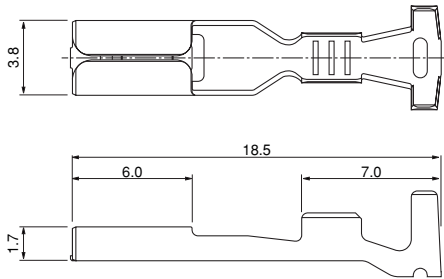
# WPK CONNECTOR

## Terminal

### Male terminal



### Female terminal



Model No.		Applicable wire	Insulation	Q'ty/
Male terminal	Female terminal	(mm <sup>2</sup> )	O.D. (mm)	reel
<b>SWPKP-21T-0.6</b>	<b>SWPKR-21T-0.6</b>	0.5 ~ 0.85	1.6 ~ 1.9	3,000

### Material and Finish

Copper alloy, tin-plated (reflow treatment)

### RoHS compliance

Terminal	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SWPKP-21T-0.6</b>	AP-K2N	MKS-L	MK/SWPKP/R-21-06	APLMK SWPKP/R21-06
		—	—	—
<b>SWPKR-21T-0.6</b>	—	MKS-L	MK/SWPKP/R-21-06	APLMK SWPKP/R21-06
		—	—	—

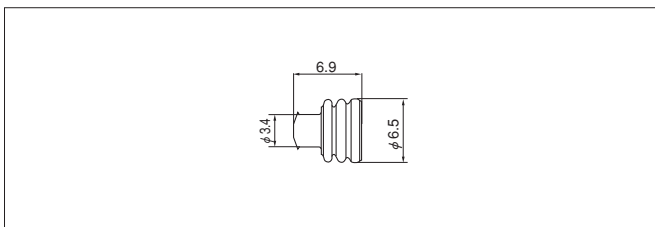
## Housing

Material: PBT, black

Circuit	Voltage rating	Current rating	Male housing(for male terminal)	Female housing(for female terminal)
1	12V	7A	<b>01P-WPKH-KN</b> 	<b>WPKR-01H-K</b> 
			Q'ty/ box 100	Q'ty/ box 1,000

RoHS compliance

## Wire end seal

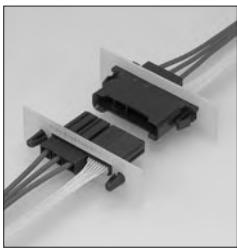


Model No.	Rubber inner diameter (mm)	Insulation O.D. (mm)	Q'ty / bag
<b>WPKS-1.3N</b>	1.3	1.6~1.9	1,500

Color	Material
Brown	NBR

### RoHS compliance

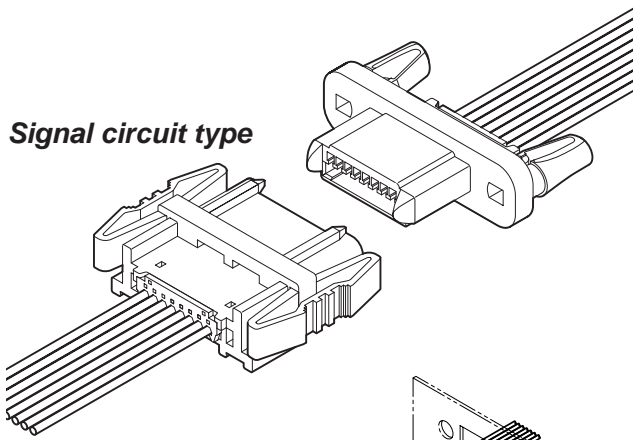
Note: Contact JST for applicable wire.



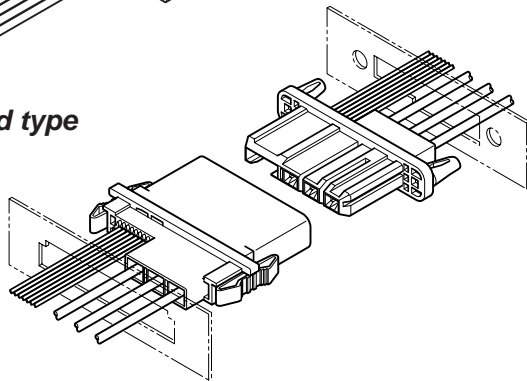
# RIZ CONNECTOR

**Disconnectable Crimp style Wire-to-wire connectors**

**Signal circuit type**



**Hybrid type**



**In unit connection, this RIZ connector is a hybrid type single row drawer connector with combined signal and power supply circuits, absorbs misalignment between**

- Space saving
- Panel locking device
- Durability
- Hybrid type

## Specifications

- Current rating: Signal circuit 1.0A AC, DC (AWG #26)  
Power supply circuit 15A AC, DC (AWG #14)
  - Voltage rating: Signal circuit 50V AC, DC  
Power supply circuit 250V AC, DC
  - Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
  - Contact resistance: Signal circuit Initial value/40m max.  
After environmental testing/60m max.  
Power supply circuit Initial value/10m max.  
After environmental testing/20m max.
  - Insulation resistance: 500m min.
  - Withstanding voltage: Signal circuit 500V AC  
Power supply circuit 1,500V AC
  - Applicable wire: Power supply circuit Conductor AWG #24 to #14  
Insulation O.D. 1.4 to 3.6mm  
Signal circuit Applicable receptacle CZ, CZH
- \* RoHS compliant products are published.  
\* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.  
\* Contact JST for details.

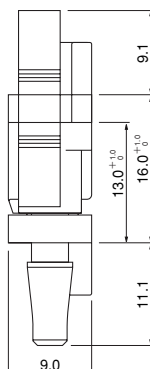
## Standards

Recognized E60389

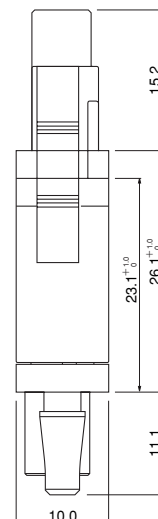
Certified LR20812

## Assembly layout

Signal circuit type



Hybrid type



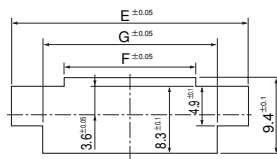
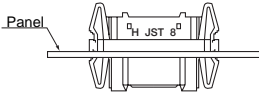
## Panel layout

### Plug

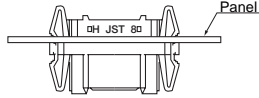
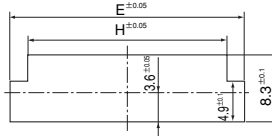
#### Signal circuit type

Panel thickness: 1.2mm, 1.6mm, 2.0mm

When mounting from mating side



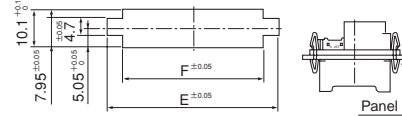
When mounting from socket side



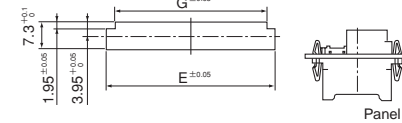
#### Hybrid type

Panel thickness: 1.2mm, 1.6mm, 2.0mm

When mounting from mating side



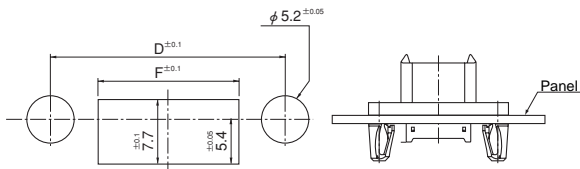
When mounting from socket side



### Receptacle

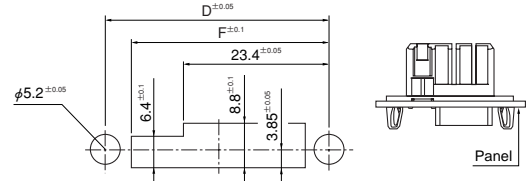
#### Signal circuit type

Panel thickness: 2.0mm



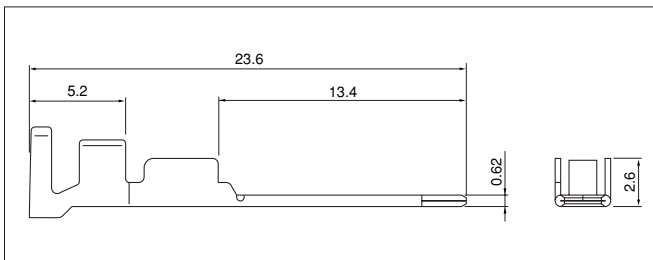
#### Hybrid type

Panel thickness: 2.0mm



- Note: 1. Punch holes in the panel according to the figures shown above. Burrs must be removed.  
 2. The strength of the panel must be considered when punching two or more holes.  
 3. The connector must be inserted from the same side as the hole is punched.

## Plug contact for power supply circuit



Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty/reel
	mm <sup>2</sup>	AWG #		
SRWM-01GG-S0.6	0.2 ~0.5	24~20	1.4 ~1.9	4,000
SRWM-21GG-S0.6	0.3 ~0.75	22~18	1.55~3.1	-
SRWM-61GG-S0.6	0.75~2.0	18~14	2.0 ~3.6	3,000

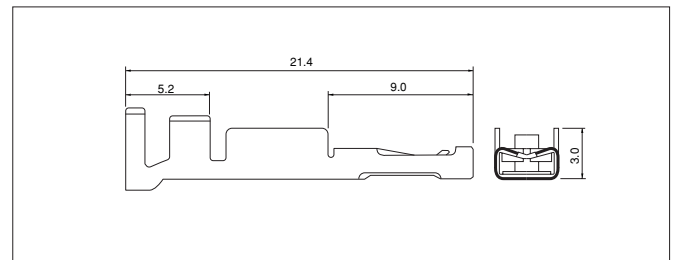
#### Material and Finish

Copper alloy, nickel-undercoated, Mating part; gold-plated  
 Crimping part; tin-plated (reflow treatment)

**RoHS compliance** This product displays (LF)(SN) on a label.

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SRWM-01GG-S0.6	AP-K2N	MKS-L	MK/SRPF/M-01-06	APLMK SRPF/M01-06
		-	-	-
SRWM-21GG-S0.6		MKS-L	MK/SRPF/M-21-06	APLMK SRPF/M21-06
		-	-	-
SRWM-61GG-S0.6	MKS-L	MK/SRPF/M-61-06	APLMK SRPF/M61-06	
	-	-	-	

## Receptacle contact for power supply circuit



Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty/reel
	mm <sup>2</sup>	AWG #		
SRWF-01GG-M0.6	0.2 ~0.5	24~20	1.4 ~1.9	4,000
SRWF-21GG-M0.6	0.3 ~0.75	22~18	1.55~3.1	3,000
SRWF-61GG-M0.6	0.75~2.0	18~14	2.0 ~3.6	3,000

#### Material and Finish

Copper alloy, nickel-undercoated, Mating part; gold-plated  
 Crimping part; tin-plated (reflow treatment)

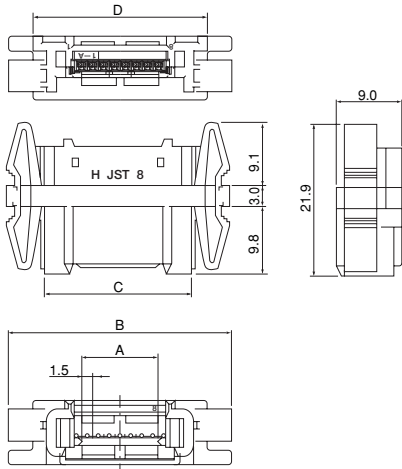
**RoHS compliance** This product displays (LF)(SN) on a label.

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SRWF-01GG-M0.6	AP-K2N	MKS-L	MK/SRPF/M-01-06	APLMK SRPF/M01-06
		-	-	-
SRWF-21GG-M0.6		MKS-L	MK/SRPF/M-21-06	APLMK SRPF/M21-06
		-	-	-
SRWF-61GG-M0.6	MKS-L	MK/SRPF/M-61-06	APLMK SRPF/M61-06	
	-	-	-	

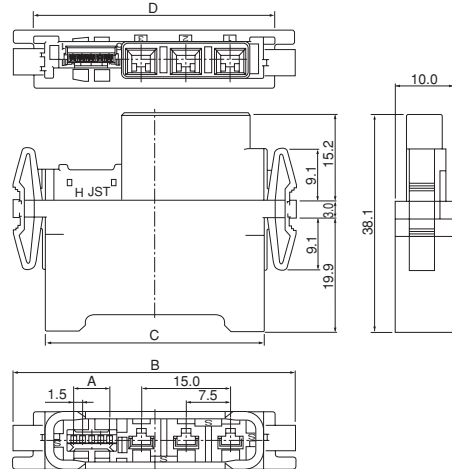
# RIZ CONNECTOR

## Plug

### Signal circuit type



### Hybrid type



Circuits	Model No.	Dimensions (mm)										Q'ty/box
		A	B	C	D	E		F	G	H		
4	04P-RIZ-K2GG-RL	4.5	24.7	14.1	17.8	22.1	22.3	9.4	14.5	18.2	80	
6	06P-RIZ-K2GG-RL	7.5	27.7	17.1	20.8	25.1	25.3	12.4	17.5	21.2	80	
8	08P-RIZ-K2GG-RL	10.5	30.7	20.1	23.8	28.1	28.3	15.4	20.5	24.2	80	
10	10P-RIZ-K2GG-RL	13.5	33.7	23.1	26.8	31.1	31.3	18.4	23.5	27.2	80	
14	14P-RIZ-K2GG-RL	19.5	39.7	29.1	32.8	37.1	37.3	24.4	29.5	33.2	80	

#### Material and Finish

Contact: Copper alloy, nickel-undercoated, selective gold-plated, tin-plated (reflow-treatment)  
Housing: PBT, UL94V-0, black

**RoHS compliance** This product displays (LF)(SN) on a label.

Circuits	Model No.	Dimensions (mm)										Q'ty/box
		A	B	C	D	E		F	G			
7	07P-RIZ-K2GG-S3RL	9.0	50.3	39.7	43.4	47.7	47.9	39.9	43.6	60		
8	08P-RIZ-K2GG-S3RL	10.5	51.8	41.2	44.9	49.2	49.4	41.4	45.1	80		
13	13P-RIZ-K2GG-S3RL	18.0	59.3	48.7	52.4	56.7	56.9	48.9	52.6	45		

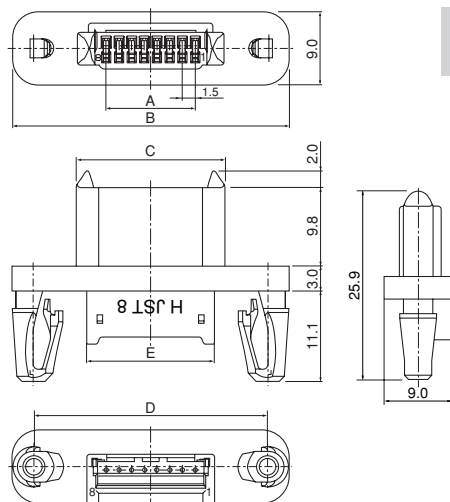
#### Material and Finish

Contact: Copper alloy, nickel-undercoated, selective gold-plated, tin-plated (reflow treatment)  
Housing: PBT, UL94V-0, black

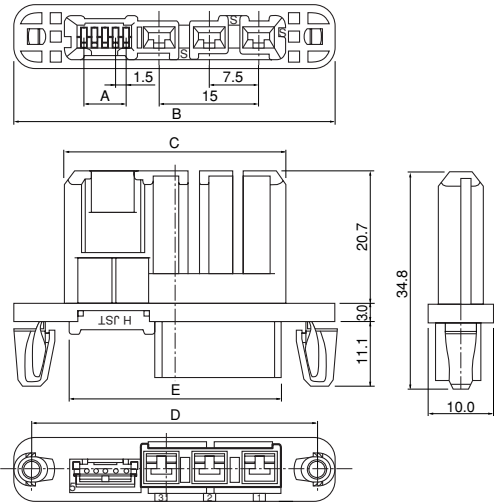
**RoHS compliance** This product displays (LF)(SN) on a label.

## Receptacle

### Signal circuit type



### Hybrid type



Circuits	Model No.	Dimensions (mm)						Q'ty/box
		A	B	C	D	E	F	
4	04R-RIZ-K4GG-FL	4.5	26.5	11.3	21.6	9.0	10.8	80
6	06R-RIZ-K4GG-FL	7.5	29.5	14.3	24.6	12.0	13.8	80
8	08R-RIZ-K4GG-FL	10.5	32.5	17.3	27.6	15.0	16.8	80
10	10R-RIZ-K4GG-FL	13.5	35.5	20.3	30.6	18.0	19.8	80
14	14R-RIZ-K4GG-FL	19.5	41.5	26.3	36.6	24.0	25.8	60

#### Material and Finish

Contact: Copper alloy, nickel-undercoated, selective gold-plated, tin-plated (reflow-treatment)  
Housing: PBT, UL94V-0, black

**RoHS compliance** This product displays (LF)(SN) on a label.

Circuits	Model No.	Dimensions (mm)						Q'ty/box
		A	B	C	D	E	F	
7	07R-RIZ-K4GG-SQ3FL	9.0	52.6	36.5	47.7	35.1	36.9	75
8	08R-RIZ-K4GG-SQ3FL	10.5	54.1	38.0	49.2	36.6	38.4	75
13	13R-RIZ-K4GG-SQ3FL	18.0	61.6	45.5	56.7	44.1	45.9	60

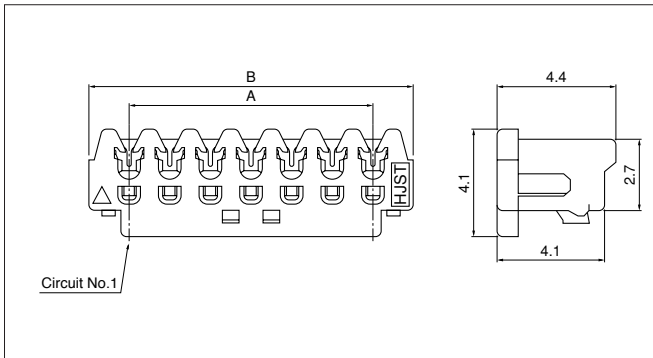
#### Material and Finish

Contact: Copper alloy, nickel-undercoated, selective gold-plated, tin-plated (reflow-treatment)  
Housing: PBT, UL94V-0, black

**RoHS compliance** This product displays (LF)(SN) on a label.

# RIZ CONNECTOR

## CZ connector socket



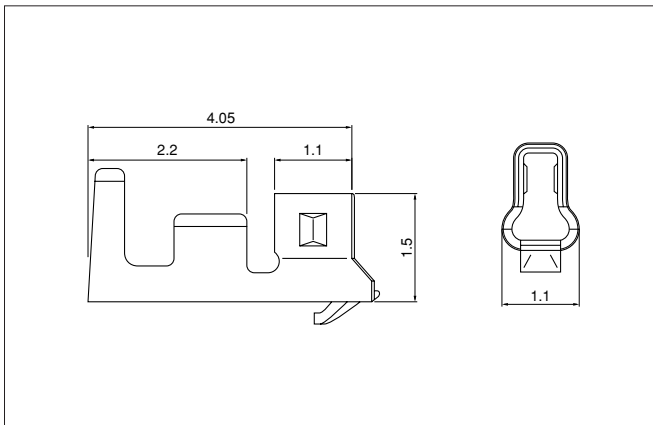
Circuits	Model No.		Dimensions (mm)		Q'ty / box
	Gray	Yellow	A	B	
4	<b>04CZ-6H</b>	<b>04CZ-6Y</b>	4.5	7.5	2,000
6	<b>06CZ-6H</b>	<b>06CZ-6Y</b>	7.5	10.5	2,000
7	<b>07CZ-6H</b>	<b>07CZ-6Y</b>	9.0	12.0	2,000
8	<b>08CZ-6H</b>	<b>08CZ-6Y</b>	10.5	13.5	2,000
10	<b>10CZ-6H</b>	<b>10CZ-6Y</b>	13.5	16.5	1,000
13	<b>13CZ-6H</b>	<b>13CZ-6Y</b>	18.0	21.0	1,000
14	<b>14CZ-6H</b>	<b>14CZ-6Y</b>	19.5	22.5	1,000

### Material and Finish

Contact: Copper alloy, tin-plated (reflow treatment) □  
Housing: Glass-filled PA 66, UL94V-0

RoHS compliance

## CZH connector contact



Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty / reel
	mm <sup>2</sup>	AWG #		
<b>SCZH-002T-P0.5</b>	0.08~0.13	28~26	0.8~1.1	13,000

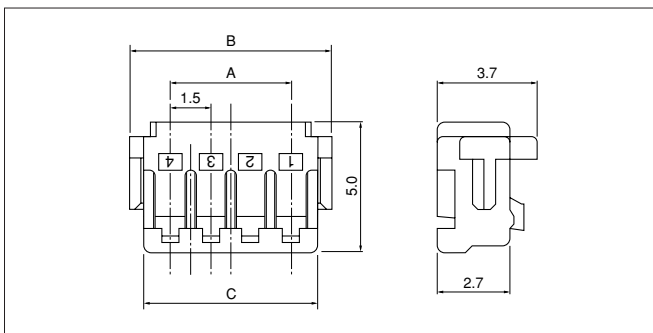
### Material and Finish

Copper alloy, tin-plated (reflow treatment)

RoHS compliance

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SCZH-002T-P0.5</b>	AP-K2N	MKS-L	MK/SCZH-002-05	APLMK SCZH002-05
		—	—	—

## CZH connector housing

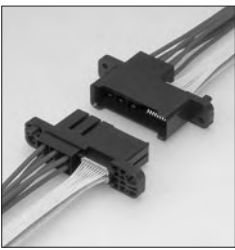


Circuits	Model No.	Dimensions (mm)			Q'ty / box
		A	B	C	
4	<b>CZHR-04V-S</b>	4.5	7.5	6.5	1,000
6	<b>CZHR-06V-S</b>	7.5	10.5	9.5	1,000
7	<b>CZHR-07V-S</b>	9.0	12.0	11.0	1,000
8	<b>CZHR-08V-S</b>	10.5	13.5	12.5	1,000
10	<b>CZHR-10V-S</b>	13.5	16.5	15.5	1,000
13	<b>CZHR-13V-S</b>	18.0	21.0	20.0	1,000
14	<b>CZHR-14V-S</b>	19.5	22.5	21.5	1,000

### Material

PBT, UL94V-0, natural (white)

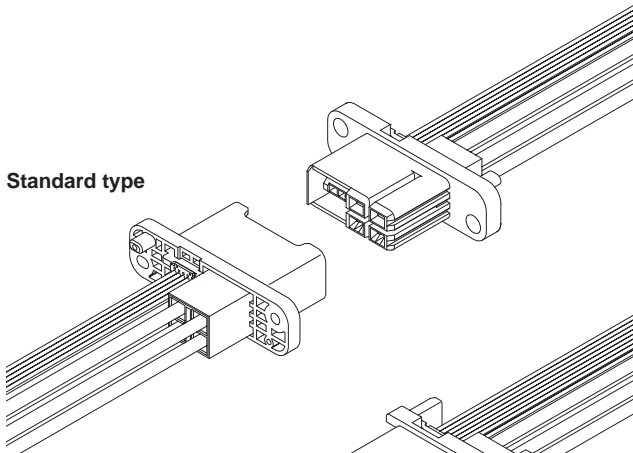
RoHS compliance



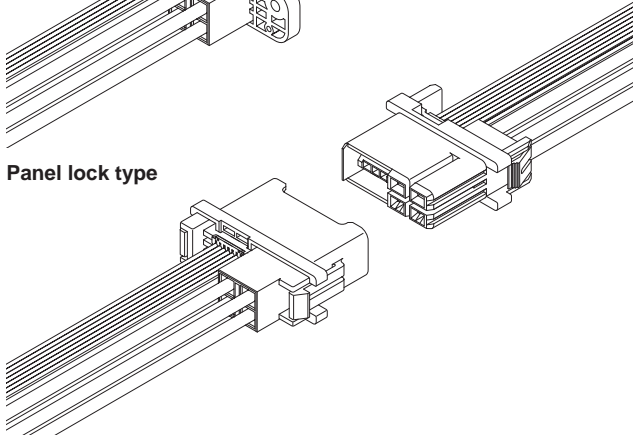
# RWZ CONNECTOR

**Disconnectable Crimp style Wire-to-wire connectors**

Standard type



Panel lock type



**In unit connection, this RWZ connector is a hybrid type double row drawer connector with combined signal and power supply circuits, absorbs misalignment between units, and excels durability.**

- Durability
- Absorbed misalignment mechanism
- Space saving
- Hybrid type

## Specifications

- Current rating: Signal circuit 1.0A AC, DC (AWG #26)  
Power supply circuit 15A AC, DC (AWG #14)
- Voltage rating: Signal circuit 50V AC, DC  
Power supply circuit 250V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Signal circuit Initial value/40m Ω max.  
After environmental testing/60m Ω max.  
Power supply circuit Initial value/10mΩ max.  
After environmental testing/20m Ω max.
- Insulation resistance: 500M Ω min.
- Withstanding voltage: Signal circuit 500V AC  
Power supply circuit 1,500V AC
- Applicable wire: Power supply circuit Conductor AWG #24 to #14  
Insulation O.D. 1.4 to 3.6mm  
Signal circuit Applicable receptacle CZ, CZH
- Mounting method: Screw, panel lock
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Standards

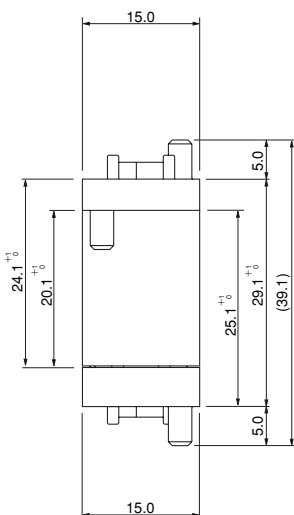
Recognized E60389

Certified LR20812

## Assembly layout

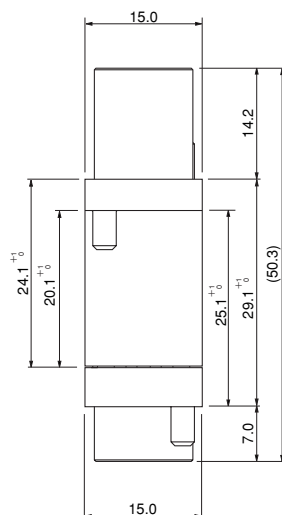
Standard type

Signal type



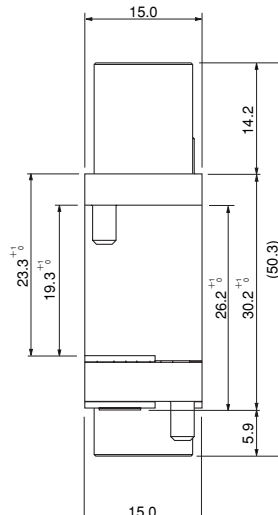
Standard type

Hybrid type



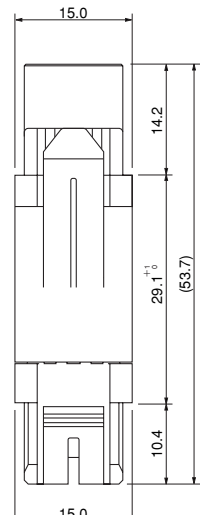
Floating bushing type

Hybrid type



Panel lock type

Hybrid type



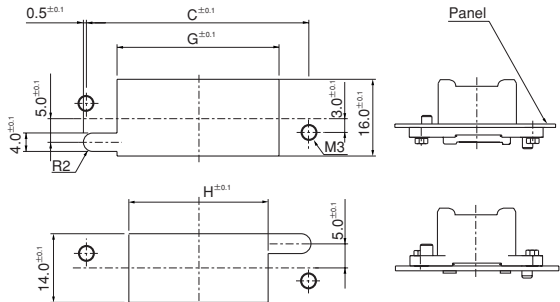


## Panel layout

### Plug

#### Standard type

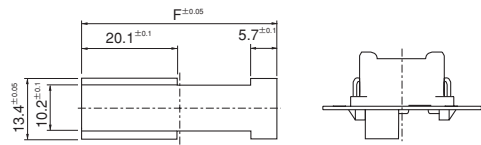
Panel thickness: 0.8 to 2.0mm



### Plug

#### Panel lock type

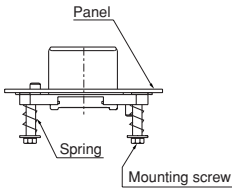
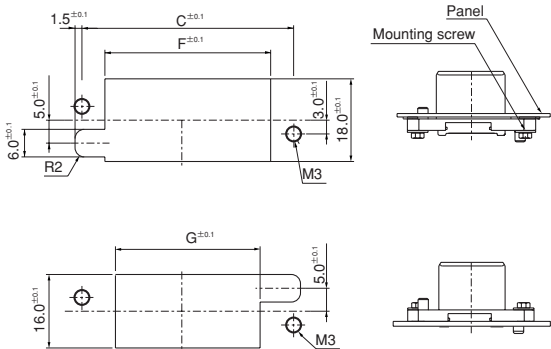
Panel thickness: 2.0mm



### Receptacle

#### Standard type

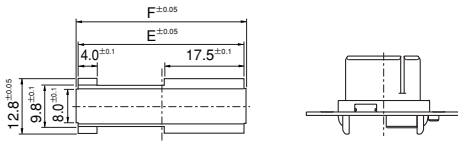
Panel thickness: 0.8 to 2.0mm



### Receptacle

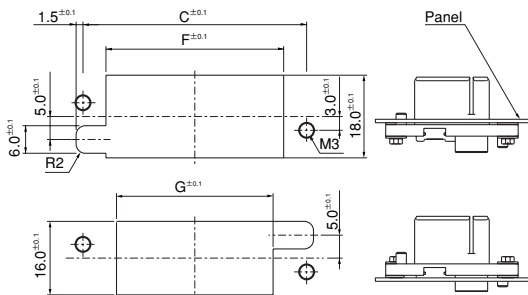
#### Panel lock type

Panel thickness: 1.2mm, 1.6mm, 2.0mm



#### Floating bushing type

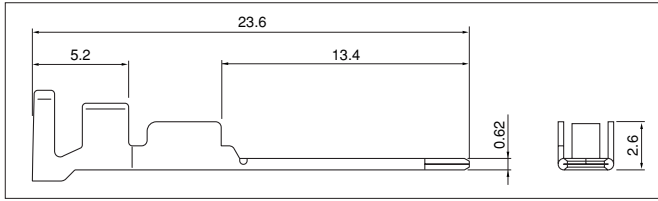
Panel thickness: 0.8 to 2.0mm



- Note: 1. Punch holes in the panel according to the figures shown above. Burrs must be removed.  
 2. The strength of the panel must be considered when punching two or more holes.  
 3. The connector must be inserted from the same side as the hole is punched.

# RWZ CONNECTOR

## Plug contact for power supply circuit



Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty/reel
	mm <sup>2</sup>	AWG #		
SRWM-01GG-S0.6	0.2 ~0.5	24~20	1.4 ~1.9	4,000
SRWM-21GG-S0.6	0.3 ~0.75	22~18	1.55~3.1	3,000
SRWM-61GG-S0.6	0.75~2.0	18~14	2.0 ~3.6	3,000

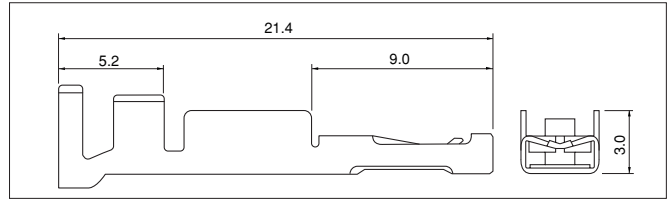
### Material and Finish

Copper alloy, nickel-undercoated, Mating part; gold-plated  
Crimping part; tin-plated (reflow treatment)

**RoHS compliance** This product displays (LF)(SN) on a label.

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SRWM-01GG-S0.6	AP-K2N	MKS-L	MK/SRPF/M-01-06	APLMK SRPF/M01-06
		—	—	—
SRWM-21GG-S0.6		MKS-L	MK/SRPF/M-21-06	APLMK SRPF/M21-06
		—	—	—
SRWM-61GG-S0.6		MKS-L	MK/SRPF/M-61-06	APLMK SRPF/M61-06
		—	—	—

## Receptacle contact for power supply circuit



Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty/reel
	mm <sup>2</sup>	AWG #		
SRWF-01GG-M0.6	0.2 ~0.5	24~20	1.4 ~1.9	4,000
SRWF-21GG-M0.6	0.3 ~0.75	22~18	1.55~3.1	3,000
SRWF-61GG-M0.6	0.75~2.0	18~14	2.0 ~3.6	3,000

### Material and Finish

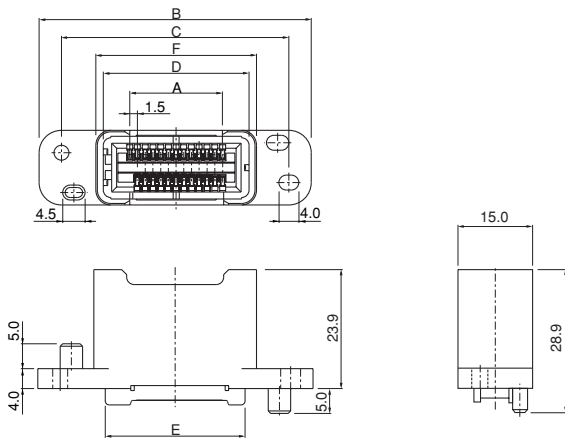
Copper alloy, nickel-undercoated, Mating part; gold-plated  
Crimping part; tin-plated (reflow treatment)

**RoHS compliance** This product displays (LF)(SN) on a label.

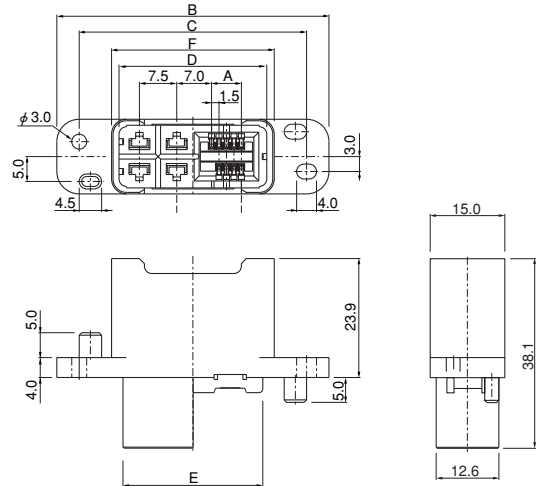
Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SRWF-01GG-M0.6	AP-K2N	MKS-L	MK/SRPF/M-01-06	PLMK SRPF/M01-06
		—	—	—
SRWF-21GG-M0.6		MKS-L	MK/SRPF/M-21-06	APLMK SRPF/M21-06
		—	—	—
SRWF-61GG-M0.6		MKS-L	MK/SRPF/M-61-06	APLMK SRPF/M61-06
		—	—	—

## Plug

### Standard/Signal circuits type



### Standard/Hybrid type



Circuits	Model No.	Dimensions (mm)								Q'ty/box
		A	B	C	D	E	F	G	H	
25	25P-RWZV-K4GG	18.0	53.2	44.2	28.2	26.6	31.2	32.2	27.6	240
31	31P-RWZV-K4GG	22.5	57.7	48.7	32.7	31.1	35.7	36.7	32.1	216
33	33P-RWZV-K4GG	24.0	59.2	50.2	34.2	32.6	37.2	38.2	33.6	192

### Material and Finish

Contact: Copper alloy, nickel-undercoated, selective gold-plated, tin-plated (reflow treatment)  
Housing: PBT, UL94V-0, black

**RoHS compliance** This product displays (LF)(SN) on a label.

Circuits	Model No.	Dimensions (mm)								Q'ty/box
		A	B	C	D	E	F	G	H	
2	39P-RWZV-K4GG-P2	28.5	69.7	60.7	44.7	43.1	47.7	48.7	44.1	168
	09P-RWZV-K4GG-P4	6.0	54.7	45.7	29.7	28.1	32.7	33.7	29.1	216
4	13P-RWZV-K4GG-P4	9.0	57.7	48.7	32.7	31.1	35.7	36.7	32.1	216
	21P-RWZV-K4GG-P4	15.0	63.7	54.7	38.7	37.1	41.7	42.7	38.1	192
6	19P-RWZV-K4GG-P6	13.5	69.7	60.7	44.7	43.1	47.7	48.7	44.1	168
	23P-RWZV-K4GG-P6	16.5	72.7	63.7	47.7	46.1	50.7	51.7	47.1	144

### Material and Finish

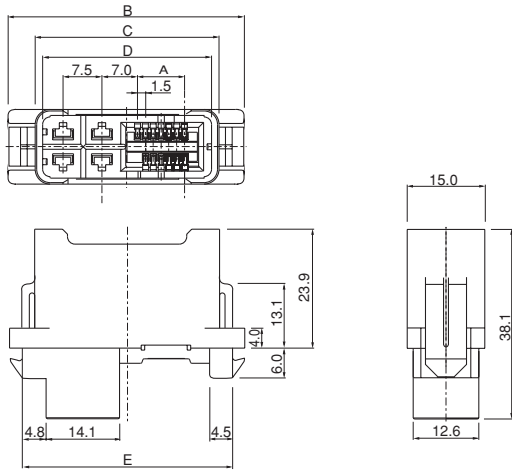
Signal contact: Copper alloy, nickel-undercoated, selective gold-plated, tin-plated (reflow treatment)  
Housing: PBT, UL94V-0, black

**RoHS compliance** This product displays (LF)(SN) on a label.

# RWZ CONNECTOR

## Plug

### Panel lock/Hybrid type



Circuits		Model No.	Dimensions (mm)						Q'ty/ box
Power Supply	Signal		A	B	C	D	E	F	
4	13	<b>13P-RWZV-K4GG-P4FL</b>	9.0	45.5	35.7	32.7	40.7	41.5	216

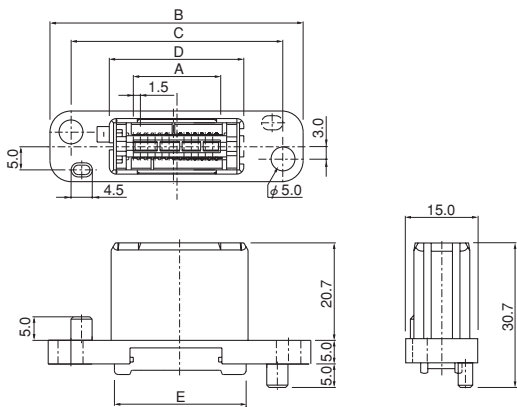
#### Material and Finish

Signal contact: Copper alloy, nickel-undercoated, selective gold-plated, tin-plated (reflow treatment)  
Housing: PBT, UL94V-0, black

**RoHS compliance** This product displays (LF)(SN) on a label.

## Receptacle

### Standard/Signal circuits type



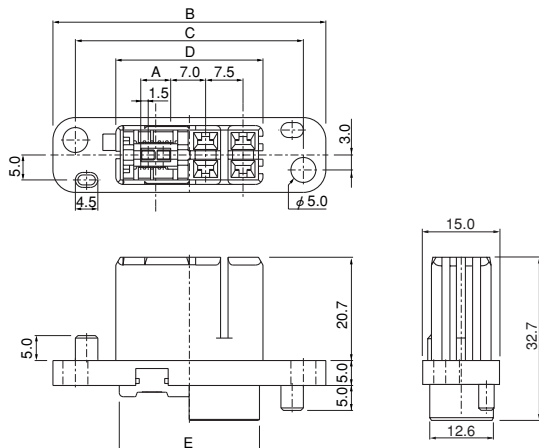
Circuits		Model No.	Dimensions (mm)							Q'ty/ box
Power Supply	Signal		A	B	C	D	E	F	G	
	25	<b>25R-RWZV-K2GG</b>	18.0	53.2	44.2	28.0	26.6	34.2	29.6	240
-	31	<b>31R-RWZV-K2GG</b>	22.5	57.7	48.7	32.5	31.1	38.7	34.1	216
	33	<b>33R-RWZV-K2GG</b>	24.0	59.2	50.2	34.0	32.6	40.2	35.6	240

#### Material and Finish

Contact: Copper alloy, nickel-undercoated, selective gold-plated, tin-plated (reflow treatment)  
Housing: PBT, UL94V-0, black

**RoHS compliance** This product displays (LF)(SN) on a label.

### Standard/Hybrid type



Circuits		Model No.	Dimensions (mm)							Q'ty/ box
Power Supply	Signal		A	B	C	D	E	F	G	
2	39	<b>39R-RWZV-K2GG-P2</b>	28.5	69.7	60.7	44.5	43.1	50.7	46.1	168
	9	<b>09R-RWZV-K2GG-P4</b>	6.0	54.7	45.7	29.5	28.1	35.7	31.1	216
4	13	<b>13R-RWZV-K2GG-P4</b>	9.0	57.7	48.7	32.5	31.1	38.7	34.1	216
	21	<b>21R-RWZV-K2GG-P4</b>	15.0	63.7	54.7	38.5	37.1	44.7	40.1	192
6	19	<b>19R-RWZV-K2GG-P6</b>	13.5	69.7	60.7	44.5	43.1	50.7	46.1	168
	23	<b>23R-RWZV-K2GG-P6</b>	16.5	72.7	63.7	47.5	46.1	53.7	49.1	144

#### Material and Finish

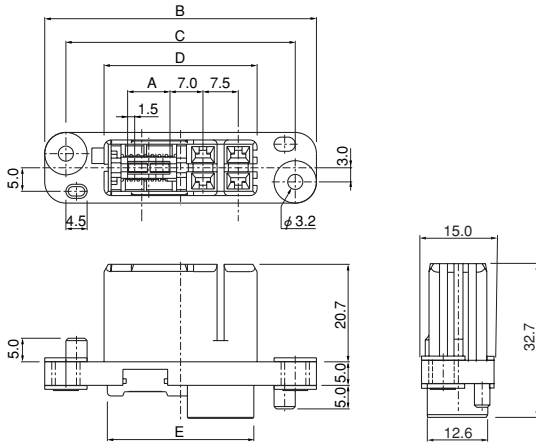
Signal contact: Copper alloy, nickel-undercoated, selective gold-plated, tin-plated (reflow treatment)  
Housing: PBT, UL94V-0, black

**RoHS compliance** This product displays (LF)(SN) on a label.

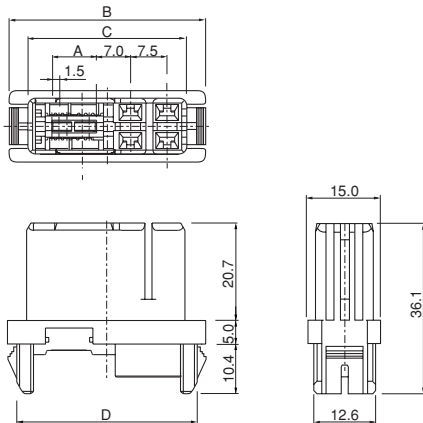
# RWZ CONNECTOR

## Receptacle

### Floating bushing/Hybrid type



### Panel lock/Hybrid type



Circuits		Model No.	Dimensions (mm)							Q'ty/ box
Power supply	Signal		A	B	C	D	E	F	G	
2	39	39R-RWZV-K2GG-P2BM	28.5	69.7	60.7	44.5	43.1	50.7	46.1	168
4	21	21R-RWZV-K2GG-P4BM	15.0	63.7	54.7	38.5	37.1	44.7	40.1	192

#### Material and Finish

Signal contact: Copper alloy, nickel-undercoated, selective gold-plated, tin-plated (reflow treatment)  
Housing: PBT, UL94V-0, black  
Washer: Copper alloy, nickel-plated  
Floating rivet: Copper alloy, nickel-plated

**RoHS compliance** This product displays (LF)(SN) A on a label.

Circuits		Model No.	Dimensions (mm)							Q'ty/ box
Power supply	Signal		A	B	C	D	E	F		
								t=1.2	t=1.6,2.0	
4	13	13R-RWZV-K2GG-Q4RL	9.0	40.3	32.5	36.5	36.7	37.2	37.5	264

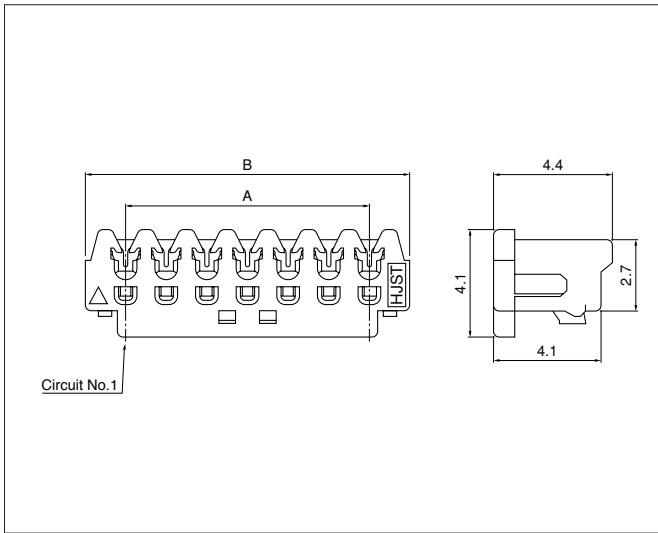
#### Material and Finish

Signal contact: Copper alloy, nickel-undercoated, selective gold-plated, tin-plated (reflow treatment)  
Housing: PBT, UL94V-0, black

**RoHS compliance** This product displays (LF)(SN) on a label.

# RWZ CONNECTOR

## CZ connector socket



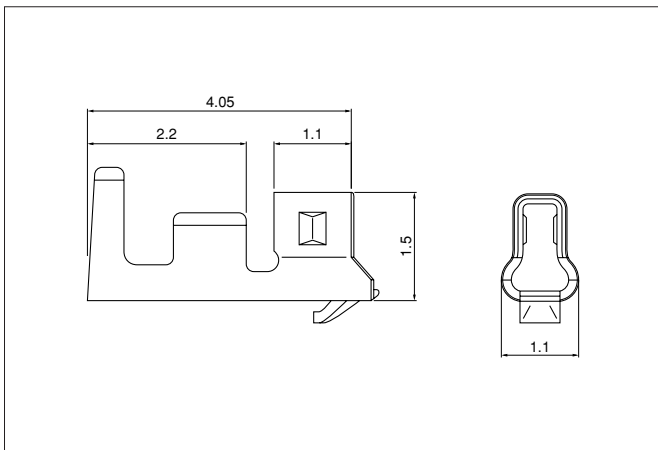
Circuits	Model No.		Dimensions (mm)		Q'ty/box
	Gray	Yellow	A	B	
4	<b>04CZ-6H</b>	<b>04CZ-6Y</b>	4.5	7.5	2,000
5	<b>05CZ-6H</b>	<b>05CZ-6Y</b>	6.0	9.0	2,000
6	<b>06CZ-6H</b>	<b>06CZ-6Y</b>	7.5	10.5	2,000
7	<b>07CZ-6H</b>	<b>07CZ-6Y</b>	9.0	12.0	2,000
9	<b>09CZ-6H</b>	<b>09CZ-6Y</b>	12.0	15.0	1,000
10	<b>10CZ-6H</b>	<b>10CZ-6Y</b>	13.5	16.5	1,000
11	<b>11CZ-6H</b>	<b>11CZ-6Y</b>	15.0	18.0	1,000
12	<b>12CZ-6H</b>	<b>12CZ-6Y</b>	16.5	19.5	1,000
13	<b>13CZ-6H</b>	<b>13CZ-6Y</b>	18.0	21.0	1,000
15	<b>15CZ-6H</b>	<b>15CZ-6Y</b>	21.0	24.0	1,000
16	<b>16CZ-6H</b>	<b>16CZ-6Y</b>	22.5	25.5	1,000
17	<b>17CZ-6H</b>	<b>17CZ-6Y</b>	24.0	27.0	1,000
19	<b>19CZ-6H</b>	<b>19CZ-6Y</b>	27.0	30.0	1,000
20	<b>20CZ-6H</b>	<b>20CZ-6Y</b>	28.5	31.5	1,000

### Material and Finish

Contact: Copper alloy, tin-plated (reflow treatment) □  
Housing: Glass-filled PA 66, UL94V-0 □

### RoHS compliance

## CZH connector contact



Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty/reel
	mm <sup>2</sup>	AWG #		
<b>SCZH-002T-P0.5</b>	0.08~0.13	28~26	0.8~1.1	13,000

### Material and Finish

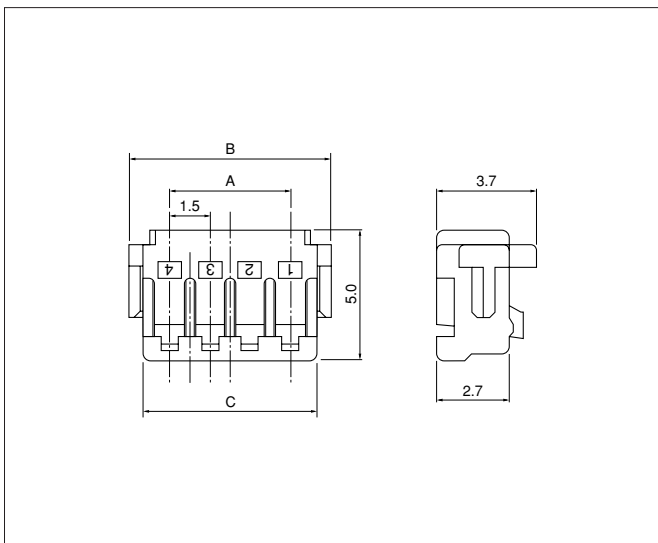
Copper alloy, tin-plated (reflow treatment)

### RoHS compliance

Note: The product listed above is not CSA approved in combination with RWZ connector. (CZH connector itself is approved.)

Contact	Crimping machine □	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SCZH-002T-P0.5</b>	AP-K2N	MKS-L	MK/SCZH-002-05	APLMK SCZH002-05
		—	—	—

## CZH connector housing



Circuits	Model No.	Dimensions (mm)			Q'ty / box
		A	B	C	
4	<b>CZHR-04V-S</b>	4.5	7.5	6.5	1,000
5	<b>CZHR-05V-S</b>	6.0	9.0	8.0	1,000
6	<b>CZHR-06V-S</b>	7.5	10.5	9.5	1,000
7	<b>CZHR-07V-S</b>	9.0	12.0	11.0	1,000
9	<b>CZHR-09V-S</b>	12.0	15.0	14.0	1,000
10	<b>CZHR-10V-S</b>	13.5	16.5	15.5	1,000
11	<b>CZHR-11V-S</b>	15.0	18.0	17.0	1,000
12	<b>CZHR-12V-S</b>	16.5	19.5	18.5	1,000
13	<b>CZHR-13V-S</b>	18.0	21.0	20.0	1,000
15	<b>CZHR-15V-S</b>	21.0	24.0	23.0	1,000
16	<b>CZHR-16V-S</b>	22.5	25.5	24.5	1,000
17	<b>CZHR-17V-S</b>	24.0	27.0	26.0	1,000
19	<b>CZHR-19V-S</b>	27.0	30.0	29.0	1,000
20	<b>CZHR-20V-S</b>	28.5	31.5	30.5	1,000

### Material

PBT, UL94V-0, natural (white)

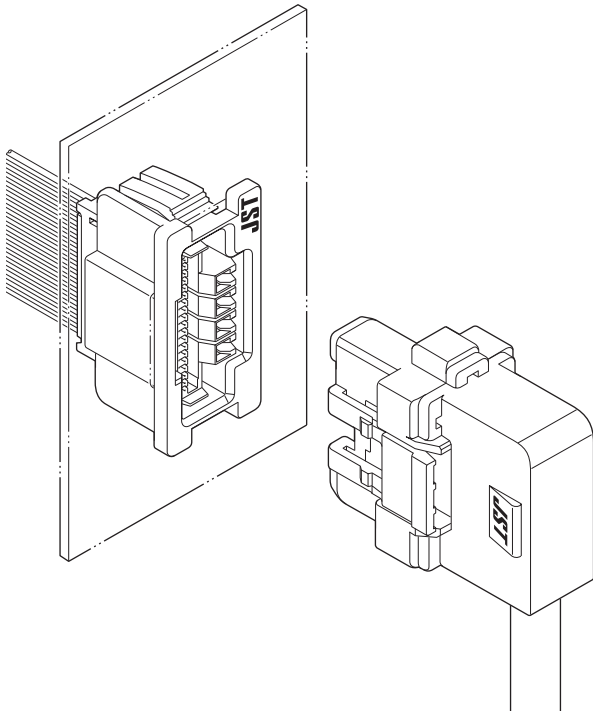
### RoHS compliance

Note: The products listed above are not CSA approved in combination with RWZ connector. (CZH connector itself is approved.)



# OTZ CONNECTOR

**Disconnectable Crimp style Wire-to-wire connectors**



**Hybrid type I/O connector with combined signal and power supply circuits.**

- **Curtailed number of components**
- **Space saving**
- **Lever lock function**

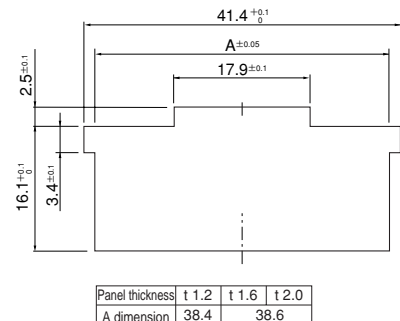
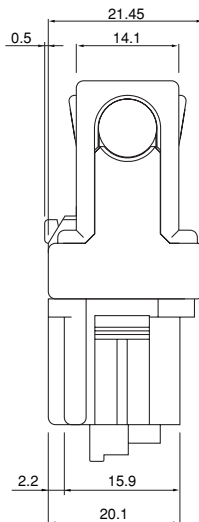
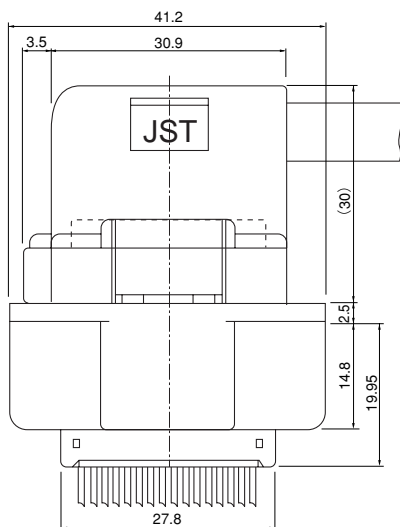
## Specifications

- Current rating: Signal circuit 1.0A AC, DC (AWG #26)  
Power supply circuit 5A AC, DC (AWG #20)
  - Voltage rating: Signal circuit 50V AC, DC (AWG #26)  
Power supply circuit 300V AC, DC (AWG #20)
  - Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
  - Applicable wire: Signal circuit AWG #28 to #26  
Power supply circuit AWG #26 to #20
  - Number of circuits: Signal circuit 16 circuits  
Power supply circuit 4 circuits
- \* RoHS compliant products are published.  
\* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.  
\* Contact JST for details.

## Standards

- Recognized E60389
- Certified LR20812

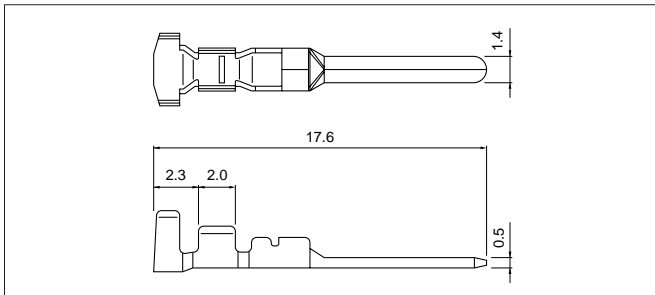
## Assembly layout and Panel layout



- Note: 1. Punch holes in the panel according to the sketch and table shown above. Burrs must be removed.  
2. The strength of the panel must be considered when punching two or more holes.  
3. The connector must be inserted from the same side as the hole is punched.

# OTZ CONNECTOR

## Power supply circuit contact plug



Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty / reel
	mm <sup>2</sup>	AWG #		
<b>SSM-01GD-P1.4</b>	0.13~0.5	26~20	1.3~2.5	6,000

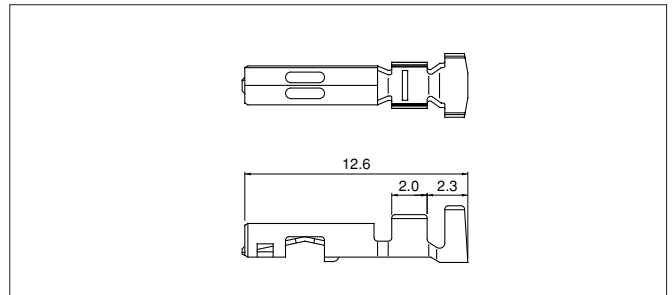
### Material and Finish

Copper alloy, nickel-undercoated, Mating part; gold-plated  
Crimping part; tin-plated (reflow treatment)

**RoHS compliance** This product displays (LF)(SN) on a label.

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SSM-01GD-P1.4</b>	AP-K2N	MKS-L	MK/SSF/M-01-14	APLMK SSF/M01-14
		—	—	—

## Power supply circuit contact receptacle



Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty / reel
	mm <sup>2</sup>	AWG #		
<b>SSF-01GW-P1.4</b>	0.13~0.5	26~20	1.3~2.5	6,000

### Material and Finish

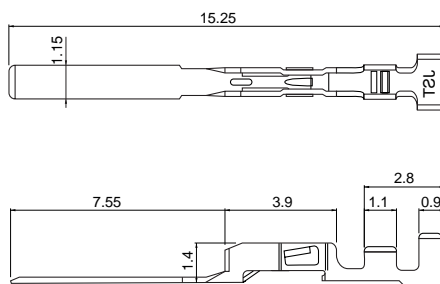
Copper alloy, nickel-undercoated, overall gold-plated

**RoHS compliance**

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SSF-01GW-P1.4</b>	AP-K2N	MKS-L	MK/SSF/M-01-14	APLMK SSF/M01-14
		—	—	—

## Plug

### Plug contact for signal



Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty / reel
	mm <sup>2</sup>	AWG #		
<b>SOTZP-002GG-P0.18</b>	0.08~0.13	28 · 26	0.7 ~ 0.93	13,000

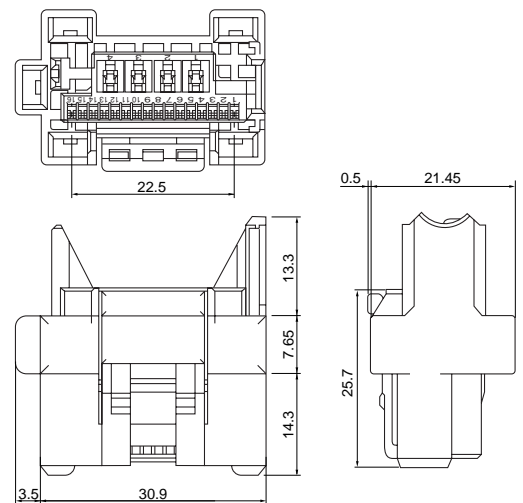
### Material and Finish

Copper alloy, nickel-undercoated, Mating part; gold-plated  
Crimping part; tin-plated (reflow treatment)

**RoHS compliance** This product displays (LF)(SN) on a label.

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SOTZP-002GG-P0.18</b>	AP-K2N	MKS-L	MK/SOTZP-002-018	APLMK SOTZP002-018
		—	—	—

### Signal 16 circuit / power 4 circuit



Model No.	Q'ty / box
<b>OTZP-16-H-P4</b>	100

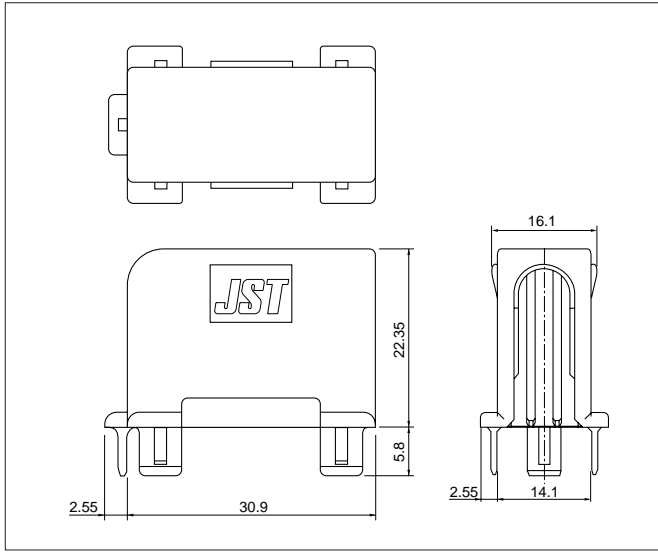
### Material

PBT, UL94V-0, gray

**RoHS compliance**

# OTZ CONNECTOR

## Plug cover

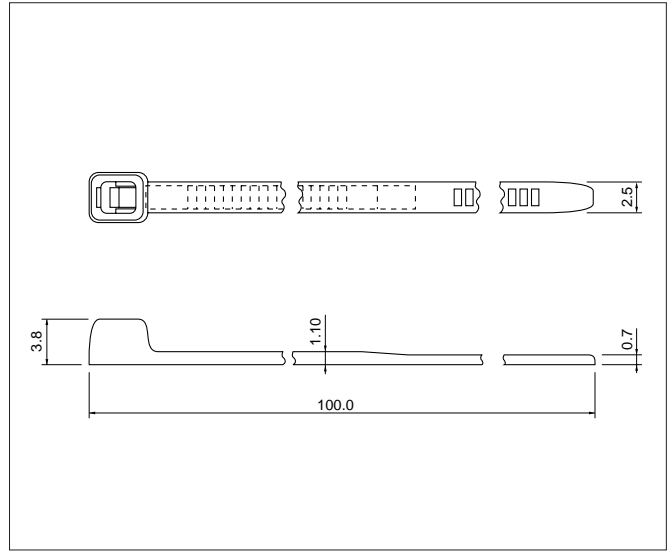


Model No.	Q'ty / box
<b>OTZC-16-H-P4</b>	200
Material	

PBT, UL94V-0, gray

RoHS compliance

## Tie lock



Model No.	Q'ty / box
<b>KB-100-1</b>	1,000
Material	

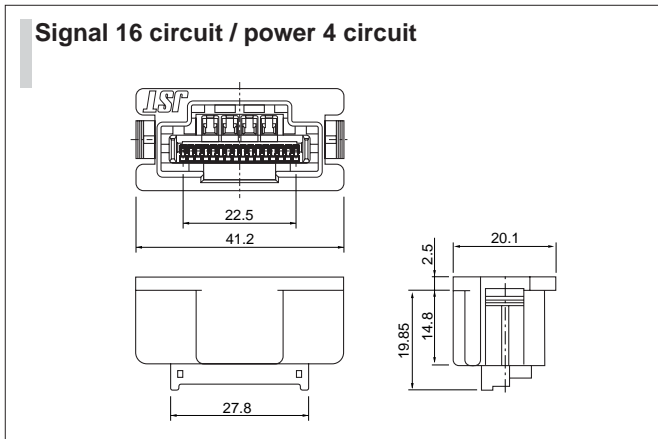
PA 66, natural

RoHS compliance

Note: Not UL/CSA approved.

## Receptacle

### Signal 16 circuit / power 4 circuit

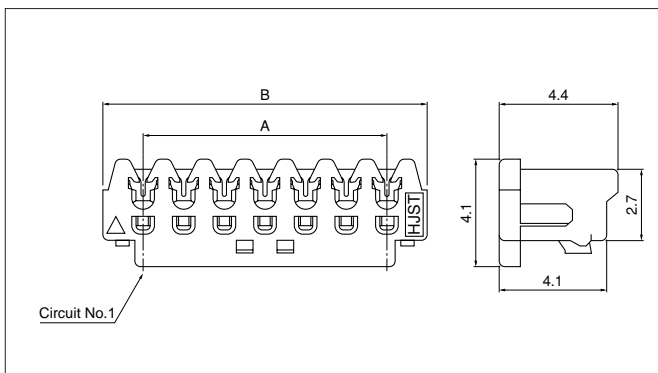


Model No.	Q'ty / box
<b>16R-OTZ-H4GG-P4RL</b>	40
Material and Finish	

Housing: PBT, UL94V-0, gray  
Contact: Copper alloy, nickel-undercoated, selective gold-plated, tin-plated (reflow treatment)

RoHS compliance This product displays (LF)(SN) on a label.

## CZ connector socket



Circuits	Model No.		Dimensions (mm)		Q'ty / box
	Gray	Yellow	A	B	
16	<b>16CZ-6H</b>	<b>16CZ-6Y</b>	22.5	25.5	1,000
Material and Finish					

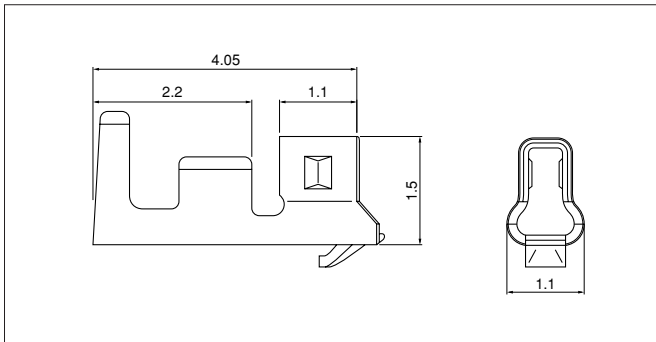
Contact: Copper alloy, tin-plated (reflow treatment)  
Housing: Glass-filled PA 66, UL94V-0

RoHS compliance



# OTZ CONNECTOR

## CZH connector contact



Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty / reel
	mm <sup>2</sup>	AWG #		
<b>SCZH-002T-P0.5</b>	0.08~0.13	28~26	0.8~1.1	13,000

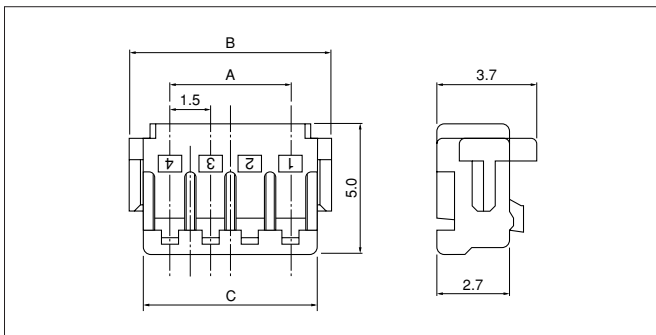
### Material and Finish

Copper alloy, tin-plated (reflow treatment)

### RoHS compliance

Note: The product listed above is not UL/CSA approved in combination with OTZ connector. (CZH connector itself is approved.)

## CZH connector housing



Circuits	Model No.	Dimensions (mm)			Q'ty / box
		A	B	C	
16	<b>CZHR-16V-S</b>	22.5	25.5	24.5	1,000

### Material

PBT, UL94V-0, natural (white)

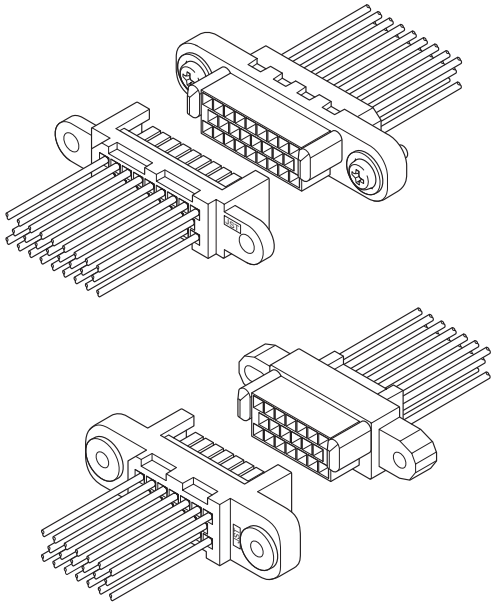
### RoHS compliance

Note: The product listed above is not UL/CSA approved in combination with OTZ connector. (CZH connector itself is approved.)



# RPJ CONNECTOR

2.7mm pitch/Disconnectable Crimp style Wire-to-wire connectors



The pin and socket are adopted for use as the small rack panel connector.

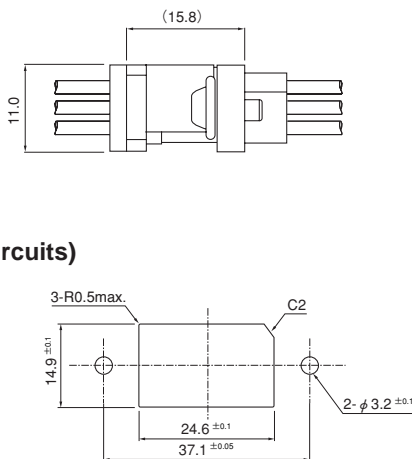
- Compact design
- Structure
- Contact lance

## Specifications

- Current rating: 2A AC, DC (AWG #24)
- Voltage rating: 250V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/20m Ω max.  
After environmental testing/30m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 1,000V AC/minute
- Applicable wire: AWG #28 to #24
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

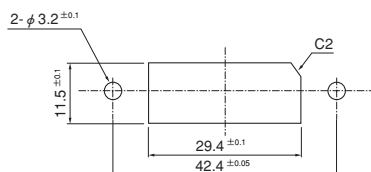
## Assembly layout and Panel layout

### Plug

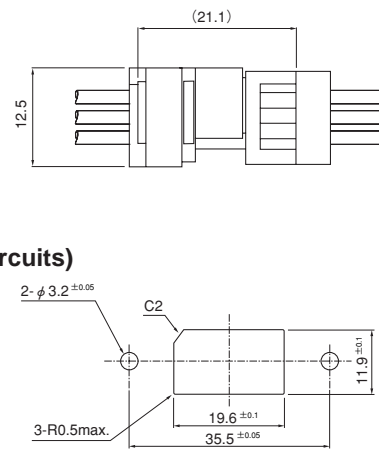


(20 circuits)

(26 circuits)

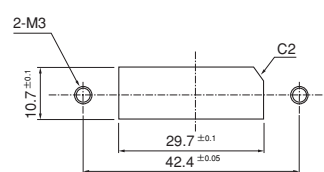


### Receptacle



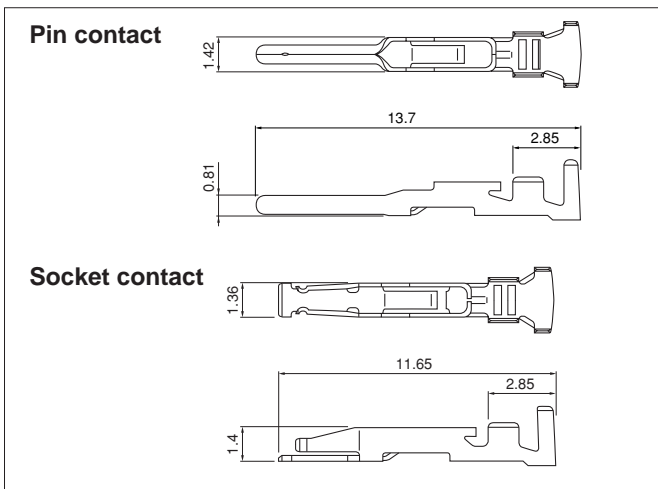
(20 circuits)

(26 circuits)



# RPJ CONNECTOR

## Contact



Model No.		Applicable wire		Insulation O.D. (mm)	Q'ty / reel
Pin contact	Socket contact	mm <sup>2</sup>	AWG #		
<b>RPJ-SP2331</b>	<b>RPJ-SS2331</b>	0.08~0.22	28~24	0.9~1.5	10,000

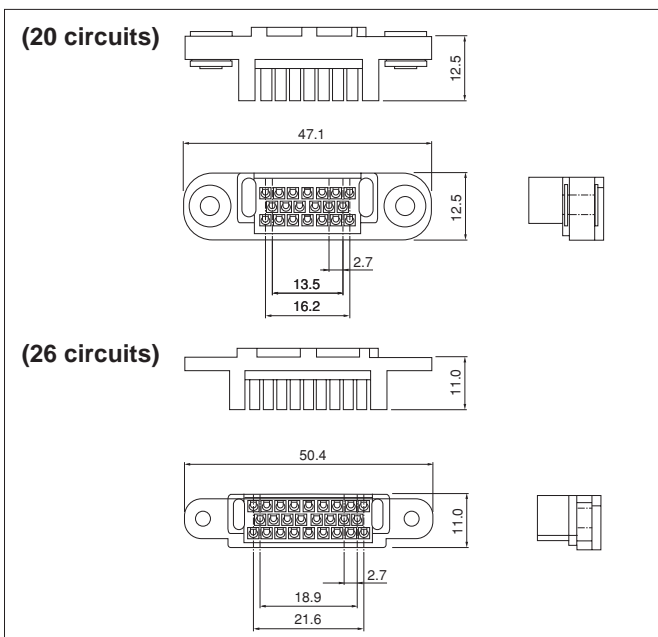
### Material and Finish

Phosphor bronze, nickel-undercoated, gold-plated

### RoHS compliance

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>RPJ-SP2331</b>	AP-K2N	MKS-L	MK/RPJ-SP/SS2	APLMK RPJ-SP/SS2
<b>RPJ-SS2331</b>		—	—	—

## Plug housing



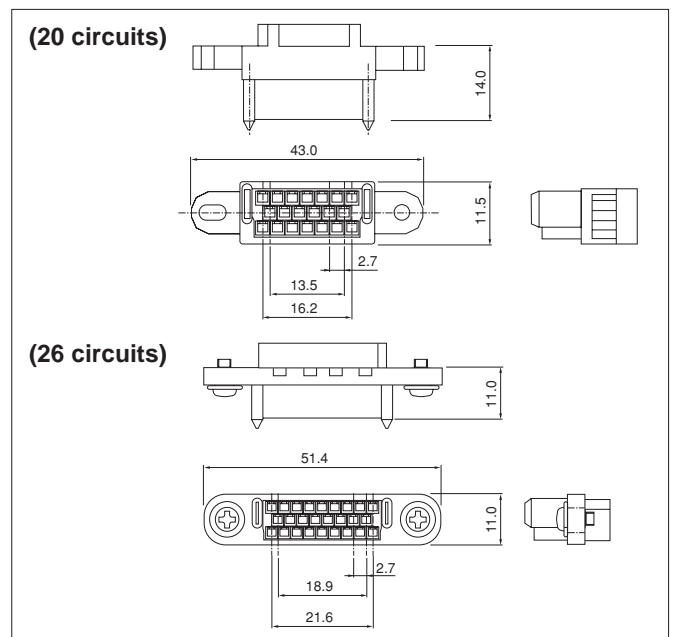
Circuits	Model No.	Q'ty / box
20	<b>RPJ-20PRW</b>	50
26	<b>RPJ-26P</b>	50

### Material and Finish

Plug housing: Glass-filled PBT, UL94V-0  
 Washer: Brass, nickel-plated (RPJ-20PRW)  
 Rivet: Brass, nickel-plated (RPJ-20PRW)

### RoHS compliance

## Receptacle housing



Circuits	Model No.	Q'ty / box
20	<b>RPJ-20R</b>	50
26	<b>RPJ-26RS</b>	50

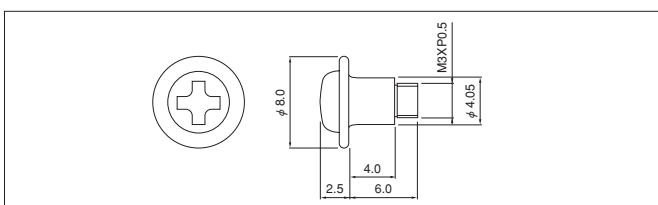
### Material

Receptacle housing: Glass-filled PBT, UL94V-0

### RoHS compliance

Note: Two screws are supplied under the same package of RPJ-26RS.

## Screw



Note: Two screws are supplied for one receptacle housing, RPJ-26RS.

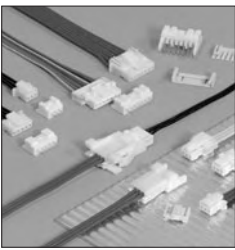


# 4

## Connector Series

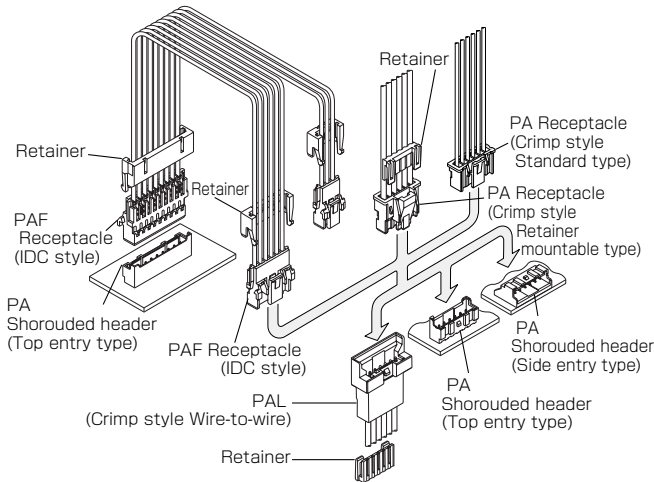
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# PA FAMILY SERIES/PA•PAF•PAL CONNECTOR

2.0mm pitch/Wire-to-board (Crimp style/IDC) / Wire-to-wire (Crimp style/IDC)



**Based upon wire-to-board crimp style PA connectors, the PA series family of connector have been expanded to meet the requirement of complex wire harness of 2.0mm pitch connectors with secure locking mechanism thanks to the additional line up of wire-to-board IDC style PAF connectors and wire-to-wire crimp style PAL connectors.**

- **Secure locking device**
- **Interchangeable between crimp and IDC socket**
- **Secondary retainers**
- **Harness variation**

## PA connector (Standard type, Retainer mountable type)

- **Highly reliable contact**
- **Insertion guide mechanism**
- **Flanged press pin**

## PAF connector

- **The industry's first secure lock ID connectors**
- **Metallic strain relief**
- **Retainer with four locking points**

## PAL connector

- **The industry's first wire to wire 2.0mm pitch retainer mountable type connector.**
- **Either with or without panel lock can be selected according to application.**

## Standards

Recognized E60389

Certified LR20812

## Specifications

### PA Connector (Standard type)

- Current rating: 3A AC, DC (AWG #22)
- Voltage rating: 250V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/10m Ω max.  
After environmental testing/20m Ω max.
- Insulation resistance: Initial/1,000M Ω min.
- Withstanding voltage: 800V AC/minute
- Applicable wire: AWG #28 to #22
- Applicable PC board thickness: 1.6mm

### PA Connector (Retainer mountable type)

- Current rating: 3A AC, DC (AWG #22)
- Voltage rating: 100V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/15m Ω max.  
After environmental testing/25m Ω max.
- Insulation resistance: Initial/1,000M Ω min.
- Withstanding voltage: 800V AC/minute
- Applicable wire: AWG #28 to #22

### PAF Connector

- Current rating: 1.0A AC, DC (AWG #26)
- Voltage rating: 100V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/15m Ω max.  
After environmental testing/25m Ω max.
- Insulation resistance: Initial/1,000M Ω min.
- Withstanding voltage: 800V AC/minute
- Applicable wire: UL1061(Contact JST for details regarding other UL wires.)  
AWG #26  
Conductor/7 strands, tin-coated annealed copper  
Insulation O.D./0.9 to 1.0mm

### PAL Connector

- Current rating: 3A AC, DC (AWG #22)
- Voltage rating: 100V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/15m Ω max.  
After environmental testing/25m Ω max.
- Insulation resistance: Initial/1,000M Ω min.
- Withstanding voltage: 800V AC/minute
- Applicable wire: AWG #28 to #22
- Applicable panel thickness : 0.5 to 2.0mm

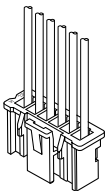
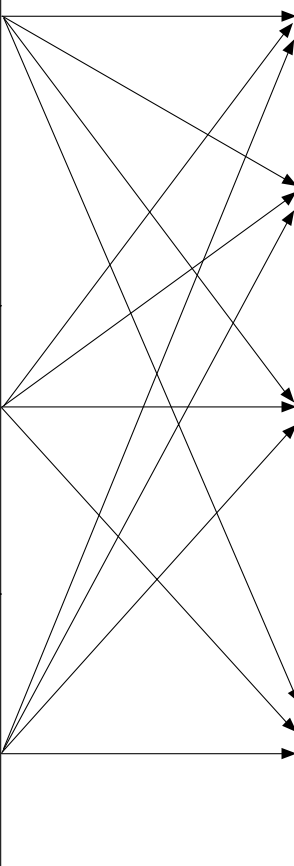
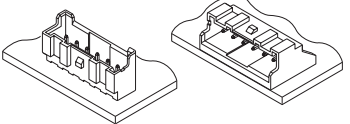
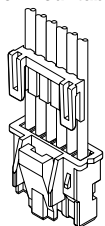
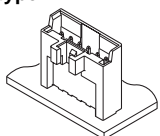
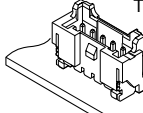
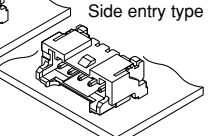
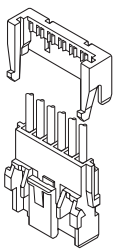
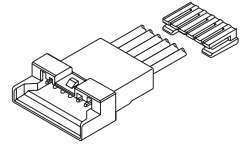
\* RoHS compliant products are published.

\* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.

\* Contact JST for details.

# PA FAMILY SERIES /PA•PAF•PAL CONNECTOR

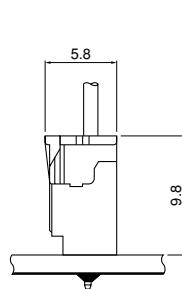
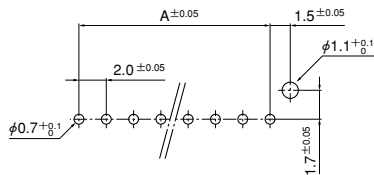
## List of combinations

<b>Crimp style Standard type</b> 	<u>Contact</u> SPHD-001T-P0.5 SPHD-002T-P0.5 <u>Housing</u> PAP-( )V-S		<u>Shrouded header</u> B( )B-PASK B( )B-PASK-1 S( )B-PASK-2	<b>Top entry type</b> <b>Side entry type</b> 
<b>Crimp style Retainer mountable type</b> 	<u>Contact</u> SPA-001T-P0.5 <u>Housing</u> PARP-( )V <u>Retainer</u> PMS-( )V-S		<u>Shrouded header</u> BM( )B-PASS BM( )B-PASS-1 SM( )B-PASS SM( )B-PASS-1	<b>High box type</b>  <b>SMT type</b> Top entry type  Side entry type 
<b>Insulation displacement type</b> 	<u>Receptacle</u> ( )PAF-6S <u>Retainer</u> PAFS-( )V-S		<u>Contact</u> SPAL-001T-P0.5 SPAL-002T-P0.5 <u>Receptacle housing</u> PALR-( )V(F) <u>Retainer</u> PMS-( )V-S	<b>Wire to wire Connectors</b> 

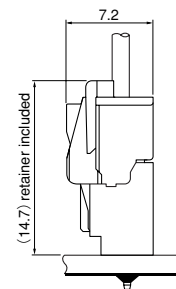
## PC board layout (viewed from component side) and Assembly layout

### Through-hole type

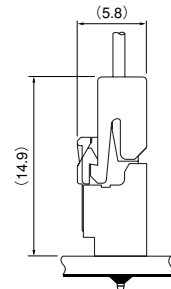
#### Top entry type



PA Receptacle + PA Header  
(Standard type)

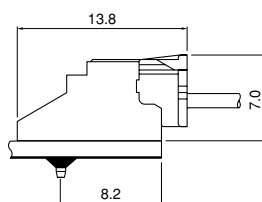
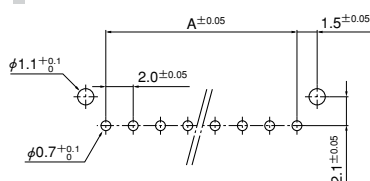


PA Receptacle + PA Header  
(Retainer mountable type)

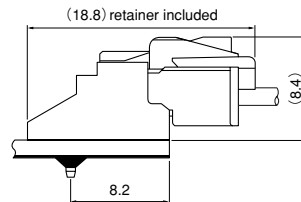


PAF Receptacle + PA Header

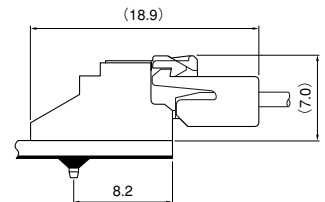
#### Side entry type



PA Receptacle  
+ PA side entry type header  
(Standard type)



PA Receptacle  
+ PA side entry type header  
(Retainer mountable type)



PAF Receptacle +  
PA side entry type header

Note: 1. Tolerances are non-cumulative:  $\pm 0.05\text{mm}$  for all centers.

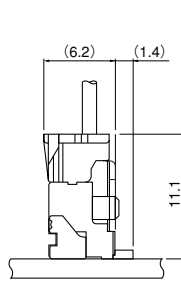
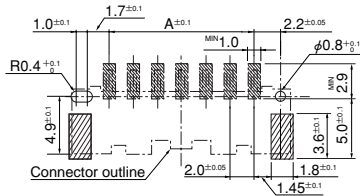
2. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.

# PA FAMILY SERIES /PA•PAF•PAL CONNECTOR

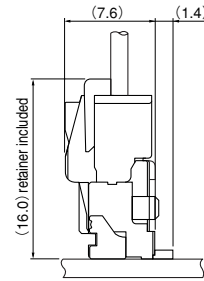
## PC board layout (viewed from component side) and Assembly layout

### SMT type

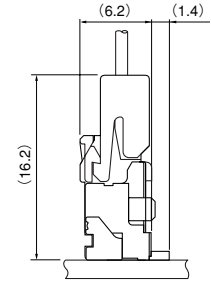
#### Top entry type



PA Receptacle + PA Header  
(Standard type)

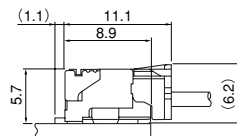
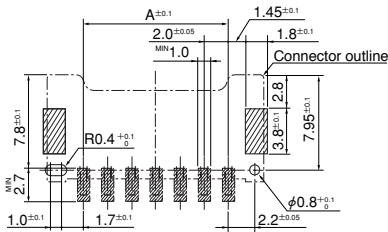


PA Receptacle + PA Header  
(Retainer mountable type)

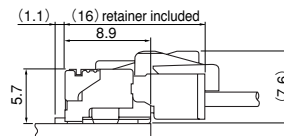


PAF Receptacle + PA Header

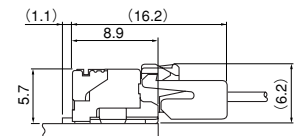
#### Side entry type



PA Receptacle +  
PA side entry type header (SMT)  
(Standard type)



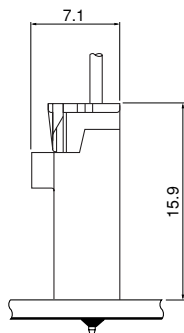
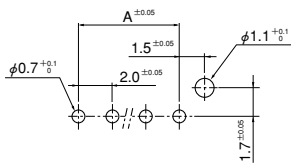
PA Receptacle +  
PA side entry type header (SMT)  
(Retainer mountable type)



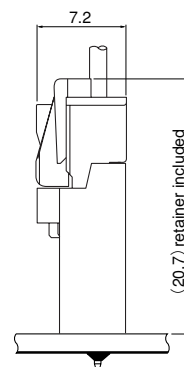
PAF Receptacle +  
PA side entry type header (SMT)

Note: 1. Tolerances are non-cumulative:  $\pm 0.05\text{mm}$  for all centers.  
2. The dimensions above should serve as a guideline. Contact JST for details.

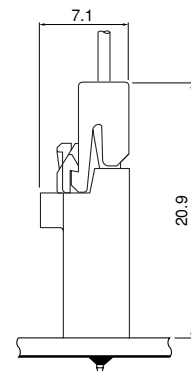
#### High box type



PA Receptacle +  
PA high box type header  
(Standard type)



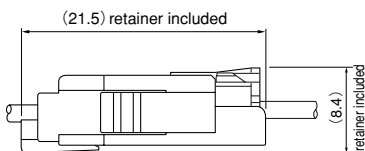
PA Receptacle +  
PA high box type header  
(Retainer mountable type)



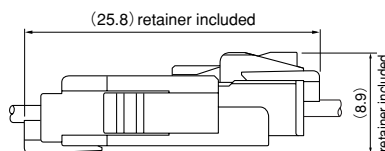
PAF Receptacle +  
PA high box type header

Note: 1. Tolerances are non-cumulative:  $\pm 0.05\text{mm}$  for all centers.  
2. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.

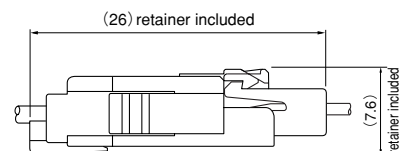
#### Wire-to-wire



PA Receptacle + PAL Receptacle  
(Standard type)



PA Receptacle + PAL Receptacle  
(Retainer mountable type)

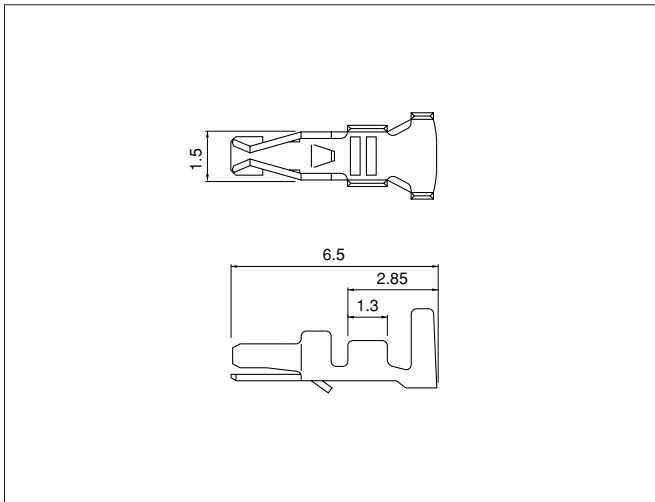


PAF Receptacle + PAL Receptacle



# PA FAMILY SERIES /PA CONNECTOR (Crimp style Standard type)

## Contact



Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty / reel
	mm <sup>2</sup>	AWG #		
<b>SPHD-001T-P0.5</b>	0.13~0.33	26~22	1.0~1.5	8,000
<b>SPHD-002T-P0.5</b>	0.08~0.21	28~24	0.9~1.5	8,000

### Material and Finish

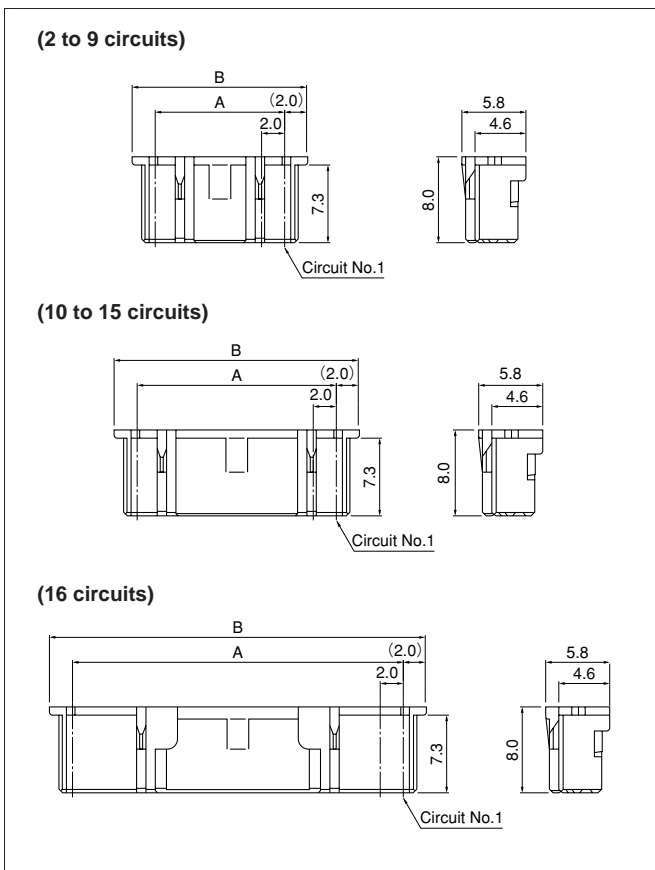
Phosphor bronze, tin-plated (reflow treatment)

### RoHS compliance

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SPHD-002T-P0.5</b>	AP-K2N	MKS-LS-10·MKS-L-10	MK/SPHD-002-05	APLMK SPHD002-05
		*MKS-SC-10	SC/SPHD-002-05	APLSC SPHD002-05
<b>SPHD-001T-P0.5</b>		MKS-LS-10·MKS-L-10	MK/SPHD-001-05	APLMK SPHD001-05
		*MKS-SC-10	SC/SPHD-001-05	APLSC SPHD001-05

Note: \*Strip-crimp applicator

## Housing



Circuits	Model No.	Dimensions (mm)		Q'ty / bag
		A	B	
2	<b>PAP-02V-S</b>	2.0	6.0	1,000
3	<b>PAP-03V-S</b>	4.0	8.0	1,000
4	<b>PAP-04V-S</b>	6.0	10.0	1,000
5	<b>PAP-05V-S</b>	8.0	12.0	1,000
6	<b>PAP-06V-S</b>	10.0	14.0	1,000
7	<b>PAP-07V-S</b>	12.0	16.0	1,000
8	<b>PAP-08V-S</b>	14.0	18.0	1,000
9	<b>PAP-09V-S</b>	16.0	20.0	1,000
10	<b>PAP-10V-S</b>	18.0	22.0	1,000
11	<b>PAP-11V-S</b>	20.0	24.0	1,000
12	<b>PAP-12V-S</b>	22.0	26.0	1,000
13	<b>PAP-13V-S</b>	24.0	28.0	1,000
14	<b>PAP-14V-S</b>	26.0	30.0	1,000
15	<b>PAP-15V-S</b>	28.0	32.0	1,000
16	<b>PAP-16V-S</b>	30.0	34.0	1,000

### Material

PA 66, UL94V-0, natural (white)

### RoHS compliance

<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. **PAP-02V-S**

S...natural (white)

K...black R...red E...blue M...green O...orange N...brown

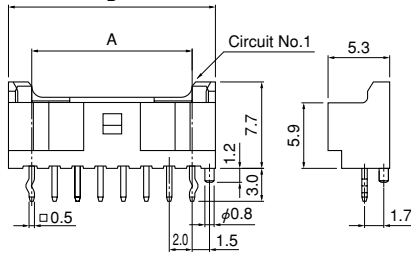
P...purple PK...pink Y...yellow L...lemon yellow FY...vivid yellow

LE...light blue H...gray TR...tomato red

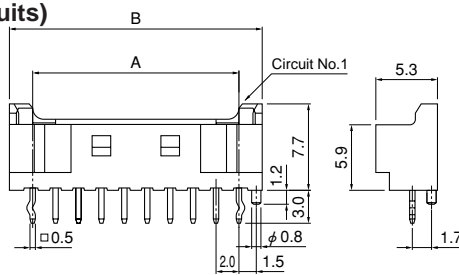
# PA FAMILY SERIES

## Through-hole type shrouded header

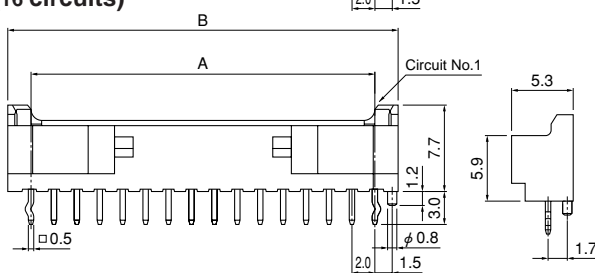
### Top entry type (2 to 9 circuits)



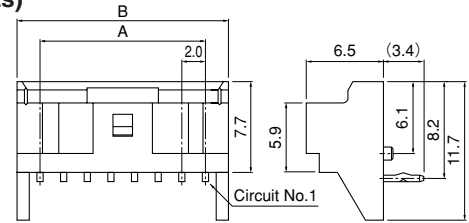
### (10 to 15 circuits)



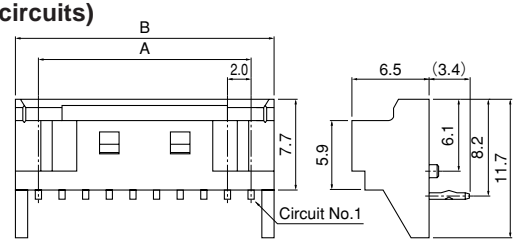
### (16 circuits)



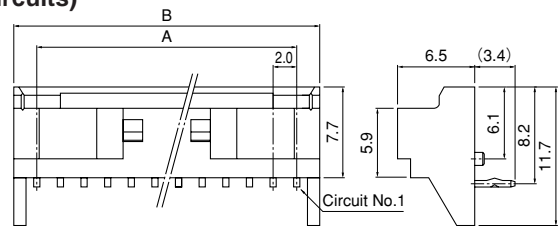
### Side entry type (2 to 9 circuits)



### (10 to 15 circuits)



### (16 circuits)



### Top entry type

Circuits	Model No.		Dimensions (mm)		Q'ty / box
	Without a boss	With a boss	A	B	
2 (Note1)	<b>B02B-PAFYK-A</b>	<b>B02B-PAFYK-1A</b>	2.0	6.0	1,000
2	<b>B02B-PASK</b>	<b>B02B-PASK-1</b>	2.0	6.0	1,000
3	<b>B03B-PASK</b>	<b>B03B-PASK-1</b>	4.0	8.0	1,000
4	<b>B04B-PASK</b>	<b>B04B-PASK-1</b>	6.0	10.0	1,000
5	<b>B05B-PASK</b>	<b>B05B-PASK-1</b>	8.0	12.0	500
6	<b>B06B-PASK</b>	<b>B06B-PASK-1</b>	10.0	14.0	500
7	<b>B07B-PASK</b>	<b>B07B-PASK-1</b>	12.0	16.0	500
8	<b>B08B-PASK</b>	<b>B08B-PASK-1</b>	14.0	18.0	500
9	<b>B09B-PASK</b>	<b>B09B-PASK-1</b>	16.0	20.0	500
10	<b>B10B-PASK</b>	<b>B10B-PASK-1</b>	18.0	22.0	500
11	<b>B11B-PASK</b>	<b>B11B-PASK-1</b>	20.0	24.0	250
12	<b>B12B-PASK</b>	<b>B12B-PASK-1</b>	22.0	26.0	250
13	<b>B13B-PASK</b>	<b>B13B-PASK-1</b>	24.0	28.0	250
14	<b>B14B-PASK</b>	<b>B14B-PASK-1</b>	26.0	30.0	250
15	<b>B15B-PASK</b>	<b>B15B-PASK-1</b>	28.0	32.0	250
16	<b>B16B-PASK</b>	<b>B16B-PASK-1</b>	30.0	34.0	250

#### Material and Finish

Post: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
 Wafer: Glass-filled PBT, UL94V-0, natural (white)  
 (Note1) PA 66, UL94V-0, vivid yellow

**RoHS compliance** This product displays (LF)(SN) on a label.

<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. **B02B-PASK**  
 S...natural (white)  
 K...black R...red E...blue M...green O...orange N...brown  
 P...purple PK...pink Y...yellow L...lemon yellow FY...vivid yellow  
 LE...light blue H...gray TR...tomato red

### Side entry type

Circuits	Model No.	Dimensions (mm)		Q'ty / box
		A	B	
2	<b>S02B-PASK-2</b>	2.0	6.0	1,000
3	<b>S03B-PASK-2</b>	4.0	8.0	1,000
4	<b>S04B-PASK-2</b>	6.0	10.0	500
5	<b>S05B-PASK-2</b>	8.0	12.0	500
6	<b>S06B-PASK-2</b>	10.0	14.0	500
7	<b>S07B-PASK-2</b>	12.0	16.0	250
8	<b>S08B-PASK-2</b>	14.0	18.0	250
9	<b>S09B-PASK-2</b>	16.0	20.0	250
10	<b>S10B-PASK-2</b>	18.0	22.0	250
11	<b>S11B-PASK-2</b>	20.0	24.0	250
12	<b>S12B-PASK-2</b>	22.0	26.0	250
13	<b>S13B-PASK-2</b>	24.0	28.0	200
14	<b>S14B-PASK-2</b>	26.0	30.0	200
15	<b>S15B-PASK-2</b>	28.0	32.0	200
16	<b>S16B-PASK-2</b>	30.0	34.0	200

#### Material and Finish

Post: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
 Wafer: Glass-filled PBT, UL94V-0, natural (white)

**RoHS compliance** This product displays (LF)(SN) on a label.

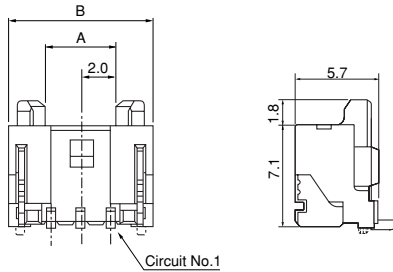
<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. **S03B-PASK-2**  
 S...natural (white)  
 K...black R...red E...blue M...green O...orange N...brown  
 P...purple PK...pink Y...yellow L...lemon yellow LE...light blue  
 H...gray TR...tomato red

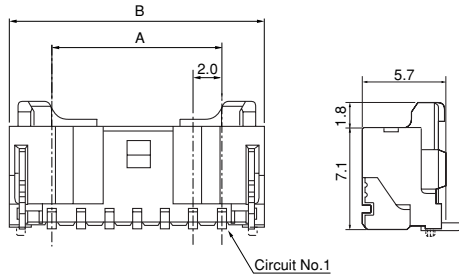
## SMT type shrouded header

### Top entry type

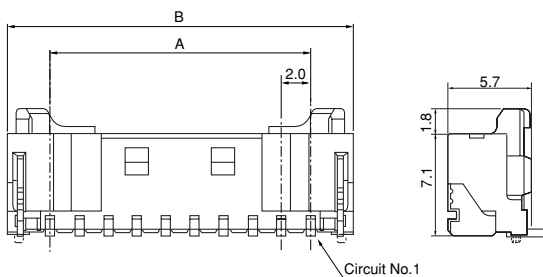
(2 to 3 circuits)



(4 to 9 circuits)

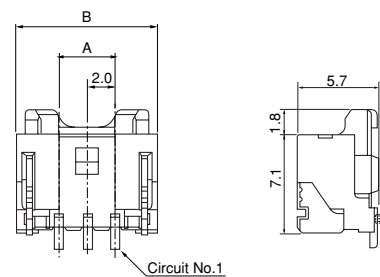


(10 to 13 circuits)

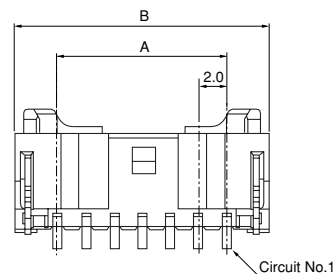


### Side entry type

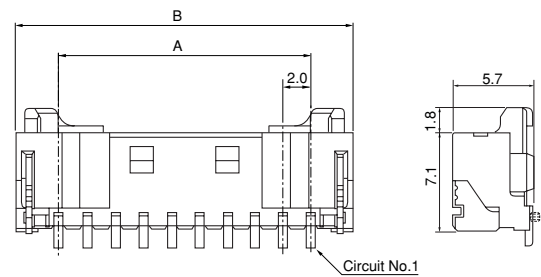
(2 to 3 circuits)



(4 to 9 circuits)



(10 to 12 circuits)



### Top entry type

Circuits	Model No.		Dimensions(mm)		Q'ty / reel
	Without a boss	With a boss	A	B	
2	BM02B-PASS-(* )	BM02B-PASS-1-(* )	2.0	8.0	500
3	BM03B-PASS-(* )	BM03B-PASS-1-(* )	4.0	10.0	500
4	BM04B-PASS-(* )	BM04B-PASS-1-(* )	6.0	12.0	500
5	BM05B-PASS-(* )	BM05B-PASS-1-(* )	8.0	14.0	500
6	BM06B-PASS-(* )	BM06B-PASS-1-(* )	10.0	16.0	500
7	BM07B-PASS-(* )	BM07B-PASS-1-(* )	12.0	18.0	500
8	BM08B-PASS-(* )	BM08B-PASS-1-(* )	14.0	20.0	500
9	BM09B-PASS-(* )	BM09B-PASS-1-(* )	16.0	22.0	500
10	BM10B-PASS-(* )	BM10B-PASS-1-(* )	18.0	24.0	500
11	BM11B-PASS-(* )	BM11B-PASS-1-(* )	20.0	26.0	500
12	BM12B-PASS-(* )	BM12B-PASS-1-(* )	22.0	28.0	500
13	BM13B-PASS-(* )	BM13B-PASS-1-(* )	24.0	30.0	500

#### Material and Finish

Post: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
 Wafer: PA, UL94V-0, natural (ivory)  
 Solder tab: Copper alloy, copper-undercoated, tin-plated (reflow treatment)

**RoHS compliance** This product displays (LF)(SN) on a label.

Note: (\*): TF...taping product

TFT...taping product with suction tape.

### Side entry type

Circuits	Model No.		Dimensions(mm)		Q'ty / reel
	Without a boss	With a boss	A	B	
2	SM02B-PASS-(* )	SM02B-PASS-1-(* )	2.0	8.0	1,000
3	SM03B-PASS-(* )	SM03B-PASS-1-(* )	4.0	10.0	1,000
4	SM04B-PASS-(* )	SM04B-PASS-1-(* )	6.0	12.0	1,000
5	SM05B-PASS-(* )	SM05B-PASS-1-(* )	8.0	14.0	1,000
6	SM06B-PASS-(* )	SM06B-PASS-1-(* )	10.0	16.0	1,000
7	SM07B-PASS-(* )	SM07B-PASS-1-(* )	12.0	18.0	1,000
8	SM08B-PASS-(* )	SM08B-PASS-1-(* )	14.0	20.0	1,000
9	SM09B-PASS-(* )	SM09B-PASS-1-(* )	16.0	22.0	1,000
10	SM10B-PASS-(* )	SM10B-PASS-1-(* )	18.0	24.0	1,000
11	SM11B-PASS-(* )	SM11B-PASS-1-(* )	20.0	26.0	1,000
12	SM12B-PASS-(* )	SM12B-PASS-1-(* )	22.0	28.0	1,000

#### Material and Finish

Post: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
 Wafer: PA, UL94V-0, natural (ivory)  
 Solder tab: Copper alloy, copper-undercoated, tin-plated (reflow treatment)

**RoHS compliance** This product displays (LF)(SN) on a label.

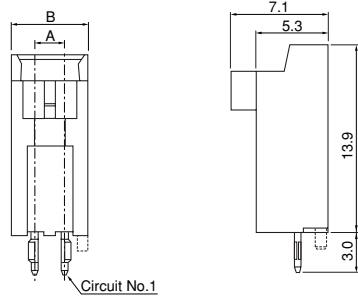
Note: (\*): TB...taping product

TBT...taping product with suction tape.

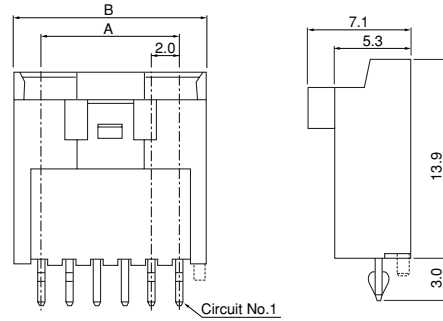
# PA FAMILY SERIES

## Shrouded header <High box type>

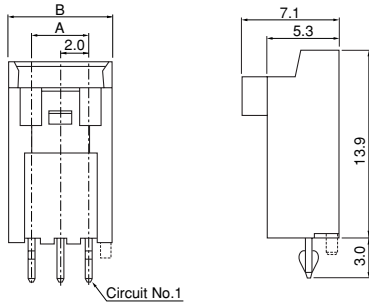
(2 circuits)



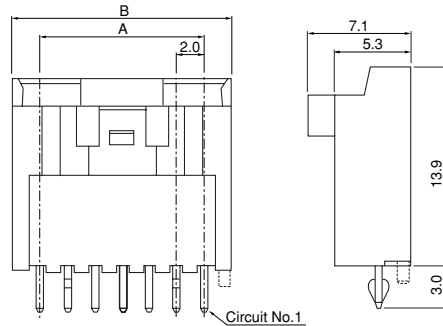
(5, 6 circuits)



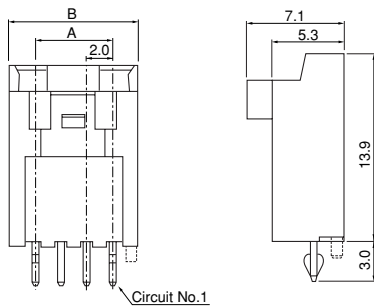
(3 circuits)



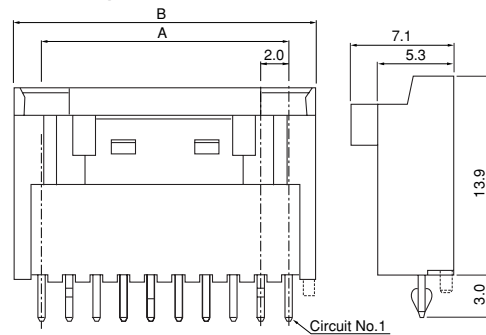
(7 to 9 circuits)



(4 circuits)



(10 to 12, 15 circuits)



Circuits	Model No.		Dimensions(mm)		Q'ty / box
	Without a boss	With a boss	A	B	
2	BH02B-PASK	BH02B-PASK-1	2.0	6.0	900
3	BH03B-PASK	BH03B-PASK-1	4.0	8.0	675
4	BH04B-PASK	BH04B-PASK-1	6.0	10.0	525
5	BH05B-PASK	BH05B-PASK-1	8.0	12.0	450
6	BH06B-PASK	BH06B-PASK-1	10.0	14.0	375
7	BH07B-PASK	BH07B-PASK-1	12.0	16.0	325
8	BH08B-PASK	BH08B-PASK-1	14.0	18.0	300
9	BH09B-PASK	BH09B-PASK-1	16.0	20.0	250
10	BH10B-PASK	BH10B-PASK-1	18.0	22.0	225
11	BH11B-PASK	BH11B-PASK-1	20.0	24.0	225
12	BH12B-PASK	BH12B-PASK-1	22.0	26.0	200
15	BH15B-PASK	BH15B-PASK-1	28.0	32.0	150

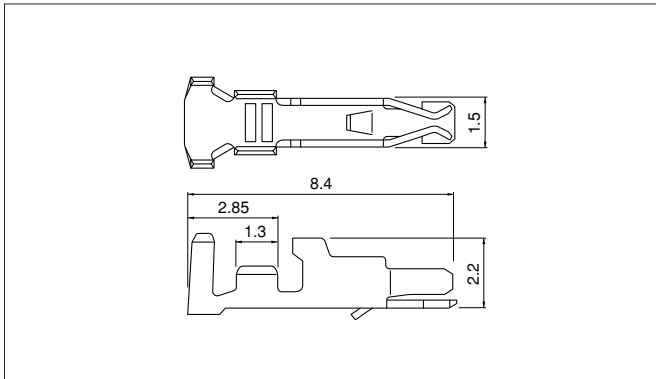
### Material and Finish

Post: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
Water: Glass-filled PBT, UL94V-0, natural (white)

RoHS compliance This product displays (LF)(SN) on a label.

# PA FAMILY SERIES /PA CONNECTOR (Crimp style Retainer mountable type)

## Contact



Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty / reel
	mm <sup>2</sup>	AWG #		
<b>SPA-001T-P0.5</b>	0.13~0.33	26~22	0.9~1.5	10,000

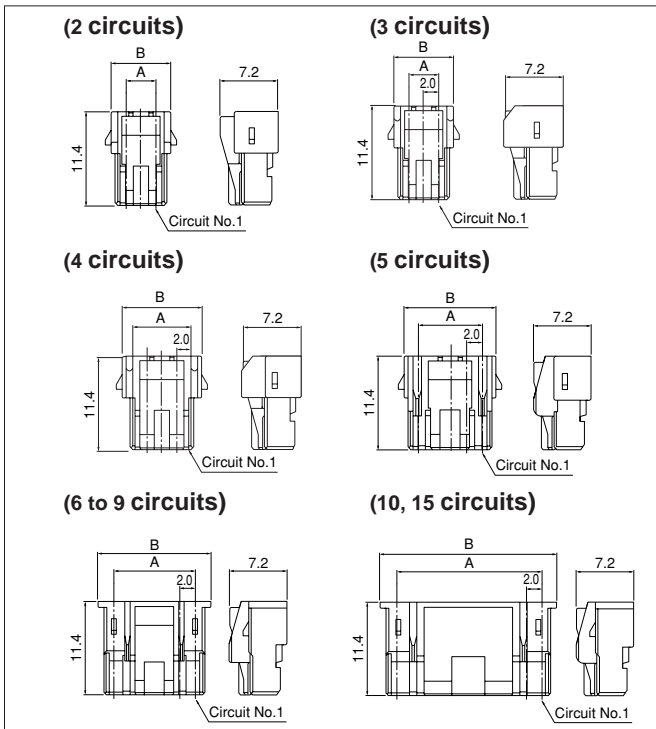
### Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

### RoHS compliance

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SPA-001T-P0.5</b>	AP-K2N	MKS-L	MK/SPA-001-05	APLMK SPA001-05
		—	—	—

## Housing



Circuits	Model No.	Dimensions(mm)		Q'ty / bag
		A	B	
2	<b>PARP-02V</b>	2.0	5.4	1,000
3	<b>PARP-03V</b>	4.0	7.4	1,000
4	<b>PARP-04V</b>	6.0	9.4	1,000
5	<b>PARP-05V</b>	8.0	11.4	1,000
6	<b>PARP-06V</b>	10.0	14.0	1,000
7	<b>PARP-07V</b>	12.0	16.0	1,000
8	<b>PARP-08V</b>	14.0	18.0	1,000
9	<b>PARP-09V</b>	16.0	20.0	1,000
10	<b>PARP-10V</b>	18.0	22.0	1,000
*15	<b>PARP-15V</b>	28.0	32.0	500

### Material

PA 66, UL94V-0, natural (white)

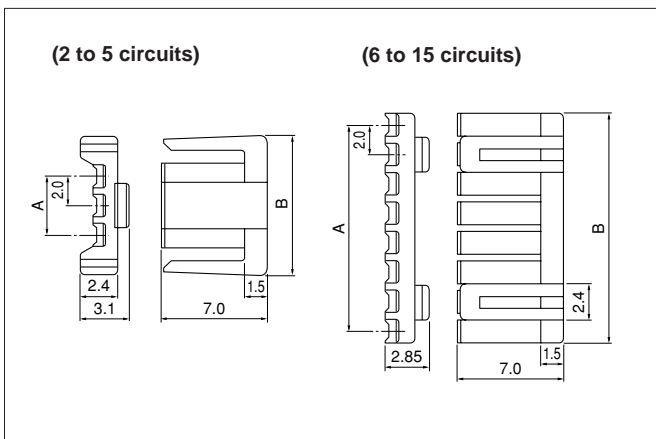
### RoHS compliance

Note: \*Marked product is not CSA approved.

<For reference> As the color identification,  
the following alphabet shall be put in the underlined part.  
For availability, delivery and minimum order quantity, contact JST.

ex. **PARP-02V-oo**  
(blank)...natural (white)  
R...red E...blue Y...yellow M...green

## Retainer



Circuits	Model No.	Dimensions(mm)		Q'ty / bag
		A	B	
2	<b>PMS-02V-S</b>	2.0	7.3	1,000
3	<b>PMS-03V-S</b>	4.0	9.3	1,000
4	<b>PMS-04V-S</b>	6.0	11.3	1,000
5	<b>PMS-05V-S</b>	8.0	13.3	1,000
6	<b>PMS-06V-S</b>	10.0	11.55	1,000
7	<b>PMS-07V-S</b>	12.0	13.55	1,000
8	<b>PMS-08V-S</b>	14.0	15.55	1,000
* 9	<b>PMS-09V-S</b>	16.0	17.55	1,000
*10	<b>PMS-10V-S</b>	18.0	19.55	1,000
*15	<b>PMS-15V-S</b>	28.0	29.55	1,000

### Material

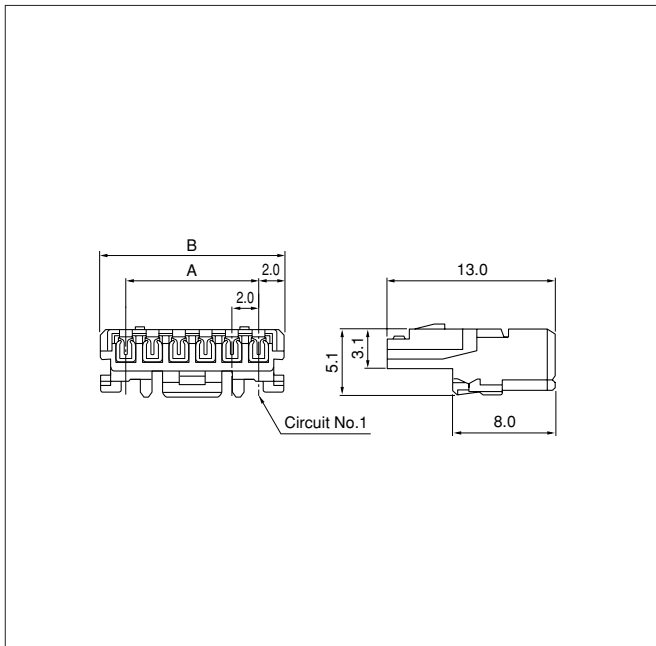
Glass-filled PA 66, UL94V-0, natural (ivory)

### RoHS compliance

Note: \*Marked products are not CSA approved.

# PA FAMILY SERIES /PAF CONNECTOR (Insulation displacement type)

## Receptacle



Circuits	Model No.	Dimensions(mm)		Q'ty / box
		A	B	
2	<b>02PAF-6S</b>	2.0	6.0	1,000
3	<b>03PAF-6S</b>	4.0	8.0	1,000
4	<b>04PAF-6S</b>	6.0	10.0	500
5	<b>05PAF-6S</b>	8.0	12.0	500
6	<b>06PAF-6S</b>	10.0	14.0	500
7	<b>07PAF-6S</b>	12.0	16.0	500
8	<b>08PAF-6S</b>	14.0	18.0	250
9	<b>09PAF-6S</b>	16.0	20.0	250
10	<b>10PAF-6S</b>	18.0	22.0	250
11	<b>11PAF-6S</b>	20.0	24.0	250
12	<b>12PAF-6S</b>	22.0	26.0	250
13	<b>13PAF-6S</b>	24.0	28.0	250
14	<b>14PAF-6S</b>	26.0	30.0	250
15	<b>15PAF-6S</b>	28.0	32.0	250
*16	<b>16PAF-6S</b>	30.0	34.0	250

### Material and Finish

Contact: Phosphor bronze, tin-plated (reflow treatment)  
Housing: PA 66, UL94V-0, natural (white)

### RoHS compliance

Note: \*Marked product is not UL/CSA approved.

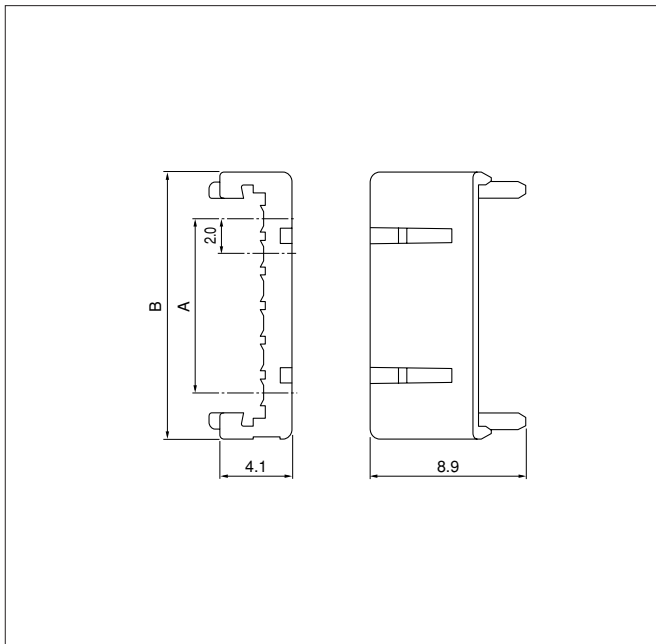
<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. **02PAF-6S**

S...natural (white)

R...red E...blue M...green Y...yellow

## Retainer



Circuits	Model No.	Dimensions(mm)		Q'ty / bag
		A	B	
2	<b>PAFS-02V-S</b>	2.0	7.4	1,000
3	<b>PAFS-03V-S</b>	4.0	9.4	1,000
4	<b>PAFS-04V-S</b>	6.0	11.4	1,000
5	<b>PAFS-05V-S</b>	8.0	13.4	1,000
6	<b>PAFS-06V-S</b>	10.0	15.4	1,000
7	<b>PAFS-07V-S</b>	12.0	17.4	1,000
8	<b>PAFS-08V-S</b>	14.0	19.4	1,000
* 9	<b>PAFS-09V-S</b>	16.0	21.4	1,000
*10	<b>PAFS-10V-S</b>	18.0	23.4	1,000
*11	<b>PAFS-11V-S</b>	20.0	25.4	1,000
*12	<b>PAFS-12V-S</b>	22.0	27.4	1,000
*13	<b>PAFS-13V-S</b>	24.0	29.4	1,000
*14	<b>PAFS-14V-S</b>	26.0	31.4	1,000
*15	<b>PAFS-15V-S</b>	28.0	33.4	1,000

### Material

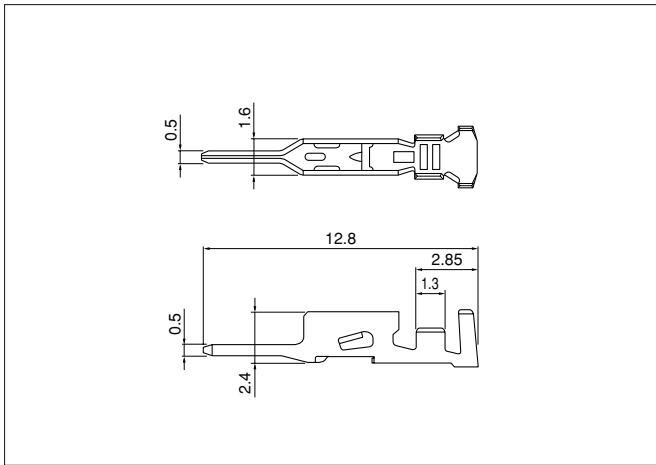
Glass-filled PA 66, UL94V-0, natural (ivory)

### RoHS compliance

Note: \*Marked products are not UL/CSA approved.

# PA FAMILY SERIES /PAL CONNECTOR (Wire-to-wire type)

## Contact



Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty / reel
	mm <sup>2</sup>	AWG #		
SPAL-001T-P0.5	0.13~0.33	26~22	1.0~1.5	10,000
SPAL-002T-P0.5	0.08~0.21	28~24	0.9~1.5	10,000

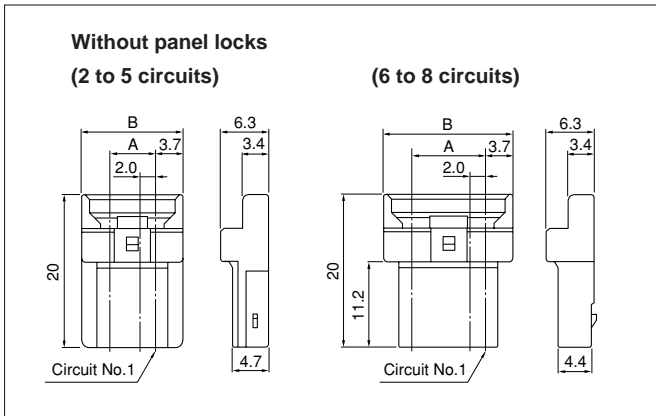
### Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

### RoHS compliance

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SPAL-001T-P0.5	AP-K2N	MKS-L	MK/SPAL-001-05	APLMK SPAL001-05
		—	—	—
SPAL-002T-P0.5	AP-K2N	MKS-L	MK/SPAL-002-05	APLMK SPAL002-05
		—	—	—

## Housing

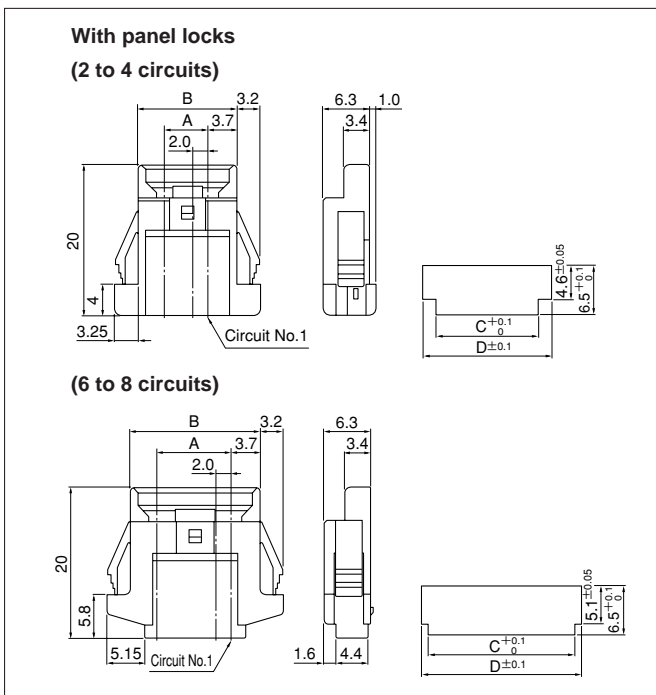


Circuits	Model No.	Dimensions(mm)		Q'ty / bag
		A	B	
2	PALR-02VF	2.0	9.4	1,000
3	PALR-03VF	4.0	11.4	1,000
4	PALR-04VF	6.0	13.4	1,000
5	PALR-05VF	8.0	15.4	1,000
6	PALR-06VF	10.0	17.4	1,000
7	PALR-07VF	12.0	19.4	1,000
8	PALR-08VF	14.0	21.4	1,000

### Material

PA 66, UL94V-0, natural (white)

### RoHS compliance



Circuits	Model No.	Dimensions(mm)				Q'ty / bag
		A	B	C	D	
2	PALR-02V	2.0	9.4	9.8	13.4	1,000
3	PALR-03V	4.0	11.4	11.8	15.4	1,000
4	PALR-04V	6.0	13.4	13.8	17.4	1,000
6	PALR-06V	10.0	17.4	19.8	21.4	1,000
7	PALR-07V	12.0	19.4	21.8	23.4	1,000
8	PALR-08V	14.0	21.4	23.8	25.4	1,000

### Material

PA 66, UL94V-0, natural (white)

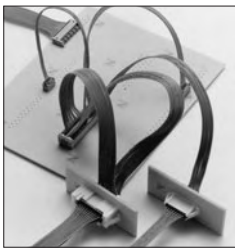
### RoHS compliance

<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. **PALR-02V(F)-oo**  
(blank)...natural (white)  
R...red E...blue M...green Y...yellow

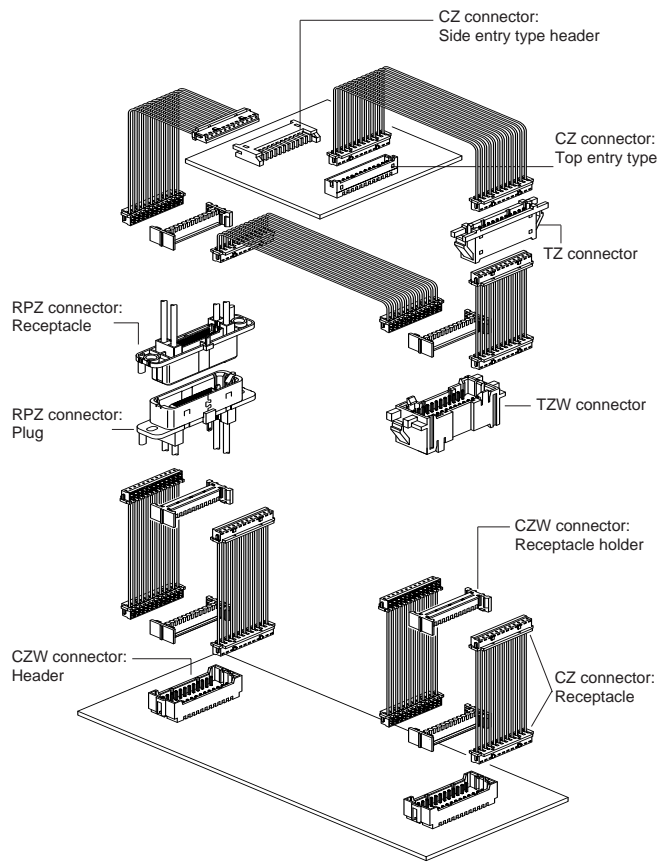
## Retainer

Retainers are interchangeable with those of the PA crimp style retainer mountable type.



# CZ FAMILY SERIES/CZ·CZW·CZH·CZHW·TZ·TZW

## 1.5mm pitch/Disconnectable Insulation displacement connectors



※ CZ connector used for the harness shown in the above-mentioned figure can be replaced to CZH connector.

**Based upon the 1.5mm pitch CZ connectors, the CZ family connectors have been expanded to meet the requirements of high density packaging. The CZW connector holder allows dual-row wire-to-board connection using the CZ receptacles, while the TZ (single-row) or TZW (dual-row) allows wire-to-wire connection, also using the CZ receptacles.**

### CZ connector

- Distortion resistant construction
- Compact and low profile

### CZW connector

- Low insertion force
- Locking construction

### CZH connector

- Housing lance
- Int interchangeability

### TZ/TZW connector

- The TZ connector is applicable to single-row connection, while the TZW connector is for dual-row connection.
- Applicable to wide range of panel thickness
- The design of the panel lock part does not allow the wires to be caught there before mounting on the panel.

### Standards

- UL Recognized E60389
- CS Certified LR20812

### Specifications

Item	Series	CZ·CZW connector	CZH·CZHW connector	TZ·TZW connector
Current rating		2A	AC·DC (AWG #26)	
Voltage rating			100V AC, DC	
Temperature rise		-25°C ~ +85°C (including temperature rise)		
Contact resistance		Initial value / 10mΩ max. After environmental testing / 20mΩ max.		Initial value / 20mΩ max. After environmental testing / 40mΩ max.
Insulation resistance		500MΩ min		
Withstanding voltage		500VAC/minute		
Applicable wire		UL10272 (Contact JST for other UL style wires.) AWG#28, #26 Conductor / 7-strands, tincoated annealed copper Insulation O.D. / 0.7~ 0.83mm	AWG #28 ~ #26	—
Applicable PC board thickness		1.6mm		—
Applicable panel thickness		—		0.5~2.0mm

\* RoHS compliant products are published.

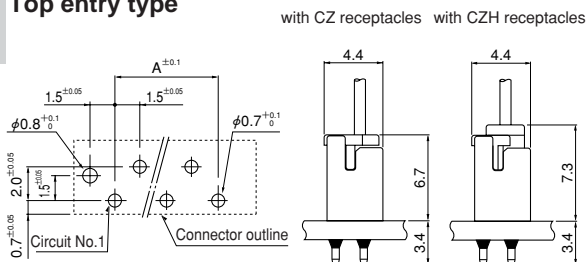
\* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.

\* Contact JST for details.

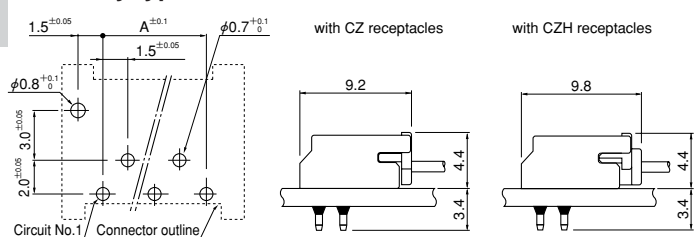
### PC board layout (viewed from component side) and Assembly layout

#### <CZ connector through-hole type>

##### Top entry type



##### Side entry type



Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.

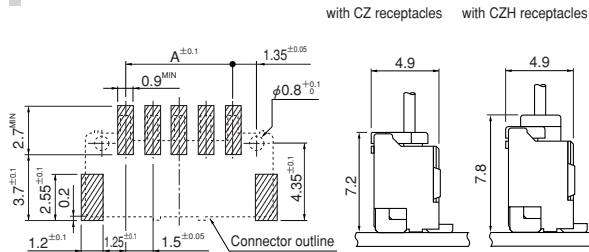
2. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.



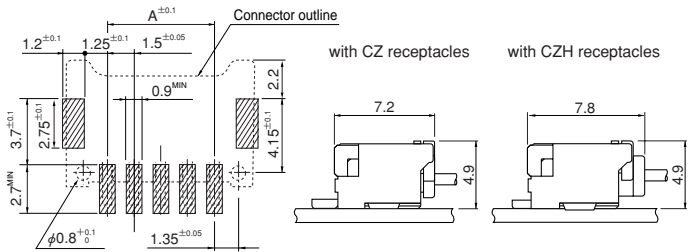
# CZ FAMILY SERIES / CZ · CZW · CZH · CZHW · TZ · TZW

## <CZ connector SMT type>

### Top entry type

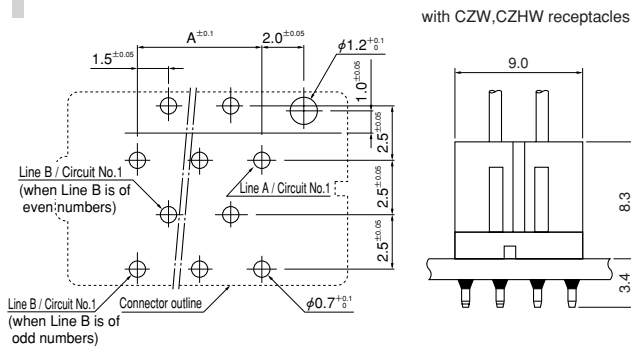


### Side entry type

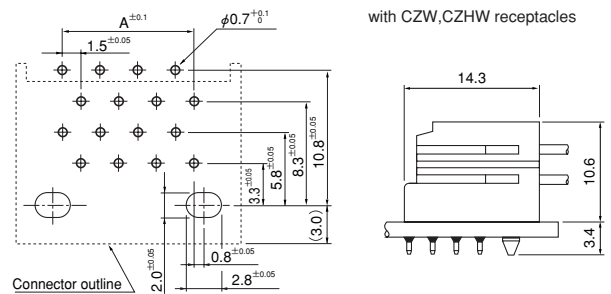


## <CZW connector through-hole type>

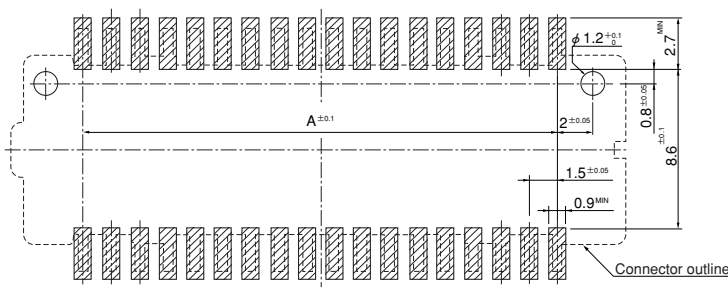
### Top entry type



### Side entry type



## <CZW connector SMT type>

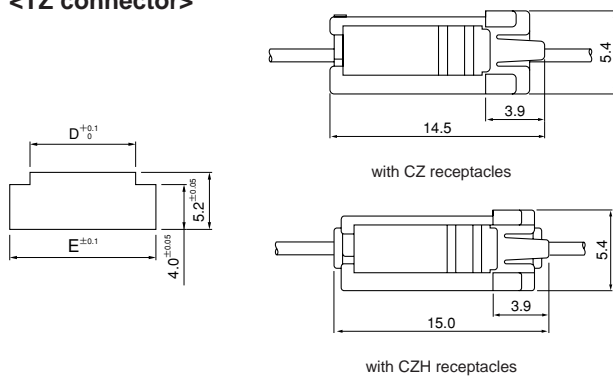


with CZHW receptacles

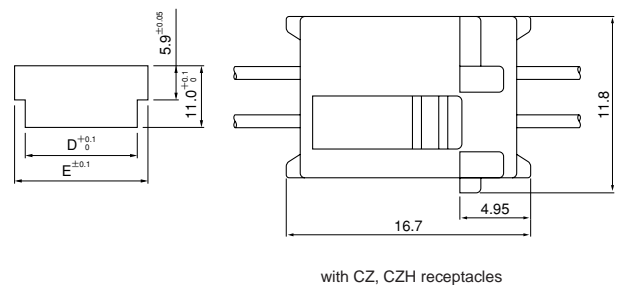
Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.

2. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.

## <TZ connector>



## <TZW connector>

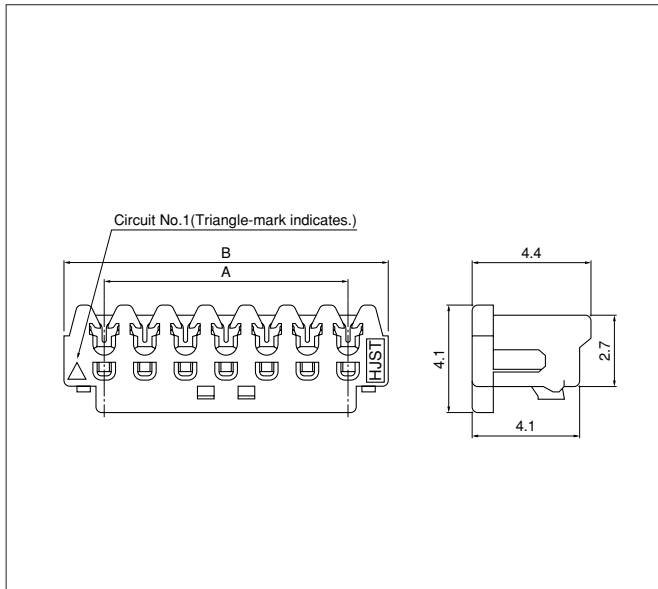


D,E dimensions: Refer to TZ connector (Until for wire-to-wire connection).

D,E dimensions: Refer to TZ connector (Dual-row until for wire-to-wire connection).

# CZ FAMILY SERIES / CZ · CZW · CZH · CZHW · TZ · TZW

## CZ connector receptacle



Circuits	Model No.		Dimensions (mm)		Q'ty / box
	Gray	Yellow	A	B	
2	<b>02CZ-6H</b>	<b>02CZ-6Y</b>	1.5	4.5	2,000
3	<b>03CZ-6H</b>	<b>03CZ-6Y</b>	3.0	6.0	2,000
4	<b>04CZ-6H</b>	<b>04CZ-6Y</b>	4.5	7.5	2,000
5	<b>05CZ-6H</b>	<b>05CZ-6Y</b>	6.0	9.0	2,000
6	<b>06CZ-6H</b>	<b>06CZ-6Y</b>	7.5	10.5	2,000
7	<b>07CZ-6H</b>	<b>07CZ-6Y</b>	9.0	12.0	2,000
8	<b>08CZ-6H</b>	<b>08CZ-6Y</b>	10.5	13.5	2,000
9	<b>09CZ-6H</b>	<b>09CZ-6Y</b>	12.0	15.0	1,000
10	<b>10CZ-6H</b>	<b>10CZ-6Y</b>	13.5	16.5	1,000
11	<b>11CZ-6H</b>	<b>11CZ-6Y</b>	15.0	18.0	1,000
12	<b>12CZ-6H</b>	<b>12CZ-6Y</b>	16.5	19.5	1,000
13	<b>13CZ-6H</b>	<b>13CZ-6Y</b>	18.0	21.0	1,000
14	<b>14CZ-6H</b>	<b>14CZ-6Y</b>	19.5	22.5	1,000
15	<b>15CZ-6H</b>	<b>15CZ-6Y</b>	21.0	24.0	1,000
16	<b>16CZ-6H</b>	<b>16CZ-6Y</b>	22.5	25.5	1,000
17	<b>17CZ-6H</b>	<b>17CZ-6Y</b>	24.0	27.0	1,000
18	<b>18CZ-6H</b>	<b>18CZ-6Y</b>	25.5	28.5	1,000
19	<b>19CZ-6H</b>	<b>19CZ-6Y</b>	27.0	30.0	1,000
20	<b>20CZ-6H</b>	<b>20CZ-6Y</b>	28.5	31.5	1,000

### Material and Finish

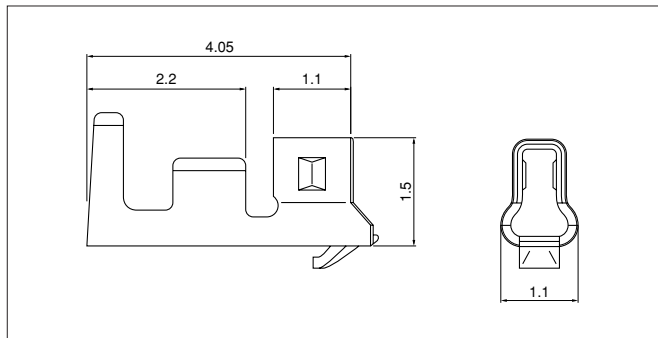
Contact: Phosphor bronze, tin-plated (reflow treatment)  
Housing: Glass-filled PA 66, UL94V-0

### RoHS compliance

<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. **02CZ-6H**  
Y...yellow H...natural (grayish color)

## CZH connector Contact



Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty / reel
	mm <sup>2</sup>	AWG #		
<b>SCZH-002T-P0.5</b>	0.08~0.13	28~26	0.8~1.1	13,000

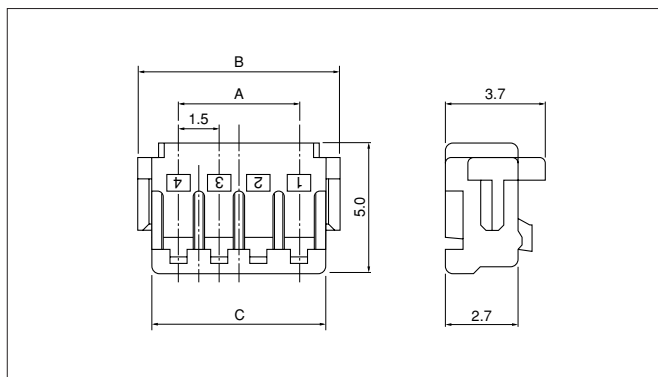
### Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

### RoHS compliance

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SCZH-002T-P0.5</b>	AP-K2N	MKS-L	MK/SCZH-002-05	APLMK SCZH002-05

## CZH connector Housing



### RoHS compliance

<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. **CZHR-02V-S**  
S...natural (white)  
K...black H...gray Y...yellow

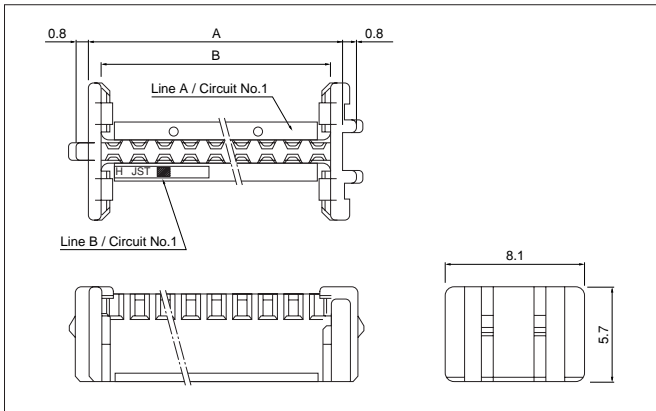
Circuits	Model No.	Dimensions (mm)			Q'ty / box
		A	B	C	
2	<b>CZHR-02V-S</b>	1.5	4.5	3.5	1,000
3	<b>CZHR-03V-S</b>	3.0	6.0	5.0	1,000
4	<b>CZHR-04V-S</b>	4.5	7.5	6.5	1,000
5	<b>CZHR-05V-S</b>	6.0	9.0	8.0	1,000
6	<b>CZHR-06V-S</b>	7.5	10.5	9.5	1,000
7	<b>CZHR-07V-S</b>	9.0	12.0	11.0	1,000
8	<b>CZHR-08V-S</b>	10.5	13.5	12.5	1,000
9	<b>CZHR-09V-S</b>	12.0	15.0	14.0	1,000
10	<b>CZHR-10V-S</b>	13.5	16.5	15.5	1,000
11	<b>CZHR-11V-S</b>	15.0	18.0	17.0	1,000
12	<b>CZHR-12V-S</b>	16.5	19.5	18.5	1,000
13	<b>CZHR-13V-S</b>	18.0	21.0	20.0	1,000
14	<b>CZHR-14V-S</b>	19.5	22.5	21.5	1,000
15	<b>CZHR-15V-S</b>	21.0	24.0	23.0	1,000
16	<b>CZHR-16V-S</b>	22.5	25.5	24.5	1,000
17	<b>CZHR-17V-S</b>	24.0	27.0	26.0	1,000
19	<b>CZHR-19V-S</b>	27.0	30.0	29.0	1,000
20	<b>CZHR-20V-S</b>	28.5	31.5	30.5	1,000

### Material

PBT, UL94V-0, natural (white)

# CZ FAMILY SERIES / CZ · CZW · CZH · CZHW · TZ · TZW

## CZW connector holder

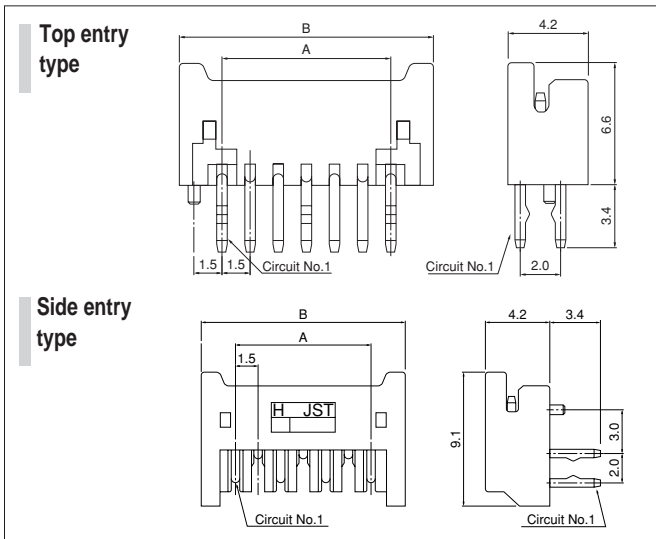


Circuits	Model No.	Dimensions (mm)		Q'ty / box
		A	B	
16	<b>CZWH-16-S</b>	14.9	13.5	1,000
18	<b>CZWH-18-S</b>	16.4	15.0	1,000
20	<b>CZWH-20-S</b>	17.9	16.5	1,000
22	<b>CZWH-22-S</b>	19.4	18.0	1,000
24	<b>CZWH-24-S</b>	20.9	19.5	1,000
26	<b>CZWH-26-S</b>	22.4	21.0	1,000
28	<b>CZWH-28-S</b>	23.9	22.5	1,000
30	<b>CZWH-30-S</b>	25.4	24.0	1,000
32	<b>CZWH-32-S</b>	26.9	25.5	1,000
34	<b>CZWH-34-S</b>	28.4	27.0	1,000
36	<b>CZWH-36-S</b>	29.9	28.5	1,000
38	<b>CZWH-38-S</b>	31.4	30.0	1,000
40	<b>CZWH-40-S</b>	32.9	31.5	1,000

Material  
PBT, UL94V-0, natural (white)

RoHS compliance

## CZ connector through-hole type shrouded header



Circuits	Model No.		Dimensions (mm)		Q'ty / box	
	Top entry type	Side entry type	A	B	Top entry type	Side entry type
2	<b>B02B-CZHK-B-1</b>	<b>S02B-CZHK-B-1</b>	1.5	6.0	2,072	1,480
3	<b>B03B-CZHK-B-1</b>	<b>S03B-CZHK-B-1</b>	3.0	7.5	1,624	1,160
4	<b>B04B-CZHK-B-1</b>	<b>S04B-CZHK-B-1</b>	4.5	9.0	1,344	960
5	<b>B05B-CZHK-B-1</b>	<b>S05B-CZHK-B-1</b>	6.0	10.5	1,176	840
6	<b>B06B-CZHK-B-1</b>	<b>S06B-CZHK-B-1</b>	7.5	12.0	1,008	720
7	<b>B07B-CZHK-B-1</b>	<b>S07B-CZHK-B-1</b>	9.0	13.5	896	640
8	<b>B08B-CZHK-B-1</b>	<b>S08B-CZHK-B-1</b>	10.5	15.0	784	560
9	<b>B09B-CZHK-B-1</b>	<b>S09B-CZHK-B-1</b>	12.0	16.5	728	520
10	<b>B10B-CZHK-B-1</b>	<b>S10B-CZHK-B-1</b>	13.5	18.0	672	480
11	<b>B11B-CZHK-B-1</b>	<b>S11B-CZHK-B-1</b>	15.0	19.5	616	440
12	<b>B12B-CZHK-B-1</b>	<b>S12B-CZHK-B-1</b>	16.5	21.0	560	400
13	<b>B13B-CZHK-B-1</b>	<b>S13B-CZHK-B-1</b>	18.0	22.5	504	360
14	<b>B14B-CZHK-B-1</b>	<b>S14B-CZHK-B-1</b>	19.5	24.0	504	360
15	<b>B15B-CZHK-B-1</b>	<b>S15B-CZHK-B-1</b>	21.0	25.5	448	320
16	<b>B16B-CZHK-B-1</b>	<b>S16B-CZHK-B-1</b>	22.5	27.0	448	320
17	<b>B17B-CZHK-B-1</b>	<b>S17B-CZHK-B-1</b>	24.0	28.5	392	280
18	<b>B18B-CZHK-B-1</b>	<b>S18B-CZHK-B-1</b>	25.5	30.0	392	280
19	<b>B19B-CZHK-B-1</b>	<b>S19B-CZHK-B-1</b>	27.0	31.5	392	280
20	<b>B20B-CZHK-B-1</b>	<b>S20B-CZHK-B-1</b>	28.5	33.0	336	240

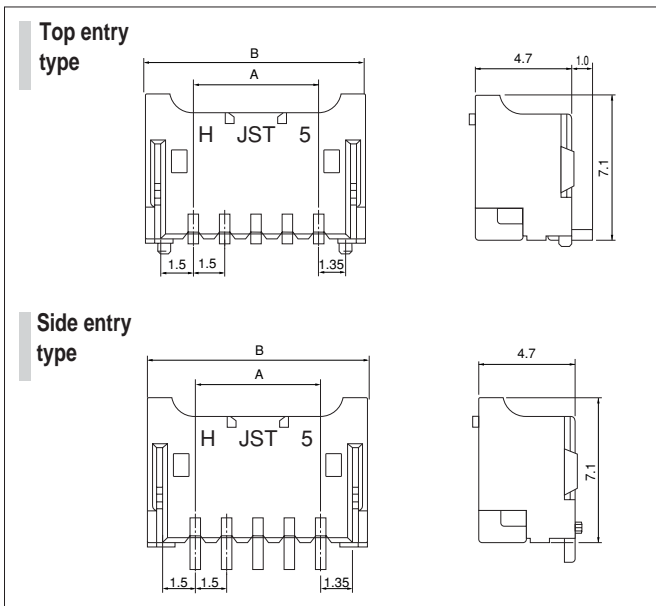
Material and Finish

Pin: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
Wafer: Glass-filled PA 66, UL94V-0, natural (grayish color)  
Note: Models B( )B-CZHK-B are the headers without the boss.  
Note: Models S( )B-CZHK-B are the headers without the boss.

RoHS compliance This product displays (LF)(SN) on a label.

<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.  
ex. **B02B-CZHK-B-1** H...natural (grayish color) Y...yellow K...black

## CZ connector SMT type shrouded header



Circuits	Model No.		Dimensions (mm)		Q'ty / box	
	Top entry type	Side entry type	A	B	Top entry type	Side entry type
2	<b>BM02B-CZSS-1-TF</b>	<b>SM02B-CZSS-1-TB</b>	1.5	6.0	800	1,250
4	<b>BM04B-CZSS-1-TF</b>	<b>SM04B-CZSS-1-TB</b>	4.5	9.0	800	1,250
5	<b>BM05B-CZSS-1-TF</b>	<b>SM05B-CZSS-1-TB</b>	6.0	10.5	800	1,250
6	<b>BM06B-CZSS-1-TF</b>	—	7.5	12.0	800	—
8	<b>BM08B-CZSS-1-TF</b>	—	10.5	15.0	800	—
10	<b>BM10B-CZSS-1-TF</b>	<b>SM10B-CZSS-1-TB</b>	13.5	18.0	800	1,250
13	<b>BM13B-CZSS-1-TF</b>	<b>SM13B-CZSS-1-TB</b>	18.0	22.5	800	1,250
14	<b>BM14B-CZSS-1-TF</b>	—	19.5	24.0	800	—
15	<b>BM15B-CZSS-1-TF</b>	—	21.0	25.5	800	—
16	<b>BM16B-CZSS-1-TF</b>	<b>SM16B-CZSS-1-TB</b>	22.5	27.0	800	1,250
17	<b>BM17B-CZSS-1-TF</b>	—	24.0	28.5	800	—
20	<b>BM20B-CZSS-1-TF</b>	—	28.5	33.0	800	—

Material and Finish

Pin: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
Wafer: PA, UL94V-0, natural (ivory)  
Solder tab: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
Note: Models BM( )B-CZSS-TF are the headers without the boss.  
Note: Models SM( )B-CZSS-TF are the headers without the boss.

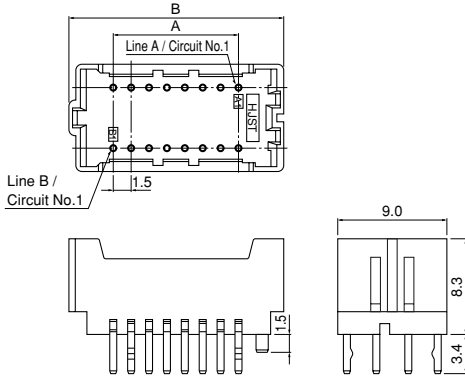
RoHS compliance This product displays (LF)(SN) on a label.

<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.  
ex. **B02B-CZSS-1-TF** S...natural (ivory) H...gray

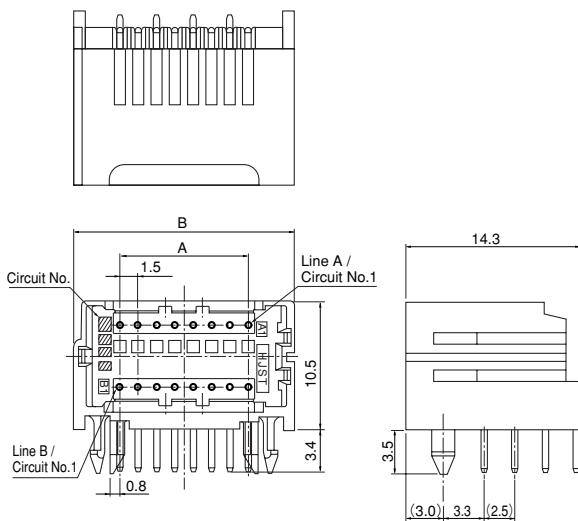
# CZ FAMILY SERIES / CZ · CZW · CZH · CZHW · TZ · TZW

## CZW connector through-hole type shrouded header

### Top entry type



### Side entry type



Circuits	Model No.		Dimensions (mm)		Q'ty / box	
	Top entry type	Side entry type	A	B	Top entry type	Side entry type
16	<b>B16B-CZW<del>H</del>K-B-1</b>	—	10.5	18.0	420	—
18	<b>B18B-CZW<del>H</del>K-B-1</b>	—	12.0	19.5	385	—
20	<b>B20B-CZW<del>H</del>K-B-1</b>	<b>S20B-CZW<del>H</del>S-B-1</b>	13.5	21.0	350	280
22	<b>B22B-CZW<del>H</del>K-B-1</b>	—	15.0	22.5	315	—
24	<b>B24B-CZW<del>H</del>K-B-1</b>	—	16.5	24.0	315	—
26	<b>B26B-CZW<del>H</del>K-B-1</b>	<b>S26B-CZW<del>H</del>S-B-1</b>	18.0	25.5	280	224
28	<b>B28B-CZW<del>H</del>K-B-1</b>	—	19.5	27.0	280	—
30	<b>B30B-CZW<del>H</del>K-B-1</b>	—	21.0	28.5	245	—
32	<b>B32B-CZW<del>H</del>K-B-1</b>	—	22.5	30.0	245	—
34	<b>B34B-CZW<del>H</del>K-B-1</b>	—	24.0	31.5	245	—
36	<b>B36B-CZW<del>H</del>K-B-1</b>	—	25.5	33.0	210	—
38	<b>B38B-CZW<del>H</del>K-B-1</b>	—	27.0	34.5	210	—
40	<b>B40B-CZW<del>H</del>K-B-1</b>	<b>S40B-CZW<del>H</del>S-B-1</b>	28.5	36.0	210	168

#### Material and Finish

Pin: Copper alloy, copper-undercoated, tin-plated (reflow treatment)

Wafer: Glass-filled PA 66, UL94V-0, natural (grayish color)

Note: Models B( )B-CZW~~H~~K-B are the headers without the boss.

**RoHS compliance** This product displays (LF)(SN) on a label.

<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

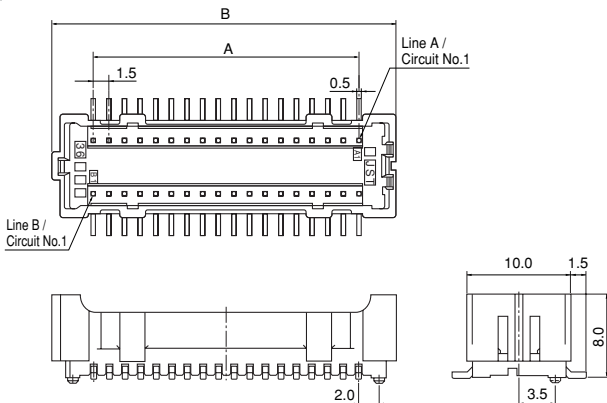
ex. **B16B-CZW~~H~~K-B-1**

H...natural (grayish color)

Y...yellow

## CZW connector SMT type shrouded header

### Top entry type



Circuits	Model No.	Dimensions (mm)		Q'ty / box
		A	B	
36	<b>BM36B-CZW<del>S</del>SS-1-TF</b>	25.5	33.0	300
40	<b>BM40B-CZW<del>S</del>SS-1-TF</b>	28.5	36.0	300

#### Material and Finish

Press pin: Copper alloy, copper-undercoated, tin-plated (reflow treatment)

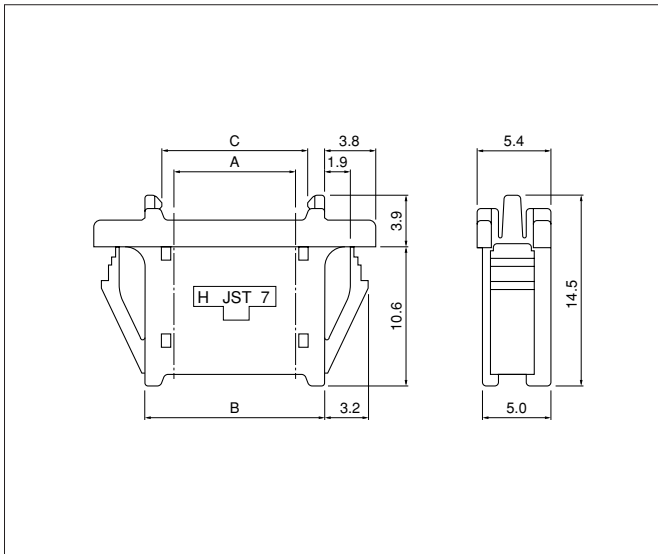
Wafer: PA, UL94V-0, natural (ivory)

Note: Models BM( )B-CZW~~S~~SS-TF are the headers without the boss.

**RoHS compliance** This product displays (LF)(SN) on a label.

# CZ FAMILY SERIES / CZ · CZW · CZH · CZHW · TZ · TZW

## TZ connector (Unit for wire-to-wire connection)



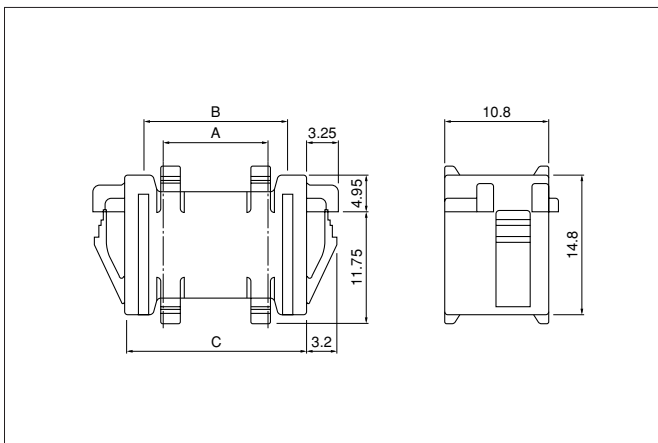
Circuits	Model No.	Dimensions (mm)					Qty / box
		A	B	C	D	E	
2	BU02P-TZ-S	1.5	5.9	3.5	6.3	9.9	500
3	BU03P-TZ-S	3.0	7.4	5.0	7.8	11.4	500
4	BU04P-TZ-S	4.5	8.9	6.5	9.3	12.9	500
5	BU05P-TZ-S	6.0	10.4	8.0	10.8	14.4	500
6	BU06P-TZ-S	7.5	11.9	9.5	12.3	15.9	250
7	BU07P-TZ-S	9.0	13.4	11.0	13.8	17.4	250
8	BU08P-TZ-S	10.5	14.9	12.5	15.3	18.9	250
9	BU09P-TZ-S	12.0	16.4	14.0	16.8	20.4	250
10	BU10P-TZ-S	13.5	17.9	15.5	18.3	21.9	250
11	BU11P-TZ-S	15.0	19.4	17.0	19.8	23.4	250
12	BU12P-TZ-S	16.5	20.9	18.5	21.3	24.9	250
13	BU13P-TZ-S	18.0	22.4	20.0	22.8	26.4	250
14	BU14P-TZ-S	19.5	23.9	21.5	24.3	27.9	250
15	BU15P-TZ-S	21.0	25.4	23.0	25.8	29.4	250
16	BU16P-TZ-S	22.5	26.9	24.5	27.3	30.9	250
17	BU17P-TZ-S	24.0	28.4	26.0	28.8	32.4	250
18	BU18P-TZ-S	25.5	29.9	27.5	30.3	33.9	150
19	BU19P-TZ-S	27.0	31.4	29.0	31.8	35.4	150
20	BU20P-TZ-S	28.5	32.9	30.5	33.3	36.9	100

### Material and Finish

Pin: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
Housing: PA 66, UL94V-0, natural (white)

**RoHS compliance** This product displays (LF)(SN) on a label.

## TZW connector (Dual-row unit for wire-to-wire connection)

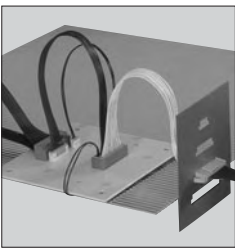


Circuits	Model No.	Dimensions (mm)					Qty / box
		A	B	C	D	E	
16	BU16P-TZW-S	10.5	15.0	19.0	19.4	23.0	160
18	BU18P-TZW-S	12.0	16.5	20.5	20.9	24.5	140
20	BU20P-TZW-S	13.5	18.0	22.0	22.4	26.0	140
22	BU22P-TZW-S	15.0	19.5	23.5	23.9	27.5	140
24	BU24P-TZW-S	16.5	21.0	25.0	25.4	29.0	120
26	BU26P-TZW-S	18.0	22.5	26.5	26.9	30.5	120
28	BU28P-TZW-S	19.5	24.0	28.0	28.4	32.0	120
30	BU30P-TZW-S	21.0	25.5	29.5	29.9	33.5	100
32	BU32P-TZW-S	22.5	27.0	31.0	31.4	35.0	100
34	BU34P-TZW-S	24.0	28.5	32.5	32.9	36.5	100
36	BU36P-TZW-S	25.5	30.0	34.0	34.4	38.0	100
38	BU38P-TZW-S	27.0	31.5	35.5	35.9	39.5	100
40	BU40P-TZW-S	28.5	33.0	37.0	37.4	41.0	80

### Material and Finish

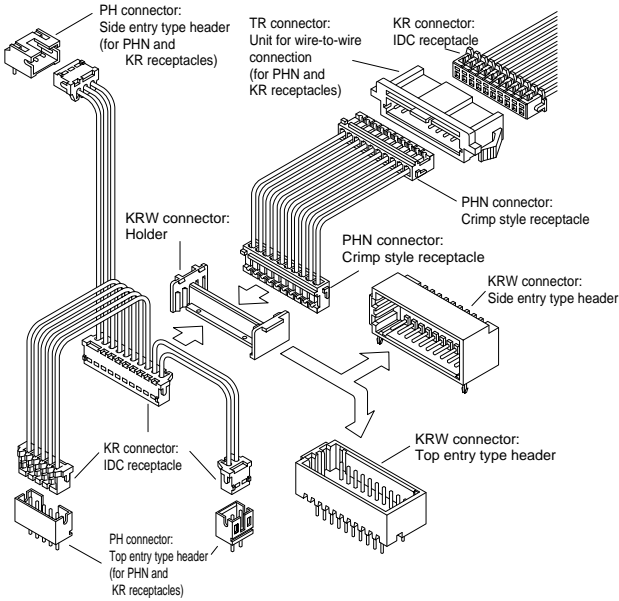
Pin: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
Housing: PA 66, UL94V-0, natural (white)

**RoHS compliance** This product displays (LF)(SN) on a label.



# KR FAMILY SERIES/KRW·KR·PHN·TR CONNECTOR

## 2.0mm pitch/Disconnectable Insulation displacement and Crimp style connectors



- Multi-IDC-harnesses are possible
- Various types of connectors
- Cost reduction
- Two types of circuit layouts

### Specifications

Item	Series	KRW connector	TR · TRW connector
Current rating		1.0A AC,DC (AWG#26)	
Voltage rating		100V AC,DC	
Temperature rise		-25°C to +85°C (including temperature rise)	
Contact resistance		initial/10mΩmax. After environmental testing/20mΩmax.	
Insulation resistance		1,000MΩmin.	
Withstanding voltage		800V AC/minute	
Applicable connector		KR connector, CR connector, PHN connector	
Applicable PC board thickness		1.6mm	—
Applicable panel thickness		—	0.5mm~2.0mm

- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

### Standards

- Ⓜ Recognized E60389
- Ⓢ Certified LR20812
- ⚠ R75087: PH, PHN connectors
- ⚠ R75088: KR connector
- ⚠ R9851222: KRW connector
- ⚠ R9851223: TR connector

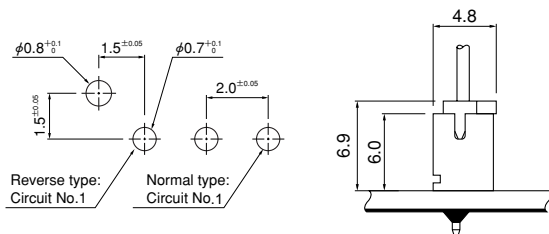
Based upon JST's field proven KR series connectors, the KR series family of connectors have been expanded to meet the requirements of high density packaging. The KRW connector allows double-row wire-to-board connection using either the KR or PHN connectors. Whilst the TR connector allows wire-to-wire connection, also using either the KR or PHN connectors.

### PC board layout and Assembly layout

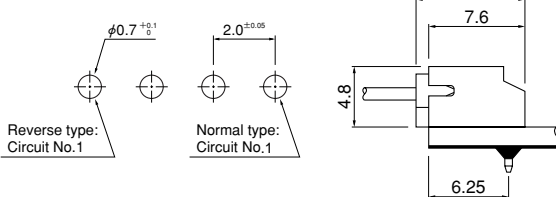
#### Single-row shrouded header

<Through-hole type(viewed from component side)>

##### Top entry type



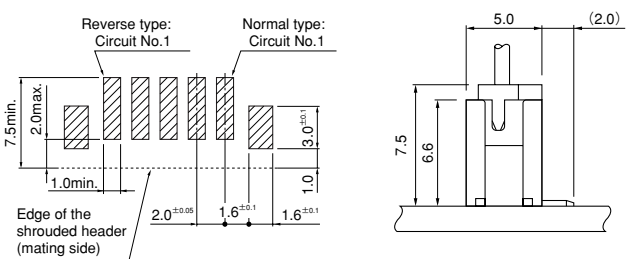
##### Side entry type



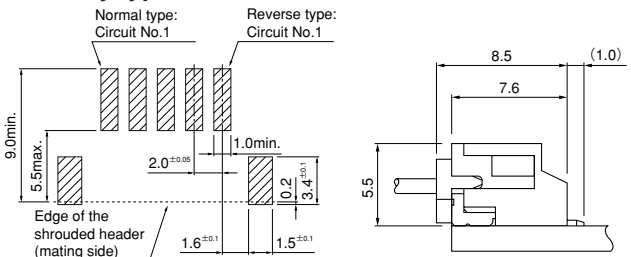
Note: 1. Tolerances are non-cumulative:  $\pm 0.05\text{mm}$  for all centers.  
2. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.

<SMTtype(viewed from soldering side)>

##### Top entry type



##### Side entry type

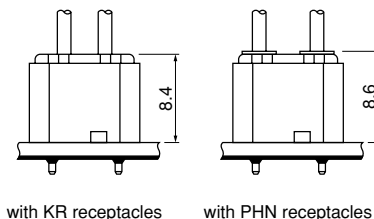
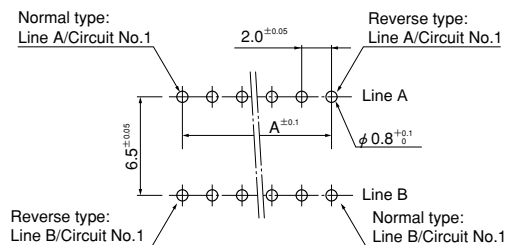


Note: 1. Tolerances are non-cumulative:  $\pm 0.05\text{mm}$  for all centers.  
2. The dimensions above should serve as a guideline. Contact JST for details.

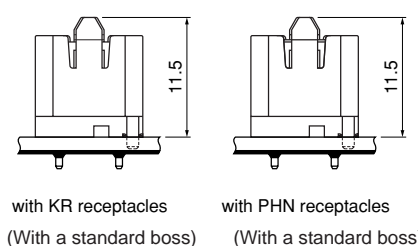
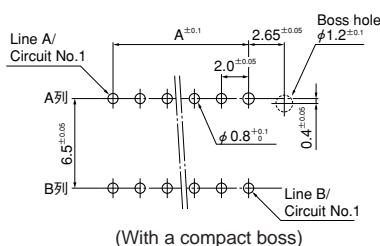
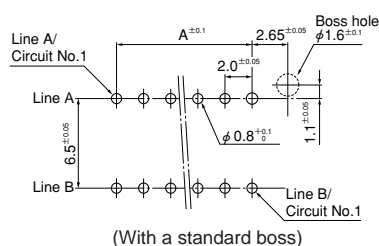
# KR FAMILY SERIES/KRW·KR·PHN·TR CONNECTOR

## Double-row shrouded header (viewed from component side)

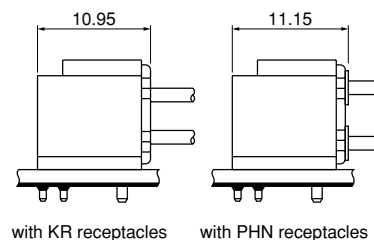
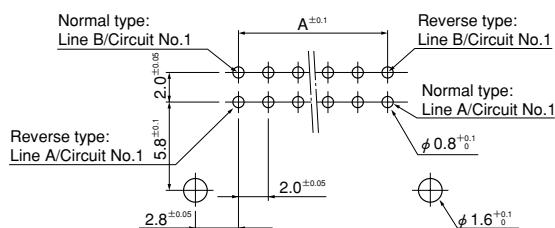
### Top entry type



### With locks



### Side entry type

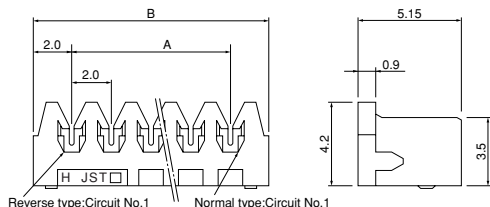


Note: 1. Tolerances are non-cumulative:  $\pm 0.05\text{mm}$  for all centers.

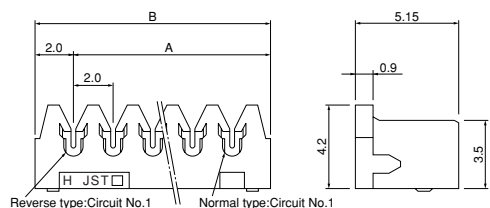
2. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.

## Insulation displacement connector (Receptacle)

### (2 to 12 circuits)



### (13 to 16 circuits)



Circuits	Model No.		Dimensions (mm)		Q'ty / box
	Normal type	Reverse type	A	B	
2	02KR-6H-P	02KR-6H-PC	2.0	6.0	2,000
3	03KR-6H-P	03KR-6H-PC	4.0	8.0	2,000
4	04KR-6H-P	04KR-6H-PC	6.0	10.0	2,000
5	05KR-6H-P	05KR-6H-PC	8.0	12.0	2,000
6	06KR-6H-P	06KR-6H-PC	10.0	14.0	2,000
7	07KR-6H-P	07KR-6H-PC	12.0	16.0	1,000
8	08KR-6H-P	08KR-6H-PC	14.0	18.0	1,000
9	09KR-6H-P	09KR-6H-PC	16.0	20.0	1,000
10	10KR-6H-P	10KR-6H-PC	18.0	22.0	1,000
11	11KR-6H-P	11KR-6H-PC	20.0	24.0	1,000
12	12KR-6H-P	12KR-6H-PC	22.0	26.0	1,000
13	13KR-6H-P	13KR-6H-PC	24.0	28.0	500
14	14KR-6H-P	14KR-6H-PC	26.0	30.0	500
15	15KR-6H-P	15KR-6H-PC	28.0	32.0	500
16	16KR-6H-P	16KR-6H-PC	30.0	34.0	500

#### Material and Finish

Contact: Phosphor bronze, tin-plated (reflow treatment)  
Housing: 2 to 12 circuits...PA 66, UL94V-0, gray  
13 to 16 circuits...Glass-filled PA 66, UL94V-0, gray

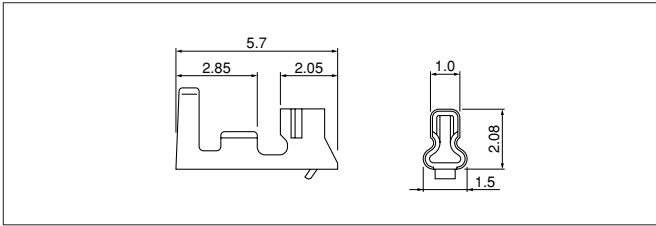
#### Applicable wire

UL1571, 1061 (Contact JST for other UL styles.)  
AWG#28, #26  
Conductor / 7 strands, tin-plated annealed copper  
Insulation O.D. / 0.9 to 1.0mm

RoHS compliance

# KR FAMILY SERIES/KRW·KR·PHN·TR CONNECTOR

## Crimp style connector (Contact)



Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty/reel
	mm <sup>2</sup>	AWG#		
<b>SPH-002T-P0.5L</b>	0.08~0.22	28~24	0.8~1.5	8,000

### Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

### RoHS compliance

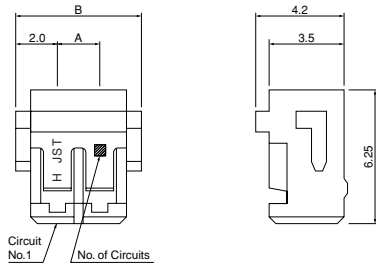
Note: SPH-002T-P0.5S is also available.

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SPH-002T-P0.5L</b>	AP-K2N	MKS-LS · MKS-L	MK/SPH-002-05L	APLMK SPH002-05L
		*MKS-SC	SC/SPH-002-05L	APLSC SPH002-05L

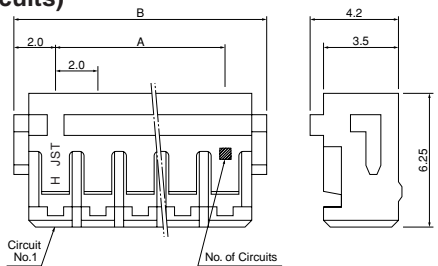
Note: \*Strip-crimp applicator

## Crimp style connector (Housing)

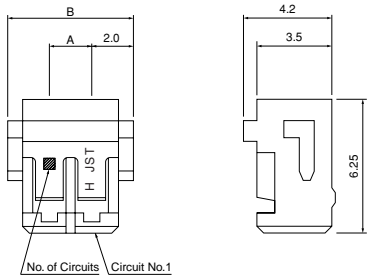
### Normal type (2 circuits)



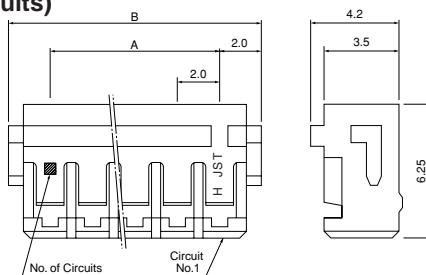
### (3 to 16 circuits)



### Reverse type (2 circuits)



### (3 to 16 circuits)



Circuits	Model No.		Dimensions (mm)		Q'ty / bag
	Normal type	Reverse type	A	B	
2	<b>PHNR-02-H</b>	<b>PHNR-02C-H</b>	2.0	6.0	1,000
3	<b>PHNR-03-H</b>	<b>PHNR-03C-H</b>	4.0	8.0	1,000
4	<b>PHNR-04-H</b>	<b>PHNR-04C-H</b>	6.0	10.0	1,000
5	<b>PHNR-05-H</b>	<b>PHNR-05C-H</b>	8.0	12.0	1,000
6	<b>PHNR-06-H</b>	<b>PHNR-06C-H</b>	10.0	14.0	1,000
7	<b>PHNR-07-H</b>	<b>PHNR-07C-H</b>	12.0	16.0	1,000
8	<b>PHNR-08-H</b>	<b>PHNR-08C-H</b>	14.0	18.0	1,000
9	<b>PHNR-09-H</b>	<b>PHNR-09C-H</b>	16.0	20.0	1,000
10	<b>PHNR-10-H</b>	<b>PHNR-10C-H</b>	18.0	22.0	1,000
11	<b>PHNR-11-H</b>	<b>PHNR-11C-H</b>	20.0	24.0	1,000
12	<b>PHNR-12-H</b>	<b>PHNR-12C-H</b>	22.0	26.0	1,000
13	<b>PHNR-13-H</b>	<b>PHNR-13C-H</b>	24.0	28.0	1,000
14	<b>PHNR-14-H</b>	<b>PHNR-14C-H</b>	26.0	30.0	1,000
15	<b>PHNR-15-H</b>	<b>PHNR-15C-H</b>	28.0	32.0	1,000
16	<b>PHNR-16-H</b>	<b>PHNR-16C-H</b>	30.0	34.0	1,000

### Material

PA 66, UL94V-0, gray

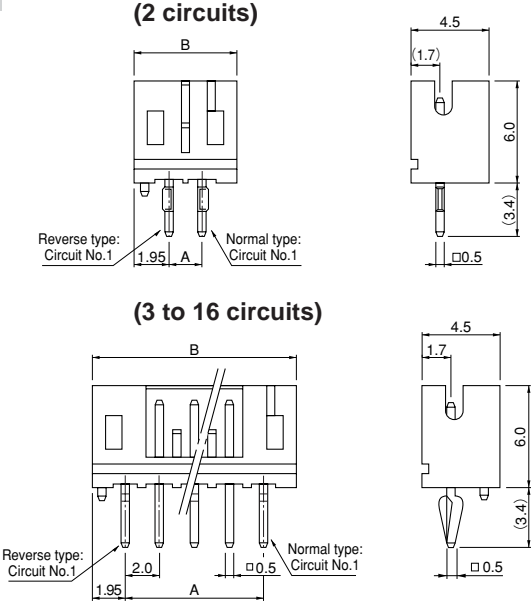
### RoHS compliance



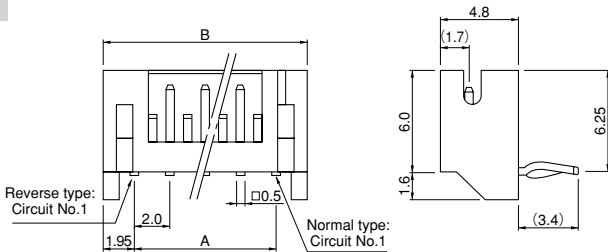
# KR FAMILY SERIES/KRW·KR·PHN·TR CONNECTOR

## Single-row shrouded header (Through-hole type)

### Top entry type



### Side entry type



Circuits	Normal type Model No.		Dimensions( mm)		Q'ty / box	
	Top entry type (with a boss)	Side entry type	A	B	Top entry type (with a boss)	Side entry type
2	B2B-PH-KBL-H	S2B-PH-KL	2.0	5.9	1,000	1,000
3	B3B-PH-KBL-H	S3B-PH-KL	4.0	7.9	1,000	1,000
4	B4B-PH-KBL-H	S4B-PH-KL	6.0	9.9	1,000	500
5	B5B-PH-KBL-H	S5B-PH-KL	8.0	11.9	1,000	500
6	B6B-PH-KBL-H	S6B-PH-KL	10.0	13.9	1,000	500
7	B7B-PH-KBL-H	S7B-PH-KL	12.0	15.9	500	500
8	B8B-PH-KBL-H	S8B-PH-KL	14.0	17.9	500	250
9	B9B-PH-KBL-H	S9B-PH-KL	16.0	19.9	500	250
10	B10B-PH-KBL-H	S10B-PH-KL	18.0	21.9	500	250
11	B11B-PH-KBL-H	S11B-PH-KL	20.0	23.9	500	250
12	B12B-PH-KBL-H	S12B-PH-KL	22.0	25.9	500	250
13	B13B-PH-KBL-H	S13B-PH-KL	24.0	27.9	250	250
14	B14B-PH-KBL-H	S14B-PH-KL	26.0	29.9	250	200
15	B15B-PH-KBL-H	S15B-PH-KL	28.0	31.9	250	200
16	B16B-PH-KBL-H	S16B-PH-KL	30.0	33.9	250	200

Circuits	Reverse type Model No.		Dimensions( mm)		Q'ty / box	
	Top entry type (with a boss)	Side entry type	A	B	Top entry type (with a boss)	Side entry type
2	B2B-PH-KBLC-H	S2B-PH-KLC-H	2.0	5.9	1,000	1,000
3	B3B-PH-KBLC-H	S3B-PH-KLC-H	4.0	7.9	1,000	1,000
4	B4B-PH-KBLC-H	S4B-PH-KLC-H	6.0	9.9	1,000	500
5	B5B-PH-KBLC-H	S5B-PH-KLC-H	8.0	11.9	1,000	500
6	B6B-PH-KBLC-H	S6B-PH-KLC-H	10.0	13.9	1,000	500
7	B7B-PH-KBLC-H	S7B-PH-KLC-H	12.0	15.9	500	500
8	B8B-PH-KBLC-H	S8B-PH-KLC-H	14.0	17.9	500	250
9	B9B-PH-KBLC-H	S9B-PH-KLC-H	16.0	19.9	500	250
10	B10B-PH-KBLC-H	S10B-PH-KLC-H	18.0	21.9	500	250
11	B11B-PH-KBLC-H	S11B-PH-KLC-H	20.0	23.9	500	250
12	B12B-PH-KBLC-H	S12B-PH-KLC-H	22.0	25.9	500	250
13	B13B-PH-KBLC-H	S13B-PH-KLC-H	24.0	27.9	250	250
14	B14B-PH-KBLC-H	S14B-PH-KLC-H	26.0	29.9	250	200
15	B15B-PH-KBLC-H	S15B-PH-KLC-H	28.0	31.9	250	200
16	B16B-PH-KBLC-H	S16B-PH-KLC-H	30.0	33.9	250	200

#### Material and Finish

Post: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
Wafer: PA 66, UL94V-0, gray

**RoHS compliance** This product displays (LF)(SN) on a label.  
Note: Top entry type headers without a boss are also available.

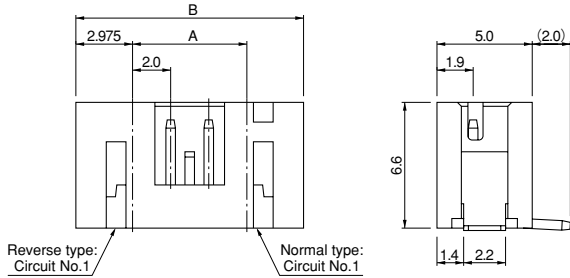
<For reference> As the color identification, the following alphabet shall be put in the underlined part.  
For availability, delivery and minimum order quantity, contact JST.

ex. **B2B-PH-KBLC-H**  
H...gray S...white Y...yellow R...red N...brown  
K...black (blank)...gray (normal side entry type only)

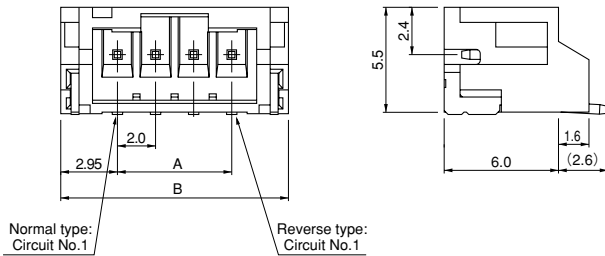
# KR FAMILY SERIES/KRW·KR·PHN·TR CONNECTOR

## Single-row shrouded header (SMT type)

### Top entry type



### Side entry type



Circuits	Normal type Model No.		Dimensions (mm)			Q'ty / reel
	Top entry type	Side entry type	A	B		
				Top entry type	Side entry type	
2	B2B-PH-SM4-TB	S2B-PH-SM4-TB	2.0	7.95	7.9	1,000
3	B3B-PH-SM4-TB	S3B-PH-SM4-TB	4.0	9.95	9.9	1,000
4	B4B-PH-SM4-TB	S4B-PH-SM4-TB	6.0	11.95	11.9	1,000
5	B5B-PH-SM4-TB	S5B-PH-SM4-TB	8.0	13.95	13.9	1,000
6	B6B-PH-SM4-TB	S6B-PH-SM4-TB	10.0	15.95	15.9	1,000
7	B7B-PH-SM4-TB	S7B-PH-SM4-TB	12.0	17.95	17.9	1,000
8	B8B-PH-SM4-TB	S8B-PH-SM4-TB	14.0	19.95	19.9	1,000
9	B9B-PH-SM4-TB	S9B-PH-SM4-TB	16.0	21.95	21.9	1,000
10	B10B-PH-SM4-TB	S10B-PH-SM4-TB	18.0	23.95	23.9	1,000
11	B11B-PH-SM4-TB	S11B-PH-SM4-TB	20.0	25.95	25.9	1,000
12	B12B-PH-SM4-TB	S12B-PH-SM4-TB	22.0	27.95	27.9	1,000
13	B13B-PH-SM4-TB	S13B-PH-SM4-TB	24.0	29.95	29.9	1,000
14	B14B-PH-SM4-TB	S14B-PH-SM4-TB	26.0	31.95	31.9	1,000
15	B15B-PH-SM4-TB	S15B-PH-SM4-TB	28.0	33.95	33.9	1,000
16	B16B-PH-SM4-TB	—	30.0	35.95	—	1,000

#### Material and Finish

Post: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
 Wafer: PA 6T, UL94V-0, natural (ivory)  
 Solder tab: Brass, copper-undercoated, tin-plated (reflow treatment)

**RoHS compliance** This product displays (LF)(SN) on a label.  
 Note: Top entry type headers with suction tape are also available.

Circuits	Reverse type Model No.		Dimensions (mm)		Q'ty / reel
	Top entry type	Side entry type	A	B	
2	B2B-PH-SM4C-TB	S2B-PH-SM4C-TB	2.0	7.9	1,000
3	B3B-PH-SM4C-TB	S3B-PH-SM4C-TB	4.0	9.9	1,000
4	B4B-PH-SM4C-TB	S4B-PH-SM4C-TB	6.0	11.9	1,000
5	B5B-PH-SM4C-TB	S5B-PH-SM4C-TB	8.0	13.9	1,000
6	B6B-PH-SM4C-TB	S6B-PH-SM4C-TB	10.0	15.9	1,000
7	B7B-PH-SM4C-TB	S7B-PH-SM4C-TB	12.0	17.9	1,000
8	B8B-PH-SM4C-TB	S8B-PH-SM4C-TB	14.0	19.9	1,000
9	B9B-PH-SM4C-TB	S9B-PH-SM4C-TB	16.0	21.9	1,000
10	B10B-PH-SM4C-TB	S10B-PH-SM4C-TB	18.0	23.9	1,000
11	B11B-PH-SM4C-TB	S11B-PH-SM4C-TB	20.0	25.9	1,000
12	B12B-PH-SM4C-TB	S12B-PH-SM4C-TB	22.0	27.9	1,000
13	B13B-PH-SM4C-TB	S13B-PH-SM4C-TB	24.0	29.9	1,000
14	B14B-PH-SM4C-TB	S14B-PH-SM4C-TB	26.0	31.9	1,000
15	B15B-PH-SM4C-TB	S15B-PH-SM4C-TB	28.0	33.9	1,000
16	B16B-PH-SM4C-TB	—	30.0	35.9	1,000

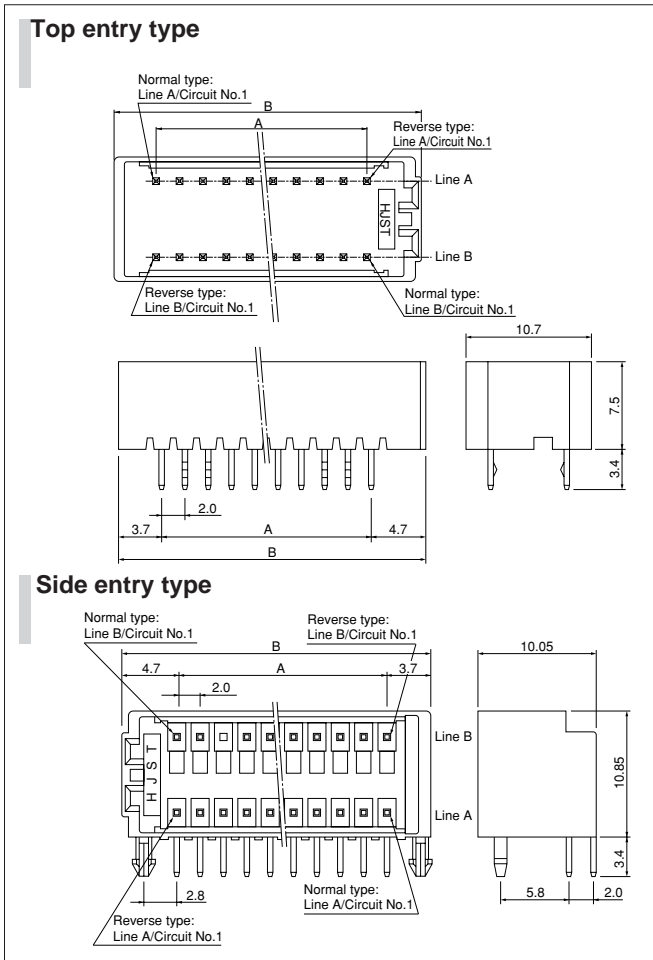
#### Material and Finish

Post: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
 Wafer: PA 6T, UL94V-0, natural (ivory)  
 Solder tab: Brass, copper-undercoated, tin-plated (reflow treatment)

**RoHS compliance** This product displays (LF)(SN) on a label.

# KR FAMILY SERIES/KRW·KR·PHN·TR CONNECTOR

## Double-row shrouded Header



Circuits	Model No.				Dimensions (mm)		Q'ty / box	
	Normal type		Reverse type		A	B	Top entry type	Side entry type
	Top entry type	Side entry type	Top entry type	Side entry type				
10	B10B-KRWHK	—	B10B-KRWHK-C	—	8.0	16.4	416	—
12	B12B-KRWHK	—	B12B-KRWHK-C	—	10.0	18.4	384	—
14	B14B-KRWHK	—	B14B-KRWHK-C	—	12.0	20.4	352	—
16	B16B-KRWHK	S16B-KRWHS	B16B-KRWHK-C	S16B-KRWHS-C	14.0	22.4	320	280
18	B18B-KRWHK	S18B-KRWHS	B18B-KRWHK-C	S18B-KRWHS-C	16.0	24.4	288	252
20	B20B-KRWHK	S20B-KRWHS	B20B-KRWHK-C	S20B-KRWHS-C	18.0	26.4	256	224
22	B22B-KRWHK	S22B-KRWHS	B22B-KRWHK-C	S22B-KRWHS-C	20.0	28.4	224	196
24	B24B-KRWHK	S24B-KRWHS	B24B-KRWHK-C	S24B-KRWHS-C	22.0	30.4	224	196
26	B26B-KRWHK	S26B-KRWHS	B26B-KRWHK-C	S26B-KRWHS-C	24.0	32.4	192	168
28	B28B-KRWHK	S28B-KRWHS	B28B-KRWHK-C	S28B-KRWHS-C	26.0	34.4	192	168
30	B30B-KRWHK	S30B-KRWHS	B30B-KRWHK-C	S30B-KRWHS-C	28.0	36.4	192	168
32	B32B-KRWHK	S32B-KRWHS	B32B-KRWHK-C	S32B-KRWHS-C	30.0	38.4	160	140

### Material and Finish

Post: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
Wafer: PA 66, UL94V-0, gray

**RoHS compliance** This product displays (LF)(SN) on a label.

Note: 1. Top entry type headers with bosses or without clinched tails are also available.

2. The products listed above are supplied packed in tray.

<For reference> As the color identification,

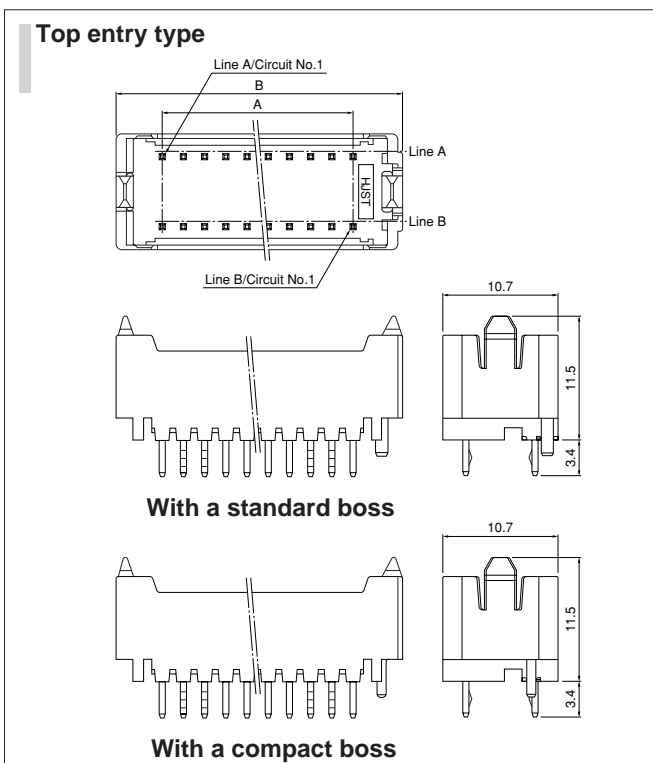
the following alphabet shall be put in the underlined part.

For availability, delivery and minimum order quantity, contact JST.

ex. **B10B-KRWHK(-)**

M...green H...gray N...brown

## Double-row shrouded Header (with locks)



Circuits	Model No.			Dimensions (mm)		Q'ty / box
	Top entry type			A	B	
	Without bosses	With a standard boss	With a compact boss			
10	B10B-KRWHK-F1	B10B-KRWHK-F1-1	B10B-KRWHK-F1-1D	8.0	17.0	364
12	B12B-KRWHK-F1	B12B-KRWHK-F1-1	B12B-KRWHK-F1-1D	10.0	19.0	308
14	B14B-KRWHK-F1	B14B-KRWHK-F1-1	B14B-KRWHK-F1-1D	12.0	21.0	280
16	B16B-KRWHK-F1	B16B-KRWHK-F1-1	B16B-KRWHK-F1-1D	14.0	23.0	252
18	B18B-KRWHK-F1	B18B-KRWHK-F1-1	B18B-KRWHK-F1-1D	16.0	25.0	252
20	B20B-KRWHK-F1	B20B-KRWHK-F1-1	B20B-KRWHK-F1-1D	18.0	27.0	224
22	B22B-KRWHK-F1	B22B-KRWHK-F1-1	B22B-KRWHK-F1-1D	20.0	29.0	196
24	B24B-KRWHK-F1	B24B-KRWHK-F1-1	B24B-KRWHK-F1-1D	22.0	31.0	196
26	B26B-KRWHK-F1	B26B-KRWHK-F1-1	B26B-KRWHK-F1-1D	24.0	33.0	168
28	B28B-KRWHK-F1	B28B-KRWHK-F1-1	B28B-KRWHK-F1-1D	26.0	35.0	168
30	B30B-KRWHK-F1	B30B-KRWHK-F1-1	B30B-KRWHK-F1-1D	28.0	37.0	168
32	B32B-KRWHK-F1	B32B-KRWHK-F1-1	B32B-KRWHK-F1-1D	30.0	39.0	140

### Material and Finish

Post: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
Wafer: PA 66, UL94V-0, gray

**RoHS compliance** This product displays (LF)(SN) on a label.

Note: 1. The products listed above are supplied packed in tray.

2. Not UL/CSA/TÜV approved.

3. The applicable holder is "KRWH(-) (-) (-) -1" only.

<For reference> As the color identification,

the following alphabet shall be put in the underlined part.

For availability, delivery and minimum order quantity, contact JST.

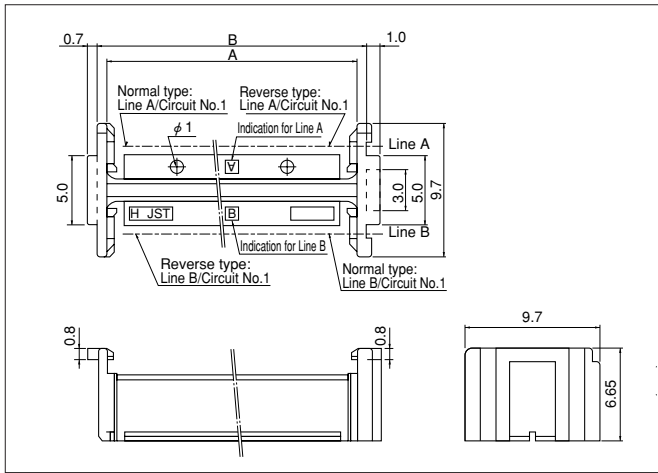
ex. **B10B-KRWHK-F1(-)**

H...gray Y...yellow R...red N...brown

M...green...K...black

# KR FAMILY SERIES/KRW·KR·PHN·TR CONNECTOR

## KRW connector Holder

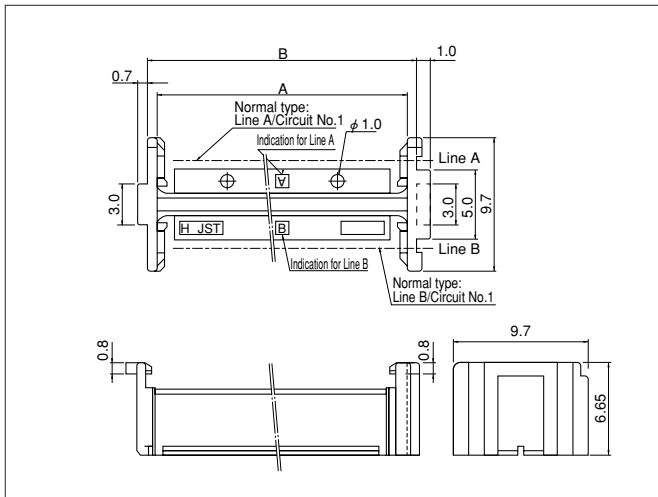


Circuits	Model No.		Dimensions (imm)	
	Normal type	Reverse type	A	B
10	KRWH-10-H	KRWH-10C-H	12.0	13.4
12	KRWH-12-H	KRWH-12C-H	14.0	15.4
14	KRWH-14-H	KRWH-14C-H	16.0	17.4
16	KRWH-16-H	KRWH-16C-H	18.0	19.4
18	KRWH-18-H	KRWH-18C-H	20.0	21.4
20	KRWH-20-H	KRWH-20C-H	22.0	23.4
22	KRWH-22-H	KRWH-22C-H	24.0	25.4
24	KRWH-24-H	KRWH-24C-H	26.0	27.4
26	KRWH-26-H	KRWH-26C-H	28.0	29.4
28	KRWH-28-H	KRWH-28C-H	30.0	31.4
30	KRWH-30-H	KRWH-30C-H	32.0	33.4
32	KRWH-32-H	KRWH-32C-H	34.0	35.4

**Material**  
PA 66, UL94V-0, gray

RoHS compliance

## KRW connector Holder (for header with locks)



Circuits	Model No.	Dimensions (mm)		Q'ty / box
		A	B	
10	KRWH-10-H-1	12.0	13.4	1,000
12	KRWH-12-H-1	14.0	15.4	1,000
14	KRWH-14-H-1	16.0	17.4	1,000
16	KRWH-16-H-1	18.0	19.4	1,000
18	KRWH-18-H-1	20.0	21.4	1,000
20	KRWH-20-H-1	22.0	23.4	1,000
22	KRWH-22-H-1	24.0	25.4	1,000
24	KRWH-24-H-1	26.0	27.4	1,000
26	KRWH-26-H-1	28.0	29.4	1,000
28	KRWH-28-H-1	30.0	31.4	1,000
30	KRWH-30-H-1	32.0	33.4	1,000
32	KRWH-32-H-1	34.0	35.4	1,000

**Material**  
PA 66, UL94V-0, gray

RoHS compliance

Note: 1. Not UL/CSA/TÜV approved.

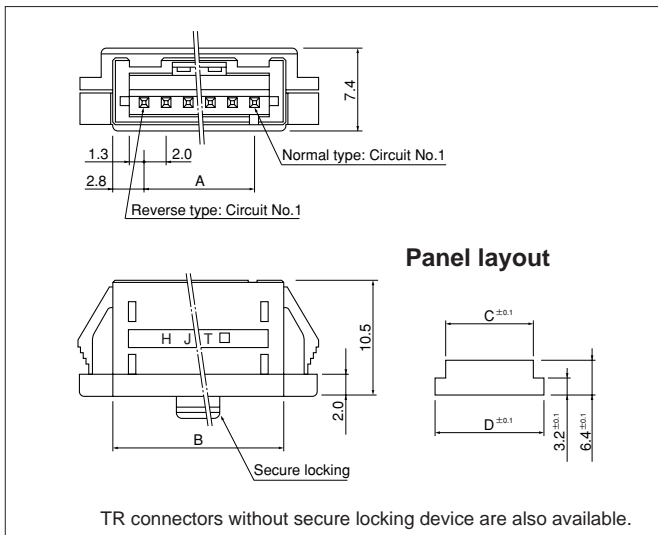
2. The applicable header is "B( )B-KRW( )K-F1-( )" only.

<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. **KRWH-10-H-1**

H...gray Y...yellow R...red N...brown K...black S...natural

## TR connector (Unit for wire-to-wire connection)



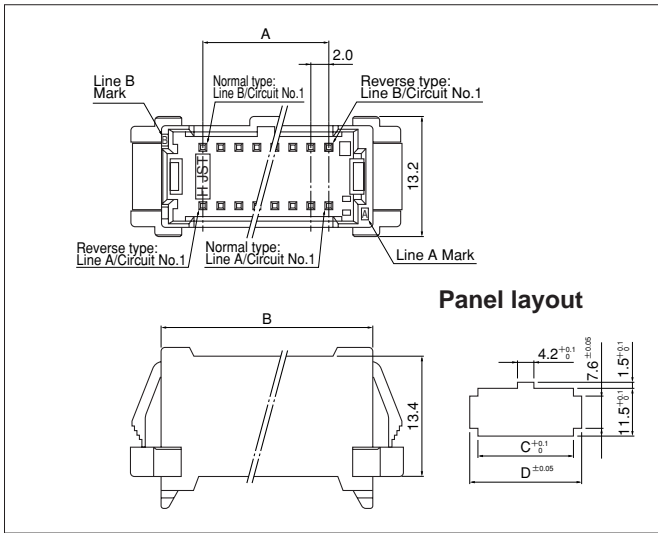
Circuits	Model No.		Dimensions (mm)				Q'ty / box
	Normal type	Reverse type	A	B	C	D	
2	BU02P-TR-P-H	BU02P-TR-PC-H	2.0	7.6	7.9	11.6	500
3	BU03P-TR-P-H	BU03P-TR-PC-H	4.0	9.6	9.9	13.6	500
4	BU04P-TR-P-H	BU04P-TR-PC-H	6.0	11.6	11.9	15.6	500
5	BU05P-TR-P-H	BU05P-TR-PC-H	8.0	13.6	13.9	17.6	250
6	BU06P-TR-P-H	BU06P-TR-PC-H	10.0	15.6	15.9	19.6	250
7	BU07P-TR-P-H	BU07P-TR-PC-H	12.0	17.6	18.0	21.6	200
8	BU08P-TR-P-H	BU08P-TR-PC-H	14.0	19.6	20.0	23.6	250
9	BU09P-TR-P-H	BU09P-TR-PC-H	16.0	21.6	22.0	25.6	250
10	BU10P-TR-P-H	BU10P-TR-PC-H	18.0	23.6	24.0	27.6	200
11	BU11P-TR-P-H	BU11P-TR-PC-H	20.0	25.6	26.0	29.6	200
12	BU12P-TR-P-H	BU12P-TR-PC-H	22.0	27.6	28.0	31.6	200
13	BU13P-TR-P-H	BU13P-TR-PC-H	24.0	29.6	30.0	33.6	150
14	BU14P-TR-P-H	BU14P-TR-PC-H	26.0	31.6	32.0	35.6	150
15	BU15P-TR-P-H	BU15P-TR-PC-H	28.0	33.6	34.0	37.6	150
16	BU16P-TR-P-H	BU16P-TR-PC-H	30.0	35.6	36.0	39.6	150

**Material and Finish**  
Post: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
Housing: PA 66, UL94V-0, gray

RoHS compliance This product displays (LF)(SN) on a label.

# KR FAMILY SERIES/KRW·KR·PHN·TR CONNECTOR

## TRW connector (Unit for wire-to-wire connection)



Circuits	Model No.		Dimensions (mm)				Qty / box
	Normal type	Reverse type	A	B	C	D	
16	BU16P-TRW-P-H	BU16P-TRW-PC-H	14.0	23.5	23.9	27.5	100
18	BU18P-TRW-P-H	BU18P-TRW-PC-H	16.0	25.5	25.9	29.5	100
20	BU20P-TRW-P-H	BU20P-TRW-PC-H	18.0	27.5	27.9	31.5	50
22	BU22P-TRW-P-H	BU22P-TRW-PC-H	20.0	29.5	29.9	33.5	50
24	BU24P-TRW-P-H	BU24P-TRW-PC-H	22.0	31.5	31.9	35.5	50
26	BU26P-TRW-P-H	BU26P-TRW-PC-H	24.0	33.5	33.9	37.5	50
28	BU28P-TRW-P-H	BU28P-TRW-PC-H	26.0	35.5	35.9	39.5	50
30	BU30P-TRW-P-H	BU30P-TRW-PC-H	28.0	37.5	37.9	41.5	50
32	BU32P-TRW-P-H	BU32P-TRW-PC-H	30.0	39.5	39.9	43.5	50

### Material and Finish

Post: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
Housing: PA 66, UL94V-0, gray

**RoHS compliance** This product displays (LF)(SN) on a label.

<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

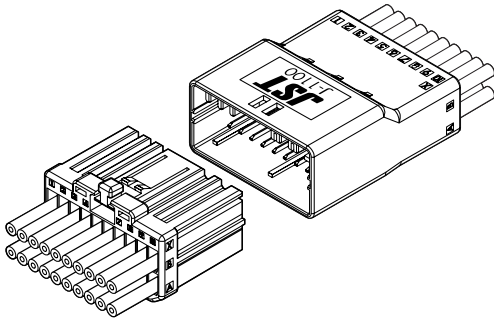
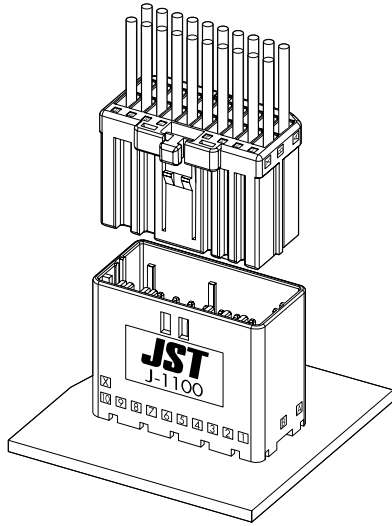
ex. **BU16P-TRW-P-H**

H...gray Y...yellow R...red N...brown  
S...natural (white) M...green



# JFA CONNECTOR J1000 SERIES

2.2mm pitch/Disconnectable Crimp style connectors(Wire-to-board/Wire-to-wire)



*It is a high reliability connector corresponding to demand of the miniaturization of electronic equipment and the wire size of AWG#18.*

- Double-spring construction
- Housing lance
- Clear “click feeling”

## Specifications

- Current rating: Refer to the following matrix table.
- Voltage rating: 125V AC, DC
- Temperature range:  $-55^{\circ}\text{C}$  to  $+105^{\circ}\text{C}$   
(including temperature rise in applying electrical current)
- Applicable wire: AWG #28 to #18 (0.08 to 0.82mm<sup>2</sup>)  
(Tin-plated annealed copper wire [stranded wire])  
(Insulation O.D./0.85 to 2.1mm)
- Applicable PC board thickness: 1.6mm

\*Contact JST for details.

\*RoHS compliant products are published

### Current rating

Unit: A

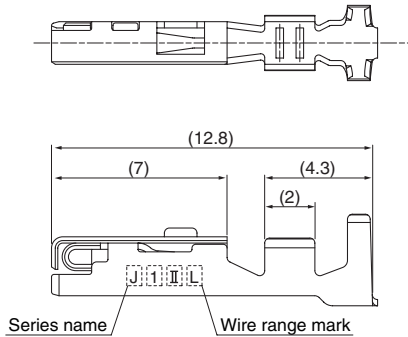
Circuits	Wire size (AWG)					
	#18	#20	#22	#24	#26	#28
1 (Note)	6.8	5.9	5.0	4.2	3.2	2.5
3	6.2	5.2	4.6	3.6	3.1	2.5
6	5.5	4.6	4.0	3.0	2.5	2.1
8	5.5	4.6	4.0	3.0	2.4	2.0
12	4.7	3.9	3.4	2.6	2.1	1.7
20	3.9	3.3	2.9	2.2	1.8	1.6

Note: Current rating value when applying only to 1-circuit of 3-circuit connector.

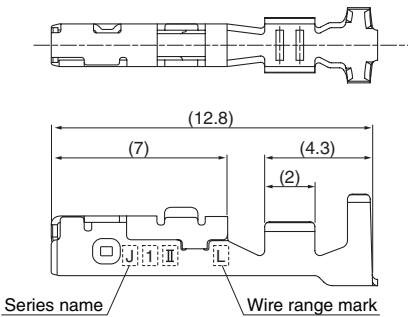
# JFA CONNECTOR/J1000 SERIES

## Receptacle contact

### Tin-plated



### Gold-plated



Strip contact Model No.	Applicable wire			Insulation O.D. (mm)	Q'ty / reel
	Nominal	mm <sup>2</sup>	AWG#		
<b>SF1F-002 (*) -P0.6</b>	M	0.08~0.22	28~24	0.85~1.43	—
<b>SF1F-21 (*) -P0.6</b>	L	0.30~0.82	22~18	1.60~2.10	5,000

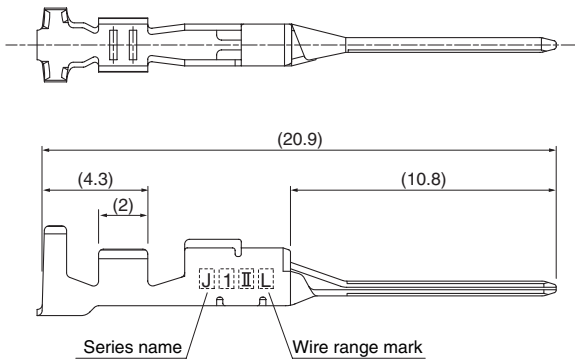
### Material and Finish

Copper alloy, tin-plated, gold-plated

### RoHS compliance

Note: Finish(\*) : T ..... Tin-plated  
GC ... Gold-plated

## Tab contact



Strip contact Model No.	Applicable wire			Insulation O.D. (mm)	Q'ty / reel
	Nominal	mm <sup>2</sup>	AWG#		
<b>SF1M-002 (*) -M0.6A</b>	M	0.08~0.22	28~24	0.85~1.43	—
<b>SF1M-21 (*) -M0.6A</b>	L	0.30~0.82	22~18	1.60~2.10	5,000

### Material and Finish

Copper alloy, tin-plated, gold-plated

### RoHS compliance

Note: Finish(\*) : T ..... Tin-plated  
GC ... Gold-plated

## Crimping machine, Applicator

Strip contact Model No.	Crimping machine	Crimp applicator	Dies	Crimp applicator with dies	Hand crimp tools
<b>SF1F-002 (*) -P0.6</b>					
<b>SF1M-002 (*) -M0.6A</b>	AP-K2N	MKS-L	MK/SF1F/M002-06	APLMK SF1F/M002-06	Refer to page 576, 577.
<b>SF1F-21 (*) -P0.6</b>					
<b>SF1M-21 (*) -M0.6A</b>	AP-K2N	MKS-L	MK/SF1F/M21-06	APLMK SF1F/M21-06	Refer to page 576, 577.

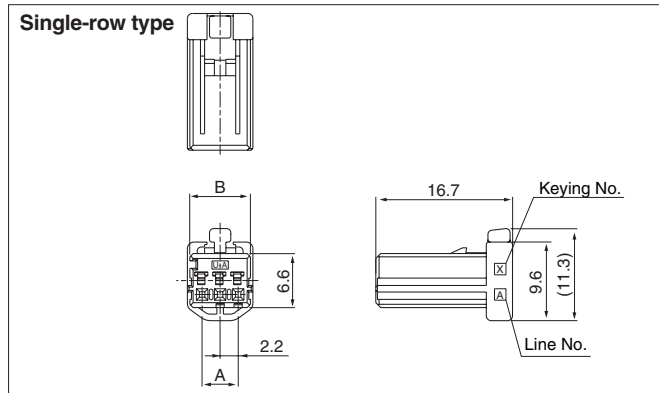
- Extraction tool for J1000 series: EJ-JFAJ1100
- Hand crimp tool uses the YRK series and refer to page 576, 577 for details

Note 1. Contact JST for fully automatic crimping applicator.

2. Finish(\*) : T ..... Tin-plated  
GC ... Gold-plated

# J1000 SERIES/J1100

## Receptacle housing



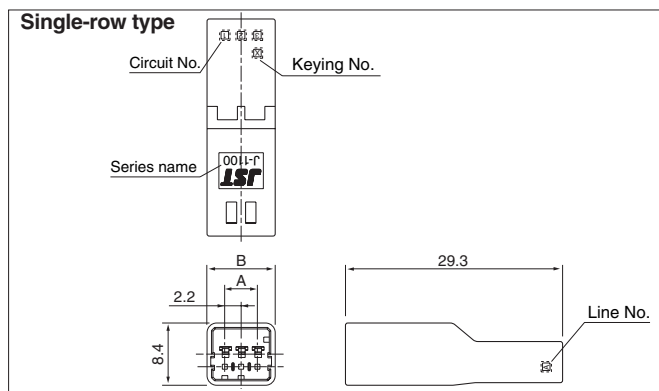
Circuits	Keying	Model No.	Dimensions (mm)		Q'ty / box
			A	B	
3	X	<b>J11SF-03V-KX</b>	4.4	7.4	1,200
	Y	<b>J11SF-03V-KY</b>	4.4	7.4	1,200

### Material

Glass-filled PBT, UL94V-0, black

### RoHS compliance

## Tab housing



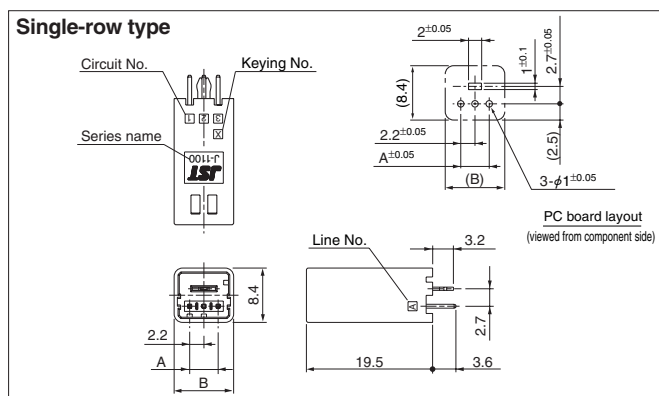
Circuits	Keying	Model No.	Dimensions (mm)		Q'ty / box
			A	B	
3	X	<b>J11SFM-03V-KX</b>	4.4	9.2	500
	Y	<b>J11SFM-03V-KY</b>	4.4	9.2	500

### Material

Glass-filled PBT, UL94V-0, black

### RoHS compliance

## Header Top entry type (Center locking type)



Circuits	Keying	Model No.	Dimensions (mm)		Q'ty / box
			A	B	
3	X	<b>B03B-J11SK-(*)XR</b>	4.4	9.2	625
	Y	<b>B03B-J11SK-(*)YR</b>	4.4	9.2	625

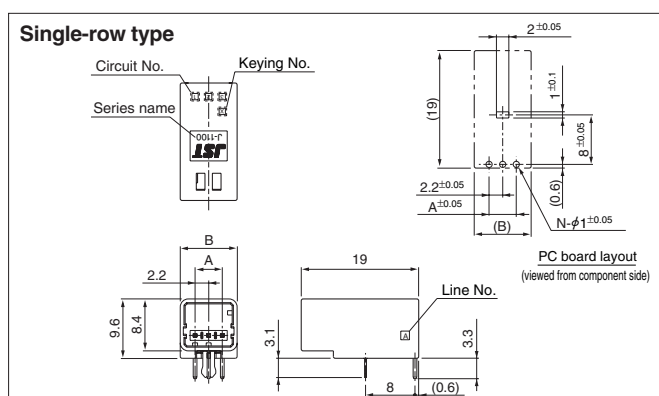
### Material and Finish

Post: Copper alloy, tin-plated, gold-plated  
Housing: Glass-filled PBT, UL94V-0, black  
Reinforcing metal fixture: Copper alloy, tin-plated

### RoHS compliance

Gold-plated product displays (LF) on a label.  
Note: Finish(\*):T .....Tin-plated  
GW ...Gold-plated

## Header Side entry type (Center locking type)



Circuits	Keying	Model No.	Dimensions (mm)		Q'ty / box
			A	B	
3	X	<b>S03B-J11SK-(*)XR</b>	4.4	9.2	600
	Y	<b>S03B-J11SK-(*)YR</b>	4.4	9.2	600

### Material and Finish

Post: Copper alloy, tin-plated, gold-plated  
Housing: Glass-filled PBT, UL94V-0, black  
Reinforcing metal fixture: Copper alloy, tin-plated

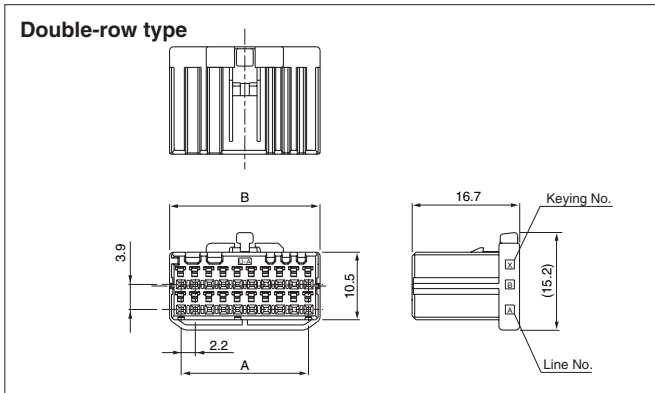
### RoHS compliance

Gold-plated product displays (LF) on a label.  
Note: Finish(\*):T .....Tin-plated  
GW ...Gold-plated



# J1000 SERIES/J1100

## Receptacle housing



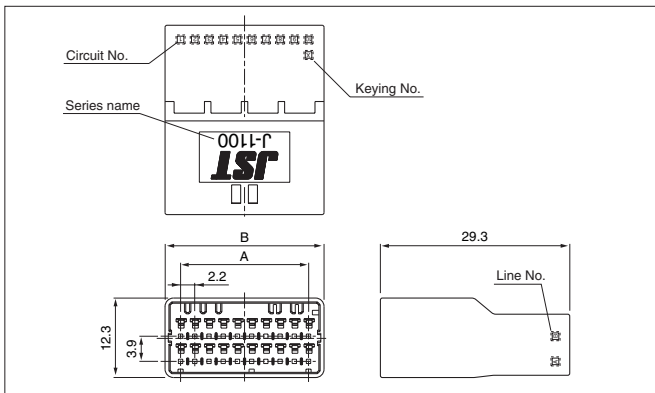
Circuits	Keying	Model No.	Dimensions (mm)		Q'ty / box
			A	B	
6	X	<b>J11DF-06V-KX</b>	4.4	8.0	800
	Y	<b>J11DF-06V-KY</b>	4.4	8.0	800
8	X	<b>J11DF-08V-KX</b>	6.6	10.2	500
	Y	<b>J11DF-08V-KY</b>	6.6	10.2	500
12	X	<b>J11DF-12V-KX</b>	11.0	14.6	400
	Y	<b>J11DF-12V-KY</b>	11.0	14.6	400
20	X	<b>J11DF-20V-KX</b>	19.8	23.4	250
	Y	<b>J11DF-20V-KY</b>	19.8	23.4	250
22	X	<b>J11DF-22V-KX</b>	22.0	25.6	—
	Y	<b>J11DF-22V-KY</b>	22.0	25.6	—
26	X	<b>J11DF-26V-KX</b>	26.4	30.0	—
	Y	<b>J11DF-26V-KY</b>	26.4	30.0	—
30	X	<b>J11DF-30V-KX</b>	30.8	34.4	—
	Y	<b>J11DF-30V-KY</b>	30.8	34.4	—

### Material

Glass-filled PBT, UL94V-0, black

**RoHS compliance**

## Tab housing



Circuits	Keying	Model No.	Dimensions (mm)		Q'ty / box
			A	B	
6	X	<b>J11DFM-06V-KX</b>	4.4	9.2	400
8	X	<b>J11DFM-08V-KX</b>	6.6	11.4	300
12	X	<b>J11DFM-12V-KX</b>	11.0	15.8	200
20	X	<b>J11DFM-20V-KX</b>	19.8	24.6	150

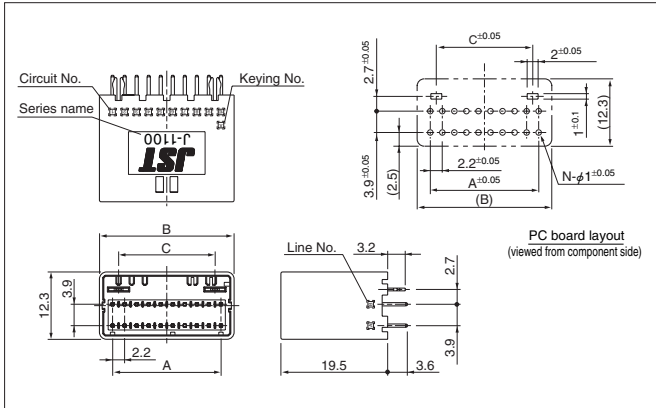
### Material

Glass-filled PBT, UL94V-0, black

**RoHS compliance**

# J1000 SERIES/J1100

## Header Top entry type (Center locking type)



Circuits	Keying	Model No.	Dimensions (mm)			Q'ty / box
			A	B	C	
6	X	B06B-J11DK-(*)XR	4.4	9.2	—	500
	Y	B06B-J11DK-(*)YR	4.4	9.2	—	500
8	X	B08B-J11DK-(*)XR	6.6	11.4	4.4	400
	Y	B08B-J11DK-(*)YR	6.6	11.4	4.4	400
12	X	B12B-J11DK-(*)XR	11.0	15.8	8.8	280
	Y	B12B-J11DK-(*)YR	11.0	15.8	8.8	280
20	X	B20B-J11DK-(*)XR	19.8	24.6	17.6	180
	Y	B20B-J11DK-(*)YR	19.8	24.6	17.6	180
22	X	B22B-J11DK-(*)XR	22.0	26.8	19.8	—
	Y	B22B-J11DK-(*)YR	22.0	26.8	19.8	—
26	X	B26B-J11DK-(*)XR	26.4	31.2	24.2	—
	Y	B26B-J11DK-(*)YR	26.4	31.2	24.2	—
30	X	B30B-J11DK-(*)XR	30.8	35.6	28.6	—
	Y	B30B-J11DK-(*)YR	30.8	35.6	28.6	—

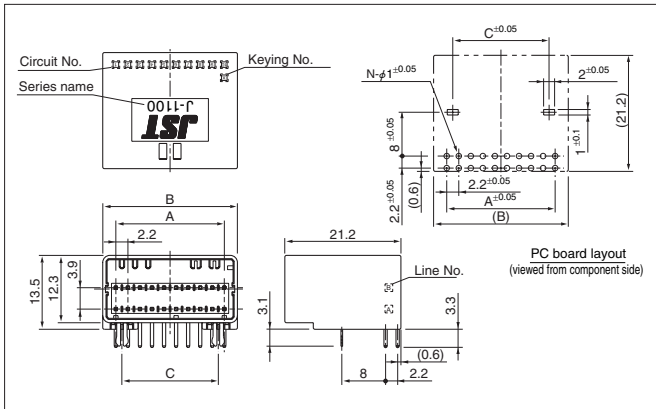
### Material and Finish

Post: Copper alloy, tin-plated, gold-plated  
Housing: Glass-filled PBT, UL94V-0, black  
Reinforcing metal fixture: Copper alloy, tin-plated

**RoHS compliance** Gold-plated product displays (LF) on a label.

Note: Finish(\*) : T ..... Tin-plated  
GW ... Gold-plated

## Header Side entry type (Center locking type)



Circuits	Keying	Model No.	Dimensions (mm)			Q'ty / box
			A	B	C	
6	X	S06B-J11DK-(*)XR	4.4	9.2	—	375
	Y	S06B-J11DK-(*)YR	4.4	9.2	—	375
8	X	S08B-J11DK-(*)XR	6.6	11.4	—	300
	Y	S08B-J11DK-(*)YR	6.6	11.4	—	300
12	X	S12B-J11DK-(*)XR	11.0	15.8	8.8	225
	Y	S12B-J11DK-(*)YR	11.0	15.8	8.8	225
20	X	S20B-J11DK-(*)XR	19.8	24.6	17.6	135
	Y	S20B-J11DK-(*)YR	19.8	24.6	17.6	135

### Material and Finish

Post: Copper alloy, tin-plated, gold-plated  
Housing: Glass-filled PBT, UL94V-0, black  
Reinforcing metal fixture: Copper alloy, tin-plated

**RoHS compliance** Gold-plated product displays (LF) on a label.

Note: Finish(\*) : T ..... Tin-plated  
GW ... Gold-plated

# JFA CONNECTOR/J1000 SERIES

## Model number identification

### Receptacle contact

**S F1 F - 21 T - P 0.6**

Form: S...Strip form

Series name

Kind of terminal: F...Receptacle contact

Applicable wire: 002...AWG#28 ~ AWG#24  
21...AWG#22 ~ AWG#18

Surface finish: T...Tin-plated, GC...Gold-plated

Material: P...Copper alloy

Terminal size

### Tab contact

**S F1 M - 21 T - M 0.6 A**

Form: S...Strip form

Series name

Kind of terminal: M...Tab contact

Applicable wire: 002...AWG#28 ~ AWG#24  
21...AWG#22 ~ AWG#18

Surface finish: T...Tin-plated, GC...Gold-plated

Material: M...Copper alloy

Terminal size

Auxiliary mark

### Receptacle housing

**J11 DF - 06 V - K X**

Series name

Type of connector: SF...Single-row type  
DF...Double-row type

No. of circuits: 3, 6, 8, 12, 20

Flammability: V...UL94V-0

Color indication: K...Black

Keying: X...X-Keying, Y...Y-Keying

### Tab housing

**J11 DFM - 06 V - K X**

Series name

Type of connector: SFM...Single-row type  
DFM...Double-row type

No. of circuits: 3, 6, 8, 12, 20

Flammability: V...UL94V-0

Color indication: K...Black

Keying: X...X-Keying

### Header

**B 06 B - J11 D K - T X R**

PC board mounting direction:  
B...Top entry type, S...Side entry type

No. of circuits: 3, 6, 8, 12, 20

Product name: Header

Series name

Rows: S...Single-row, D...Double-row

Color indication: K...Black

Surface finish: T...Tin-plated, GW...Gold-plated

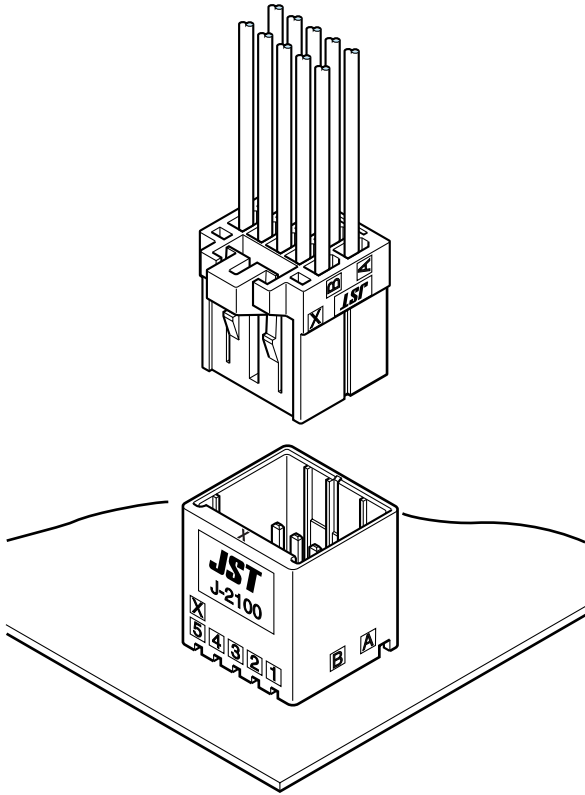
Keying: X...X-Keying, Y...Y-Keying

Packaging form: R...Tray, M...Magazine stick



# JFA CONNECTOR J2000 SERIES

2.5mm pitch/Disconnectable Crimp style connectors(Wire-to-board/Wire-to-wire)



**2.5mm pitch connector for miniaturization of electronic equipment.**  
**Center locking or side locking options can be used depending on the required application.**  
**Receptacle contacts are designed to be common with all JFA connector J2000 series.**

- Double-spring construction
- 2 kinds of locking method
- Housing lance
- Clear “click feeling”

## Specifications

- Current rating: 4.6A max. AC, DC (3 circuits/AWG #20)
- Voltage rating: 250V AC, DC
- Temperature range: -55°C to +105°C  
 (including temperature rise in applying electrical current)
- Withstanding voltage: 1,500V AC/minute
- Applicable wire: AWG #28 to #20 (0.08 to 0.75mm<sup>2</sup>)
- Applicable PC board thickness: 1.6mm

\*Contact JST for details.

\*RoHS compliant products are published.

## Current rating

Unit: A

Circuits	Wire size (AWG)				
	#20	#22	#24	#26	#28
3	4.6	4.4	3.4	3.0	2.4
4	4.5	4.3	3.2	2.8	2.3
6	4.3	4.1	2.8	2.6	2.1
8	4.1	3.6	2.6	2.3	1.9
10	3.9	3.4	2.5	2.2	1.8
12	3.6	3.1	2.4	2.0	1.6
16	3.2	2.8	2.2	1.8	1.4
20	2.9	2.5	2.1	1.7	1.3

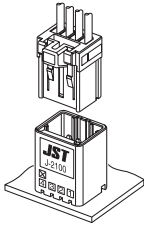
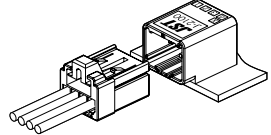
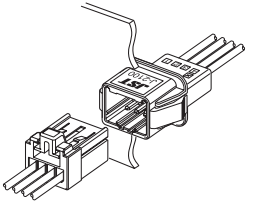
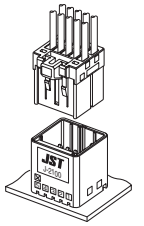
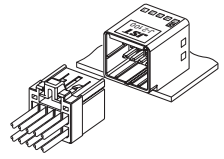
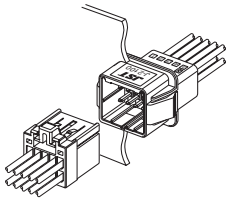
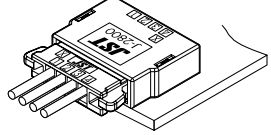
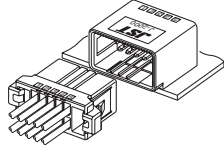
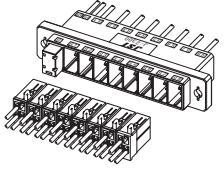
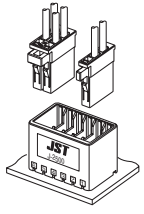
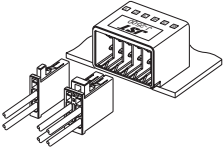
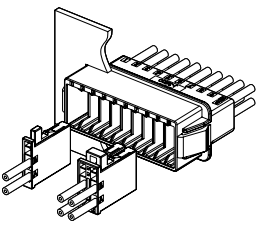
## Standards

Recognized E60389

# JFA CONNECTOR/J2000 SERIES

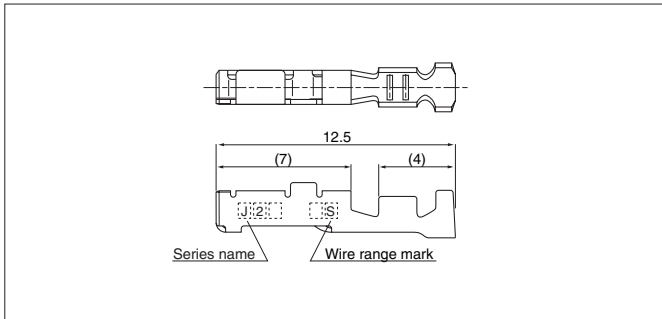
## List of J2000 series products

2.5mm pitch/ Voltage rating 250V AC, DC

Type	Wire-to-board		Wire-to-wire	
	Top entry type	Side entry type	Panel mounting type	
Center locking type	<b>J2100</b> Single-row type			
	Circuits	3, 4	3, 4	3, 4
	<b>J2100</b> Double-row type			
	Circuits	6, 8, 10, 12, 16, 20	6, 8, 10, 12, 16, 20	6, 10, 12, 16, 20
Side locking type	<b>J2800</b> Single-row type			
	Circuits		4	
	<b>J2200</b> Double-row type			
	Circuits		10	
Common type for sensors	<b>J2300</b>			
	Circuits			Output 10 / Input 24
Module type	<b>J2500</b>			
	Circuits	12, 20	12, 20	20

# JFA CONNECTOR/J2000 SERIES

## Receptacle contact



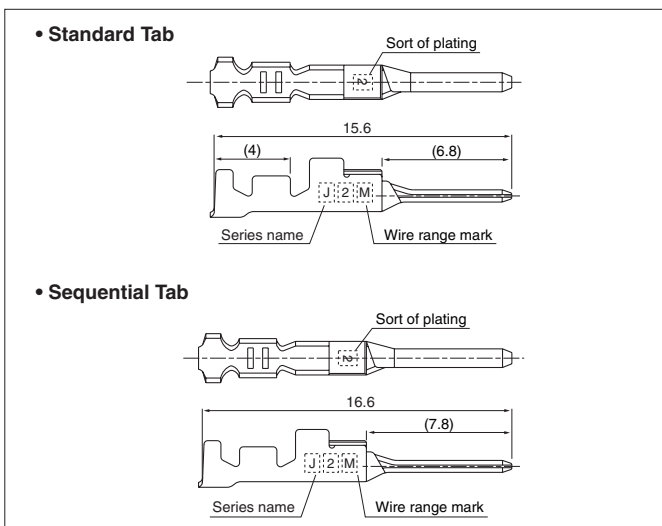
Strip contact Model No.	Applicable wire			Insulation O.D. (mm)	Q'ty / reel
	Nominal	mm <sup>2</sup>	AWG#		
<b>SJ2F-002GF-P1.0</b>	S	0.08 ~ 0.20	28 ~ 24	0.88 ~ 1.43	6,000
<b>SJ2F-01GF-P1.0</b>	M	0.20 ~ 0.50	24 ~ 20	1.11 ~ 1.53	6,000
<b>SJ2F-21GF-P1.0</b>	L	0.30 ~ 0.75	—	1.30 ~ 1.90	5,000

### Material and Finish

Copper alloy (superior conductivity), nickel-underplated, selective gold-plated

**RoHS compliance**

## Tab contact



Strip contact Model No.	Applicable wire			Insulation O.D. (mm)	Q'ty / reel
	Nominal	mm <sup>2</sup>	AWG#		
<b>SJ2M-002GF-M1.0N</b>	S	0.08 ~ 0.20	28 ~ 24	0.88 ~ 1.43	5,500
<b>SJ2M-01GF-M1.0N</b>	M	0.20 ~ 0.50	24 ~ 20	1.11 ~ 1.53	5,500
<b>SJ2M-21GF-M1.0N</b>	L	0.30 ~ 0.75	—	1.30 ~ 1.90	5,000
<b>SJ2M-01GF-M1.0S</b>	Sequential	0.20 ~ 0.50	24 ~ 20	1.11 ~ 1.53	5,500

### Material and Finish

Copper alloy (superior conductivity), nickel-underplated, selective gold-plated

**RoHS compliance**

## Crimping machine, Applicator

Strip contact Model No.	Crimping machine	Crimp applicator	Dies	Crimp applicator with dies	Hand crimp tools
<b>SJ2F-002GF-P1.0</b> <b>SJ2M-002GF-M1.0N</b>	AP-K2N	MKS-L	MK/SJ2F/M-002-10	APLMK SJ2F/M002-10	YRS-8851
<b>SJ2F-21GF-P1.0</b> <b>SJ2M-21GF-M1.0N</b>	AP-K2N	MKS-L	MK/SJ2F/M-21-10	APLMK SJ2F/M21-10	YRF-1120
		*MKS-SC-J2	SC/SJ2F/M-21-10	APLSC SJ2F/M21-10	

• Extraction tool for J2000 series: EJ-JFAJ2N

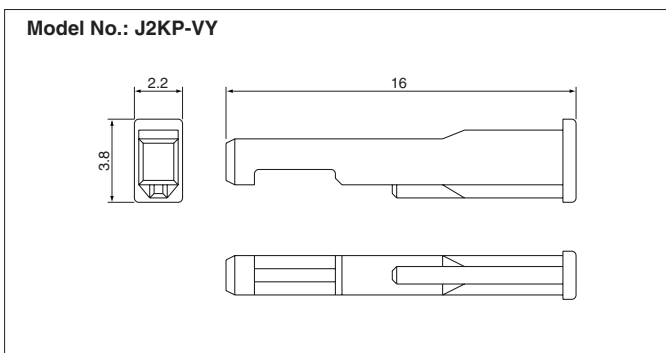
• Refer to page 654,655 for details of YRK series hand crimping tool.

Note 1.\*: Strip-crimp applicator

2. Contact JST for fully automatic crimping applicator.

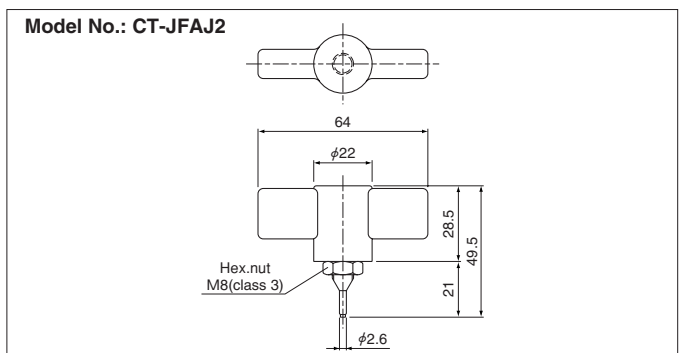
Strip contact Model No.	Crimping machine	Crimp applicator	Dies	Crimp applicator with dies	Hand crimp tools
<b>SJ2F-01GF-P1.0</b> <b>SJ2M-01GF-M1.0N</b> <b>SJ2M-01GF-M1.0S</b>	AP-K2N	MKS-L	MK/SJ2F/M-01-10	APLMK SJ2F/M01-10	YRS-8861
		*MKS-SC-J2	SC/SJ2F/M-01-10	APLSC SJ2F/M01-10	

## Keying plug



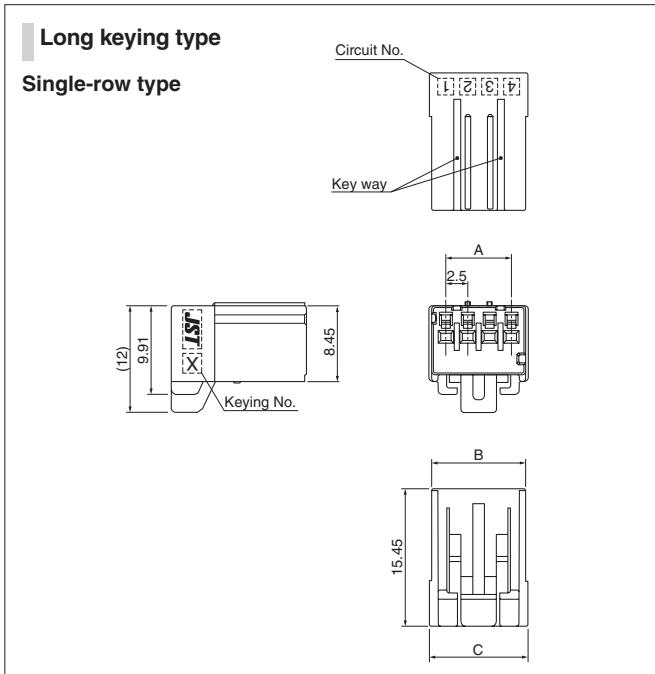
**RoHS compliance**

## Tab contact cutting tool



# J2000 SERIES/J2100

## Receptacle housing (Center locking type)



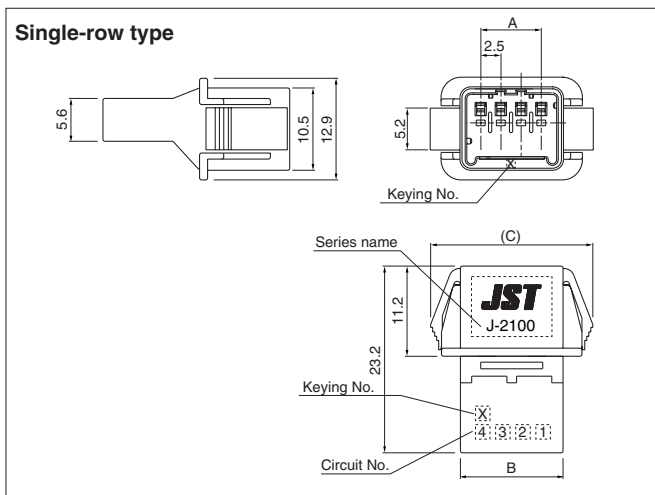
Circuits	Keying	Model No.	Dimensions (mm)			Q'ty / bag
			A	B	C	
3	X	J21SF-03V-KX-L	5.0	8.3	8.9	400
	Y	J21SF-03V-KY-L	5.0	8.3	8.9	400
4	X	J21SF-04V-KX-L	7.5	10.8	11.4	400
	Y	J21SF-04V-KY-L	7.5	10.8	11.4	400

### Material

Glass-filled PBT, UL94V-0, black

### RoHS compliance

## Tab housing (Panel mounting type)



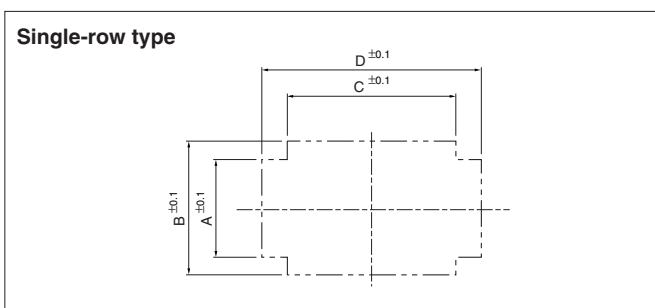
Circuits	Keying	Model No.	Dimensions (mm)			Q'ty / box
			A	B	(C)	
3	X	J21SPM-03V-KX	5.0	10.2	17.6	208
	Y	J21SPM-03V-KY	5.0	10.2	17.6	208
4	X	J21SPM-04V-KX	7.5	12.7	20.1	192
	Y	J21SPM-04V-KY	7.5	12.7	20.1	192

### Material

Glass-filled PBT, UL94V-0, black

### RoHS compliance

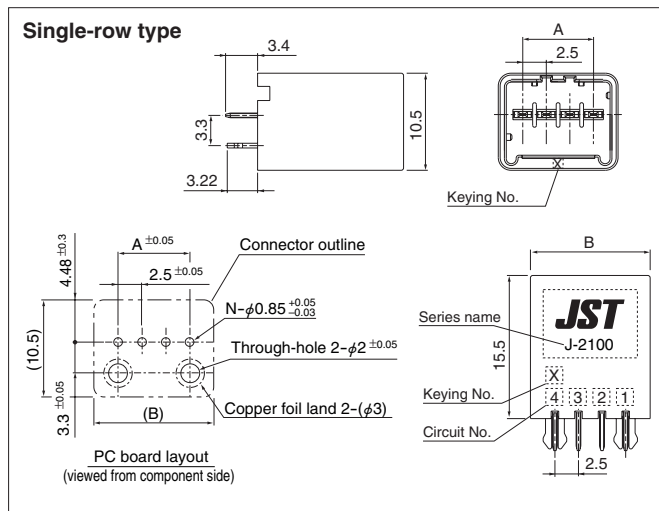
## Panel layout



Circuits	Dimensions (mm)			
	A	B	C	D
3	7.8	10.8	10.5	15.2
4	7.8	10.8	13.0	17.7

# J2000 SERIES/J2100

## Header Top entry type (Center locking type)



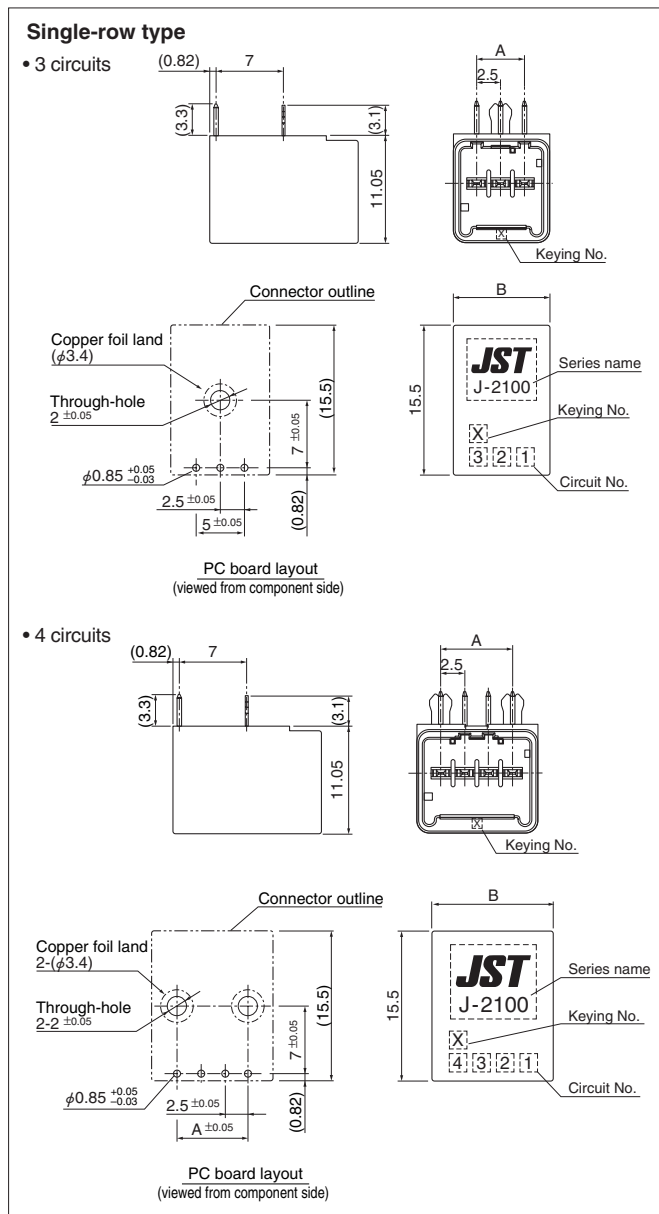
Circuits	Keying	Model No.	Dimensions (mm)		Q'ty / box
			A	B	
3	X	<b>B03B-J21SK-GGXR</b>	5.0	10.2	378
	Y	<b>B03B-J21SK-GGYR</b>	5.0	10.2	378
4	X	<b>B04B-J21SK-GGXR</b>	7.5	12.7	306
	Y	<b>B04B-J21SK-GGYR</b>	7.5	12.7	306

### Material and Finish

Tab contact: Copper alloy, nickel-undercoated, selective gold-plated  
Housing: Glass-filled PBT, UL94V-0, black  
Reinforcing metal fixture: Copper alloy, nickel-undercoated, selective gold-plated

**RoHS compliance** This product displays (LF)(AU) on a label.

## Header Side entry type (Center locking type)



Circuits	Keying	Model No.	Dimensions (mm)		Q'ty / box
			A	B	
3	X	<b>S03B-J21SK-GGXR</b>	5.0	10.2	294
	Y	<b>S03B-J21SK-GGYR</b>	5.0	10.2	294
4	X	<b>S04B-J21SK-GGXR</b>	7.5	12.7	238
	Y	<b>S04B-J21SK-GGYR</b>	7.5	12.7	238

### Material and Finish

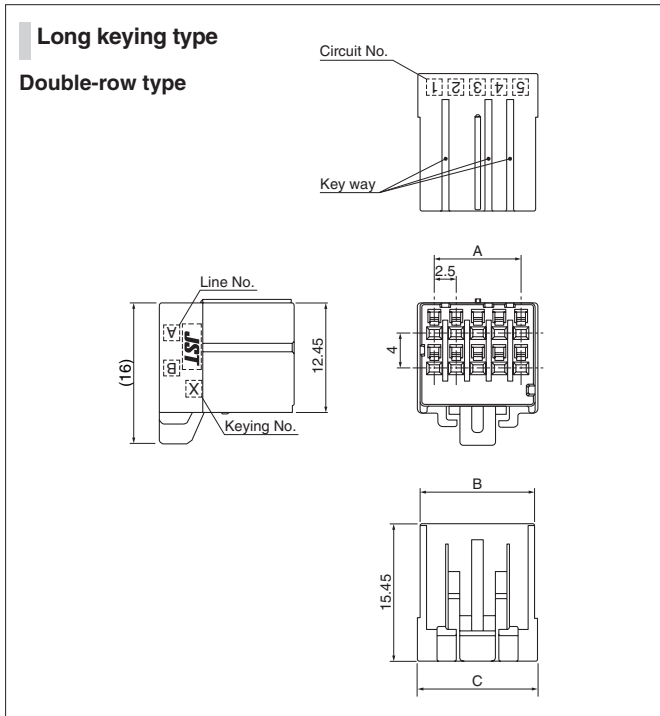
Tab contact: Copper alloy, nickel-undercoated, selective gold-plated  
Housing: Glass-filled PBT, UL94V-0, black  
Reinforcing metal fixture: Copper alloy, nickel-undercoated, selective gold-plated

**RoHS compliance** This product displays (LF)(AU) on a label.



# J2000 SERIES/J2100

## Receptacle housing (Center locking type)



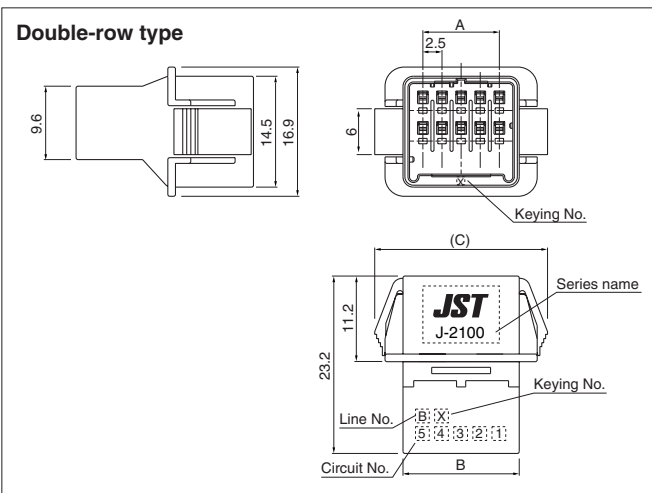
Circuits	Keying	Model No.	Dimensions (mm)			Q'ty / bag
			A	B	C	
6	X	J21DF-06V-KX	5.0	8.3	8.9	300
	Y	J21DF-06V-KY	5.0	8.3	8.9	300
	X	J21DF-06V-KX-L	5.0	8.3	8.9	300
	Y	J21DF-06V-KY-L	5.0	8.3	8.9	300
8	X	J21DF-08V-KX-L	7.5	10.8	11.4	300
	Y	J21DF-08V-KY-L	7.5	10.8	11.4	300
10	X	J21DF-10V-KX-L	10.0	13.3	13.9	200
	Y	J21DF-10V-KY-L	10.0	13.3	13.9	200
12	X	J21DF-12V-KX-L	12.5	15.8	16.4	200
	Y	J21DF-12V-KY-L	12.5	15.8	16.4	200
16	X	J21DF-16V-KX-L	17.5	20.8	21.4	200
	Y	J21DF-16V-KY-L	17.5	20.8	21.4	200
20	X	J21DF-20V-KX-L	22.5	25.8	26.4	100
	Y	J21DF-20V-KY-L	22.5	25.8	26.4	100

### Material

Glass-filled PBT, UL94V-0, black

### RoHS compliance

## Tab housing (Panel mounting type)



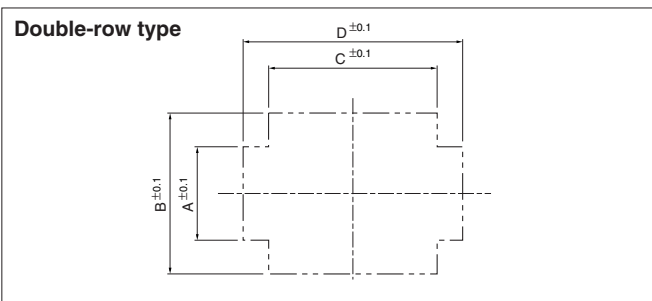
Circuits	Keying	Model No.	Dimensions (mm)			Q'ty / box
			A	B	(C)	
6	X	J21DPM-06V-KX	5.0	10.2	17.6	156
	Y	J21DPM-06V-KY	5.0	10.2	17.6	156
10	X	J21DPM-10V-KX	10.0	15.2	22.6	120
	Y	J21DPM-10V-KY	10.0	15.2	22.6	120
12	X	J21DPM-12V-KX	12.5	17.7	25.1	108
	Y	J21DPM-12V-KY	12.5	17.7	25.1	108
16	X	J21DPM-16V-KX	17.5	22.7	30.1	84
	Y	J21DPM-16V-KY	17.5	22.7	30.1	84
20	X	J21DPM-20V-KX	22.5	27.7	35.1	72
	Y	J21DPM-20V-KY	22.5	27.7	35.1	72

### Material

Glass-filled PBT, UL94V-0, black

### RoHS compliance

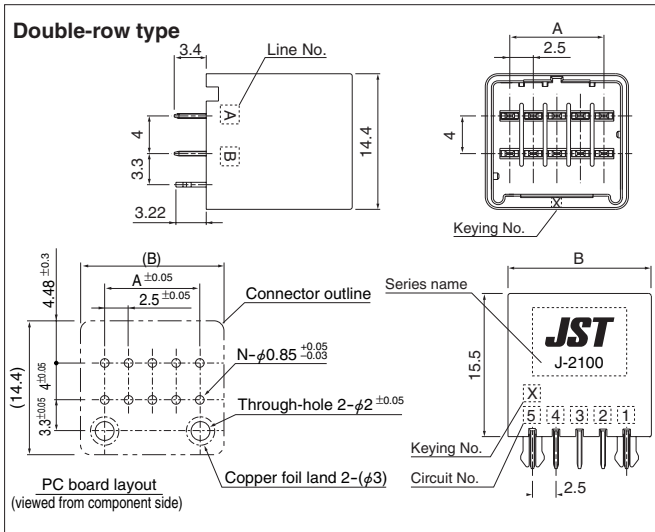
## Panel layout



Circuits	Dimensions (mm)			
	A	B	C	D
6	8.6	14.8	10.5	15.2
10	8.6	14.8	15.5	20.2
12	8.6	14.8	18.0	22.7
16	8.6	14.8	23.0	27.7
20	8.6	14.8	28.0	32.7

# J2000 SERIES/J2100

## Header Top entry type (Center locking type)



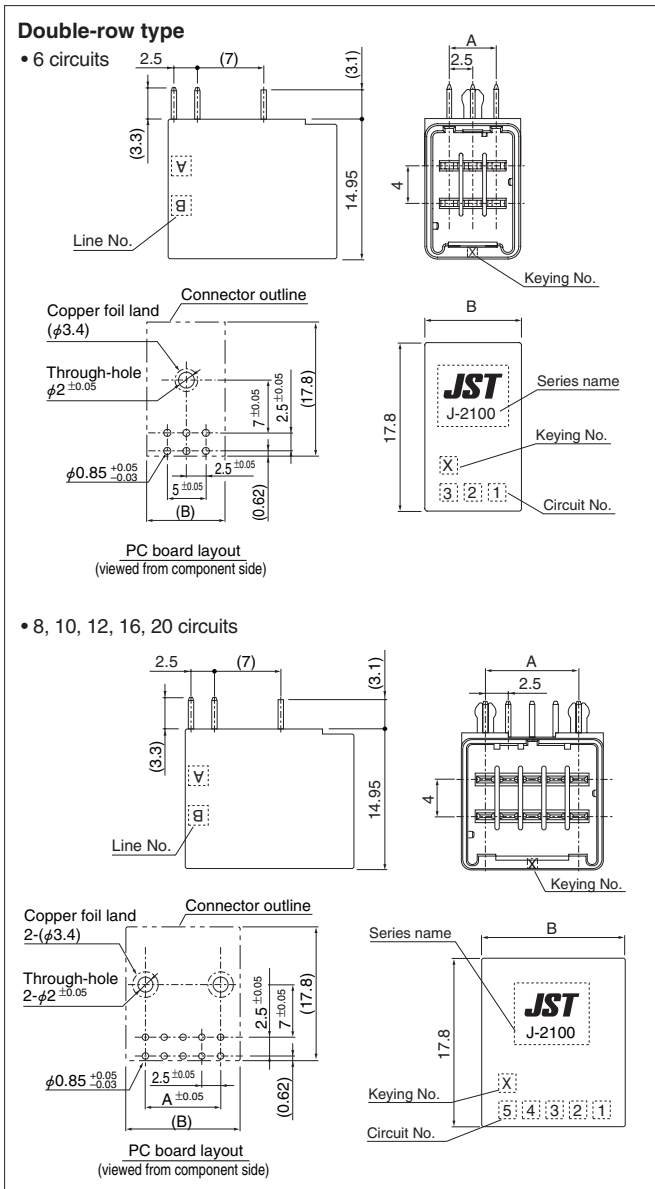
Circuits	Keying	Model No.	Dimensions (mm)		Q'ty / box
			A	B	
6	X	B06B-J21DK-GGXR	5.0	10.2	252
	Y	B06B-J21DK-GGYR	5.0	10.2	252
8	X	B08B-J21DK-GGXR	7.5	12.7	204
	Y	B08B-J21DK-GGYR	7.5	12.7	204
10	X	B10B-J21DK-GGXR	10.0	15.2	168
	Y	B10B-J21DK-GGYR	10.0	15.2	168
12	X	B12B-J21DK-GGXR	12.5	17.7	144
	Y	B12B-J21DK-GGYR	12.5	17.7	144
16	X	B16B-J21DK-GGXR	17.5	22.7	108
	Y	B16B-J21DK-GGYR	17.5	22.7	108
20	X	B20B-J21DK-GGXR	22.5	27.7	84
	Y	B20B-J21DK-GGYR	22.5	27.7	84

### Material and Finish

Tab contact: Copper alloy, nickel-undercoated, selective gold-plated  
Housing: Glass-filled PBT, UL94V-0, black  
Reinforcing metal fixture: Copper alloy, nickel-undercoated, selective gold-plated

**RoHS compliance** This product displays (LF) (AU) on a label.

## Header Side entry type (Center locking type)



Circuits	Keying	Model No.	Dimensions (mm)		Q'ty / box
			A	B	
6	X	S06B-J21DK-GGXR	5.0	10.2	252
	Y	S06B-J21DK-GGYR	5.0	10.2	252
8	X	S08B-J21DK-GGXR	7.5	12.7	204
	Y	S08B-J21DK-GGYR	7.5	12.7	204
10	X	S10B-J21DK-GGXR	10.0	15.2	168
	Y	S10B-J21DK-GGYR	10.0	15.2	168
12	X	S12B-J21DK-GGXR	12.5	17.7	144
	Y	S12B-J21DK-GGYR	12.5	17.7	144
16	X	S16B-J21DK-GGXR	17.5	22.7	108
	Y	S16B-J21DK-GGYR	17.5	22.7	108
20	X	S20B-J21DK-GGXR	22.5	27.7	84
	Y	S20B-J21DK-GGYR	22.5	27.7	84

### Material and Finish

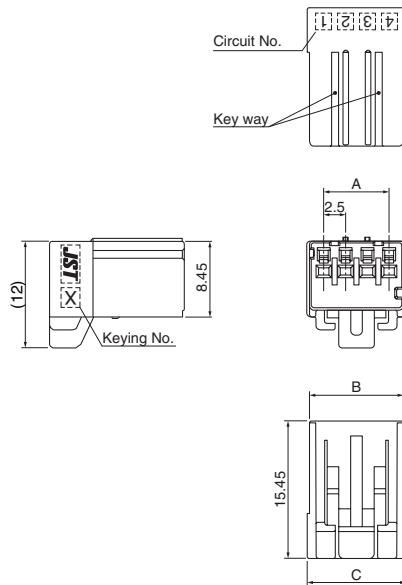
Tab contact: Copper alloy, nickel-undercoated, selective gold-plated  
Housing: Glass-filled PBT, UL94V-0, black  
Reinforcing metal fixture: Copper alloy, nickel-undercoated, selective gold-plated

**RoHS compliance** This product displays (LF) (AU) on a label.

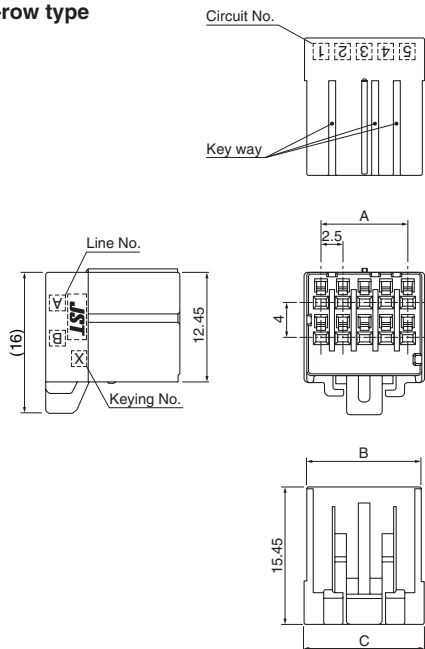
## Receptacle housing (Center locking type)

### Short keying type

#### Single-row type



#### Double-row type



### Single-row type

Circuits	Keying	Model No.	Dimensions (mm)			Q'ty / bag
			A	B	C	
3	X	J21SF-03V-KX	5.0	8.3	8.9	400
	Y	J21SF-03V-KY	5.0	8.3	8.9	400
4	X	J21SF-04V-KX	7.5	10.8	11.4	400
	Y	J21SF-04V-KY	7.5	10.8	11.4	400

### Double-row type

Circuits	Keying	Model No.	Dimensions (mm)			Q'ty / bag
			A	B	C	
8	X	J21DF-08V-KX	7.5	10.8	11.4	300
	Y	J21DF-08V-KY	7.5	10.8	11.4	300
10	X	J21DF-10V-KX	10.0	13.3	13.9	200
	Y	J21DF-10V-KY	10.0	13.3	13.9	200
12	X	J21DF-12V-KX	12.5	15.8	16.4	200
	Y	J21DF-12V-KY	12.5	15.8	16.4	200
16	X	J21DF-16V-KX	17.5	20.8	21.4	200
	Y	J21DF-16V-KY	17.5	20.8	21.4	200
20	X	J21DF-20V-KX	22.5	25.8	26.4	100
	Y	J21DF-20V-KY	22.5	25.8	26.4	100

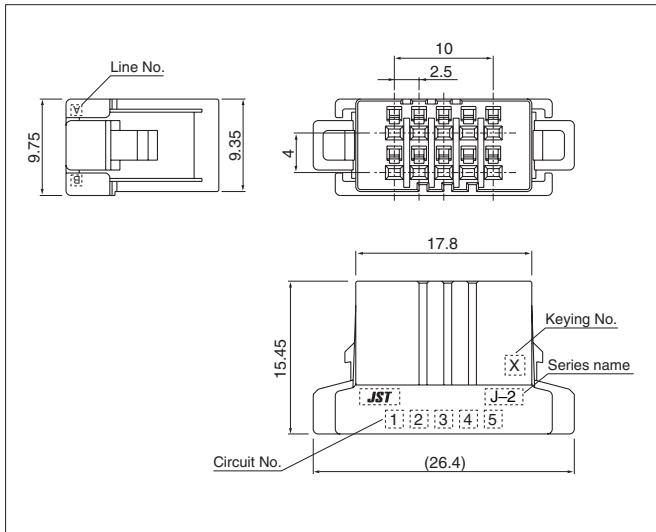
#### Material

Glass-filled PBT, UL94V-0, black

### RoHS compliance

# J2000 SERIES/J2200

## Receptacle housing (Side locking type)



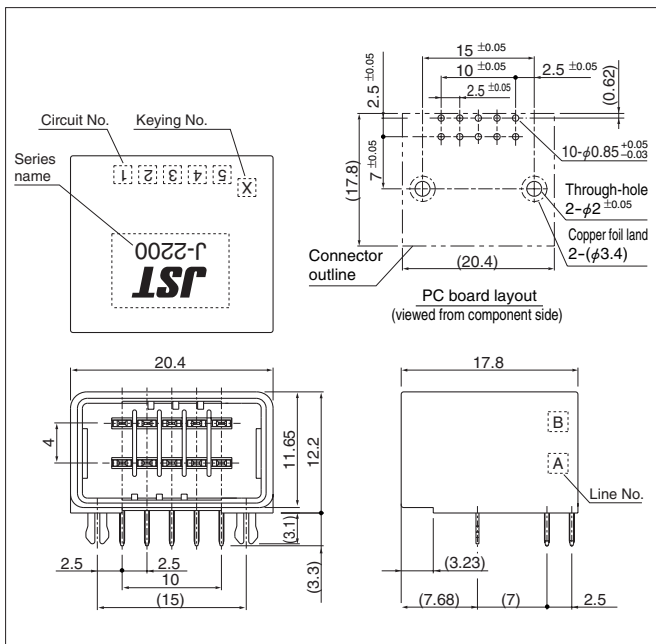
Circuits	Keying	Model No.	Q'ty / bag
10	X	<b>J22DF-10V-KX</b>	250
	Y	<b>J22DF-10V-KY</b>	250

### Material

Glass-filled PBT, UL94V-0, black

### RoHS compliance

## Header Side entry type (Side locking type)



Circuits	Keying	Model No.	Q'ty / box
10	X	<b>S10B-J22DK-GGXR</b>	120
	Y	<b>S10B-J22DK-GGYR</b>	120

### Material and Finish

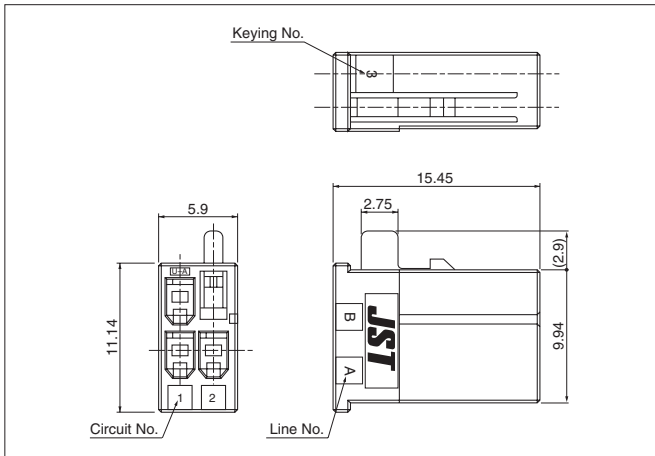
Tab contact: Copper alloy, nickel-undercoated, selective gold-plated

Housing: Glass-filled PBT, UL94V-0, black

Reinforcing metal fixture: Copper alloy, nickel-undercoated, selective gold-plated

**RoHS compliance** This product displays (LF)(AU) on a label.

## Receptacle housing (Common type for sensor)



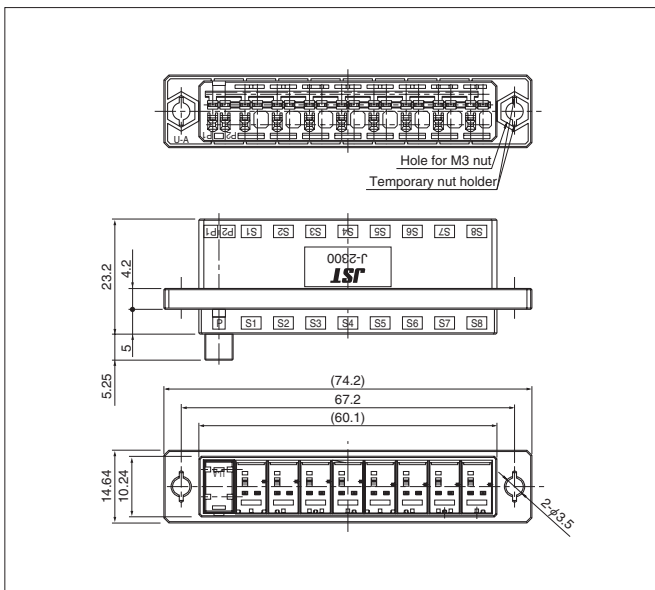
Circuits	Keying	Model No.	Q'ty / box
3	S1	J23CF-03V-KS1	784
	S2	J23CF-03V-KS2	784
	S3	J23CF-03V-KS3	784
	S4	J23CF-03V-KS4	784
	S5	J23CF-03V-KS5	784
	S6	J23CF-03V-KS6	784
	S7	J23CF-03V-KS7	784
	S8	J23CF-03V-KS8	784

### Material

Glass-filled PBT, UL94V-0, black

RoHS compliance

## T&P connector



Circuits	Keying	Model No.	Q'ty / box
Input	24	S1 ~ S8	64
Output	10		

### Material and Finish

Tab contact: Copper alloy, nickel-undercoated, selective gold-plated  
Housing: Glass-filled PBT, UL94V-0, black

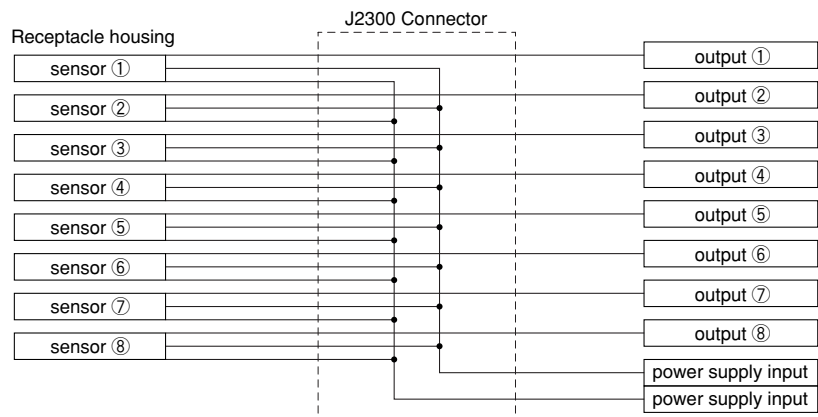
RoHS compliance

### • Current rating

Wire size	Current (A)
#20	6.5
#22	5.5
#24	4.0
#26	3.0
#28	2.0

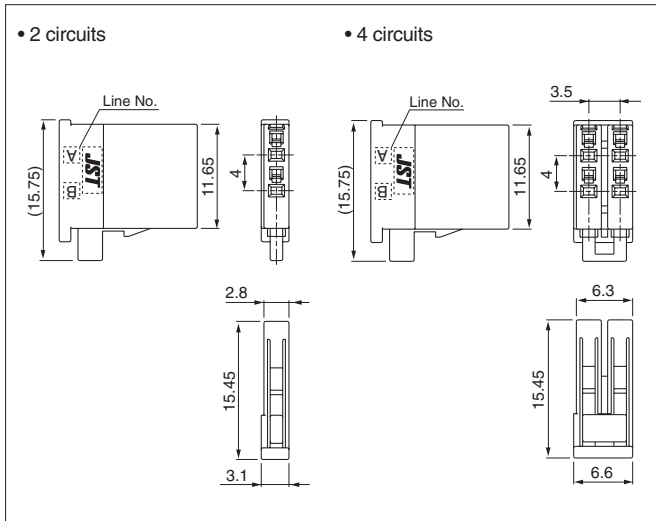
• Voltage rating: 250V AC, DC

### • Circuit composition



# J2000 SERIES/J2500

## Receptacle housing (Module type)

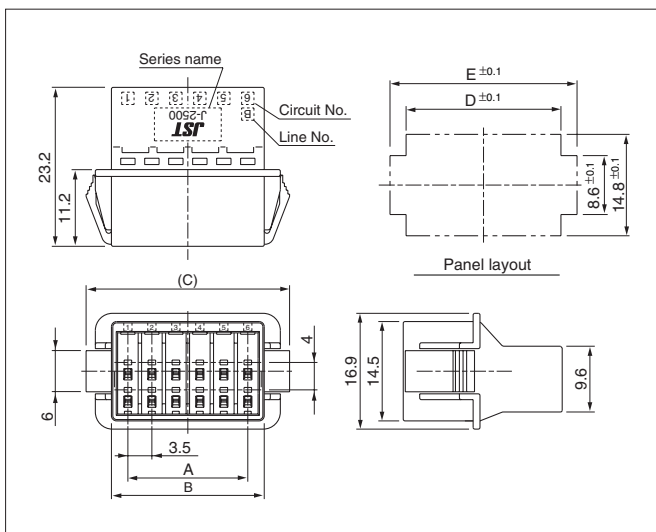


Circuits	Keying	Model No.	Q'ty / bag
2	—	<b>J25MF-02V-K</b>	800
4	—	<b>J25MF-04V-K</b>	400

Material			
Glass-filled PBT, UL94V-0, black			

**RoHS compliance**

## Tab housing (Panel mounting type)



Circuits	Keying	Model No.	Dimensions (mm)					Q'ty / box
			A	B	(C)	D	E	
12	—	<b>J25DPM-12V-K</b>	17.5	22.3	29.7	22.6	27.3	96
20	—	<b>J25DPM-20V-K</b>	31.5	36.3	43.7	36.6	41.3	132

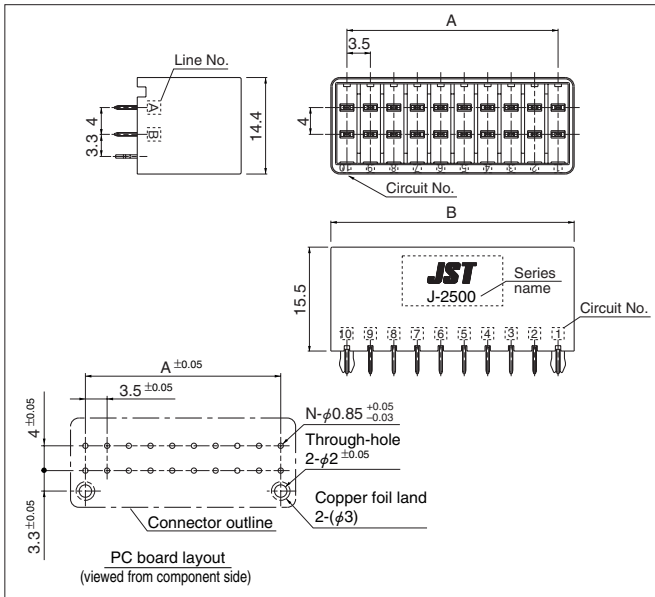
Material							
Glass-filled PBT, UL94V-0, black							

**RoHS compliance**

Note: Not UL approved.

# J2000 SERIES/J2500

## Header Top entry type (Module type)



Circuits	Keying	Model No.	Dimensions (mm)		Q'ty / box
			A	B	
12	—	<b>B12B-J25DK-GGR</b>	17.5	22.3	108
20	—	<b>B20B-J25DK-GGR</b>	31.5	36.3	72

### Material and Finish

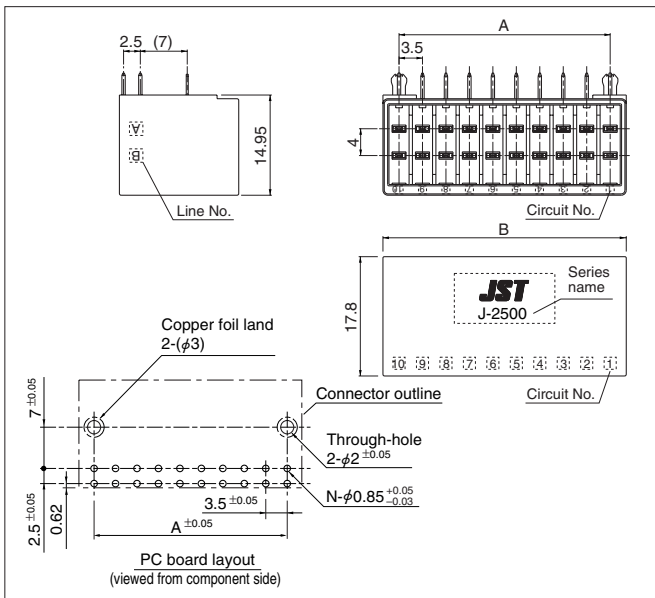
Tab contact: Copper alloy, nickel-undercoated, selective gold-plated

Housing: Glass-filled PBT, UL94V-0, black

Reinforcing metal fixture: Copper alloy, nickel-undercoated, selective gold-plated

**RoHS compliance** This product displays (LF) (AU) on a label.

## Header Side entry type (Module type)



Circuits	Keying	Model No.	Dimensions (mm)		Q'ty / box
			A	B	
12	—	<b>S12B-J25DK-GGR</b>	17.5	22.3	108
20	—	<b>S20B-J25DK-GGR</b>	31.5	36.3	72

### Material and Finish

Tab contact: Copper alloy, nickel-undercoated, selective gold-plated

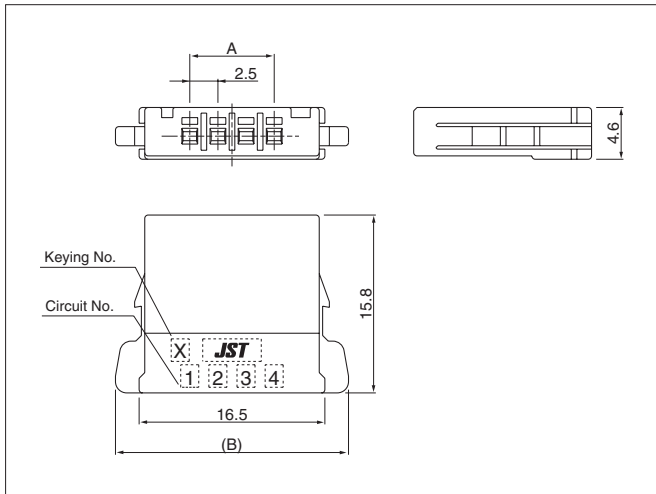
Housing: Glass-filled PBT, UL94V-0, black

Reinforcing metal fixture: Copper alloy, nickel-undercoated, selective gold-plated

**RoHS compliance** This product displays (LF) (AU) on a label.

# J2000 SERIES/J2800

## Receptacle housing



Circuits	Keying	Model No.	Dimensions (mm)		Q'ty / box
			A	(B)	
4	X	<b>J28SF-04V-KX</b>	7.5	20.7	540
	Y	Under planning	—	—	—

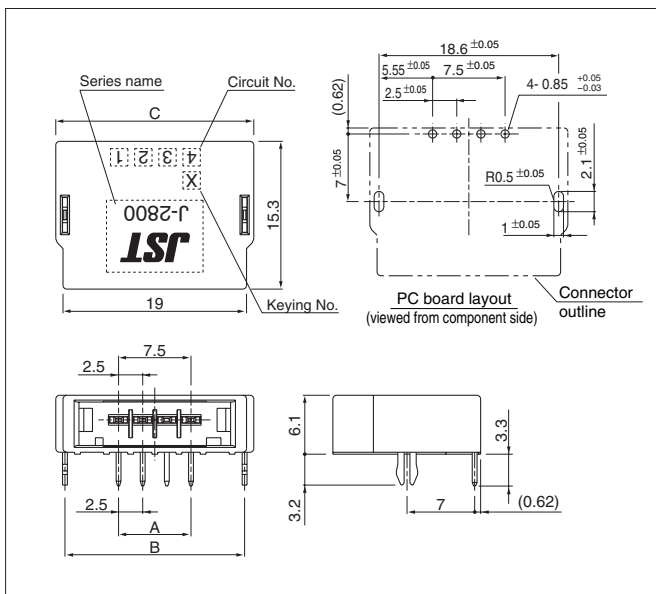
### Material

PBT, UL94V-0, black

### RoHS compliance

Note: Not UL approved.

## Header Side entry type (Side locking type)



Circuits	Keying	Model No.	Dimensions (mm)			Q'ty / box
			A	B	C	
4	X	<b>S04B-J28SK-GGXQ1R</b>	7.5	18.6	20.5	280
	Y	Under planning	—	—	—	—

### Material and Finish

Tab contact: Copper alloy, nickel-undercoated, selective gold-plated

Housing: Glass-filled PBT, UL94V-0, black

Reinforcing metal fixture: Copper alloy, nickel-undercoated, selective gold-plated

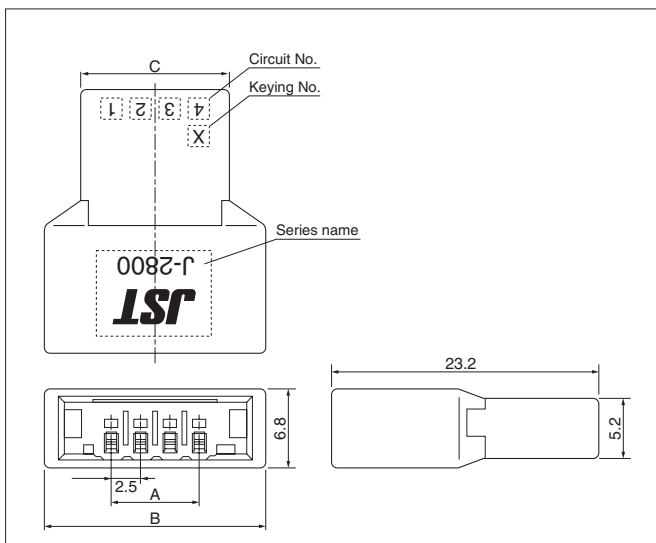
### RoHS compliance

This product displays (LF) on a label.

Note: 1. 3rd and 4th pins are sequential pins.

2. Not UL approved.

## Tab housing (Free hanging type)



Circuits	Keying	Model No.	Dimensions (mm)			Q'ty / box
			A	B	C	
4	X	<b>J28SFM-04V-KX</b>	7.5	19	12.7	—
	Y	Under planning	7.5	19	12.7	—

### Material

PBT, UL94V-0, black

### RoHS compliance

Note: Not UL approved.



# JFA CONNECTOR/2000 SERIES

## Model number identification

### Receptacle contact

**S J2 F - 01 GF - P 1.0**

Form: S...Strip form

Series name

Kind of terminal: F...Receptacle contact

Applicable wire: 002...AWG#28 ~ AWG#24  
01...AWG#24 ~ AWG#20  
21...0.3 to 0.75mm<sup>2</sup>

Surface finish: GF...Nickel-undercoated, 0.38μm selective gold-plated

Material: P...Copper alloy

Terminal size

### Tab contact

**S J2 M - 01 GF - M 1.0 S**

Form: S...Strip form

Series name

Kind of terminal: M...Tab contact

Applicable wire: 002...AWG #28 ~ #24  
01...AWG #24 ~ #20  
21...0.3 to 0.75mm<sup>2</sup>

Surface finish: GF...Nickel-undercoated, 0.38μm selective gold-plated

Material: M...Copper alloy

Terminal size

Sequential identification: N...Normal, S...Sequential

### Receptacle housing

**J21 D F-06 V - K X - L**

Series name: J21...Center locking type  
J22...Side locking type  
J23...Center locking type (for sensor)  
J25...Module type  
J28...Side locking type (Thin type)

Rows: S...Single-row, D...Double-row, M...Module-row  
C...For sensor-row

Type of connector: F...Receptacle housing

No. of circuits: 2, 3, 4, 6, 8, 10, 12, 16, 20

Flammability: UL94V-0

Color indication: K...Black, S...Natural (White), PK...Pink

Keying: X...X-Keying, Y...Y-Keying, ※...S1 ~ S8

Key way type: L...Long keying type  
Blank...Short keying type (6 circuits is long keying type)

### Tab housing

**J21 D P M-06 V - K X**

Series name: J21...Center locking type  
J22...Side locking type  
J25...Module type

Rows: S...Single-row, D...Double-row

Configuration: F...Free hanging, P...Panel mounting

Type of connector: M...Tab housing

No. of circuits: 3, 4, 6, 10, 12, 16, 20

Flammability: UL94V-0

Color indication: K...Black

Keying: X...X-Keying, Y...Y-Keying

### Header

**S 04 B - J28 S K - GG X Q1 R**

PC board mounting direction:  
B...Top entry type  
S...Side entry type  
P...Panel mounting type

No. of circuits: 3, 4, 6, 8, 10, 12, 16, 20

Product name: Header

Series name: J21...Center locking type  
J22...Side locking type  
J23...Center locking type (for sensor)  
J25...Module type  
J28...Side locking type (Thin type)

Rows: S...Single-row, D...Double-row

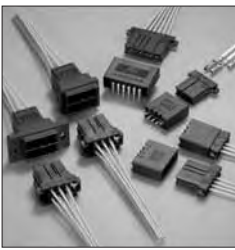
Color indication: K...Black, S...Natural (White), PK...Pink

Surface finish: GG...Nickel-undercoated, 0.38μm selective gold-plated

Keying: X...X-Keying, Y...Y-Keying, N...Special keying (S1 ~ S8)

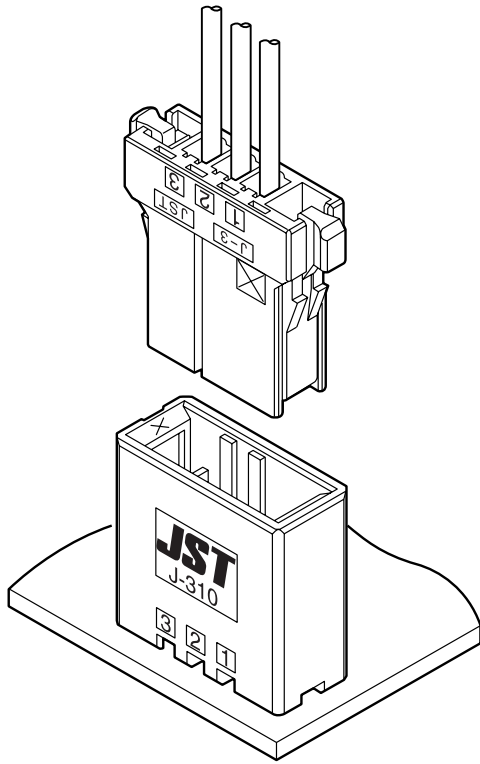
Sequential indication: Q1...Sequential type, Blank...Standard type

Packaging form: R...Tray



# JFA CONNECTOR J300 SERIES

3.81, 5.08mm pitch/Disconnectable Crimp style connectors(Wire-to-board/Wire-to-wire)



**Connectors for signal circuit or power supply circuit, applicable to the factory automation, heavy electric machinery, and other industrial equipment in general. In spite of the various kinds of housings available, their contacts are designed to be common. The applicable tooling can be standardized.**

- Double-spring construction
- Housing lances
- Secure locking method
- Recognition mark

## Specifications

- Current rating: 15A AC, DC (Single circuit/AWG #14)
- Voltage rating: 310, 340 series [3.81mm pitch] 250V AC, DC  
320, 350 series, 360T [5.08mm pitch] 600V AC, DC
- Temperature range: -55°C to +105°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/5mΩ max.  
After environmental testing/10mΩ max.
- Insulation resistance: 1,000MΩ min.
- Withstanding voltage:  
310, 340 series [3.81mm pitch] 1,500V AC/minute  
320, 350 series, 360T [5.08mm pitch] 2,200V AC/minute
- Applicable wire: AWG #28 to #14 (0.08 to 2.0mm<sup>2</sup>)
- Applicable PC board thickness: 1.6 to 2.4mm

\*Contact JST for details.

\*RoHS compliant products are published.

## Current rating

Unit: A

Circuits	Wire size (AWG)							
	#14	#16	#18	#20	#22	#24	#26	#28
1	15.0	14.0	11.5	9.5	8.0	6.5	5.75	4.75
2	13.5	13.5	11.25	9.25	7.5	6.25	5.5	4.5
3	12.25	12.25	10.5	8.5	7.0	5.75	5.0	4.1
4	11.25	11.25	10.0	8.0	6.5	5.5	4.75	4.0
5	10.5	10.5	9.5	7.5	6.25	5.25	4.5	4.0
6	9.75	9.75	9.0	7.0	6.0	5.0	4.25	3.75
8	9.0	9.0	8.25	6.5	5.5	4.5	3.75	3.25
9	8.5	8.5	8.0	6.25	5.25	4.5	3.75	3.25
10	8.5	8.5	8.0	6.25	5.25	4.5	3.75	3.25
12	8.25	8.25	7.75	6.0	5.0	4.0	3.5	3.0
16	8.0	8.0	7.5	6.0	4.75	4.0	3.5	3.0
20	8.0	8.0	7.25	6.0	4.5	4.0	3.5	2.75

## Standards

Recognized E60389

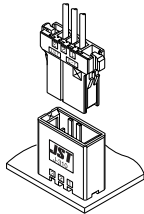
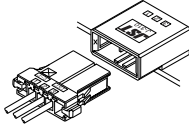
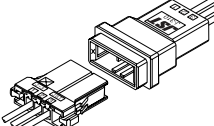
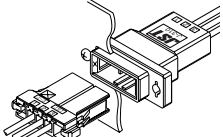
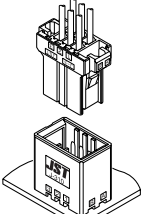
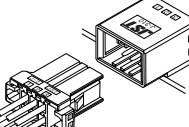
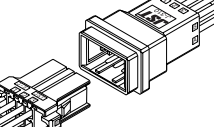
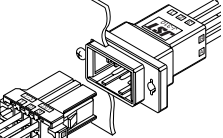
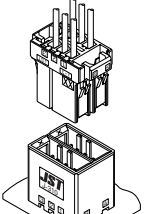
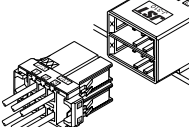
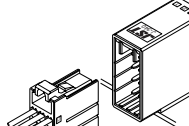
Certified LR20812

J-50015641

# JFA CONNECTOR/J300 SERIES

## List of J300 series products

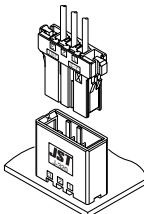
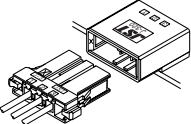
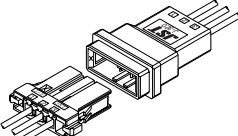
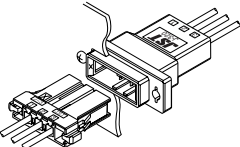
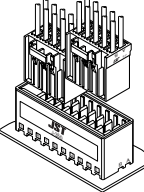
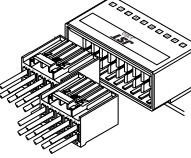
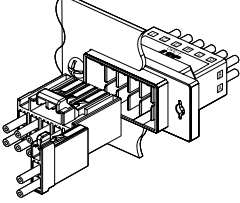
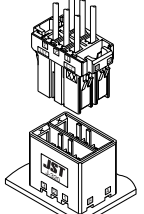
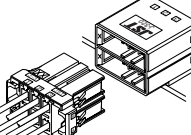
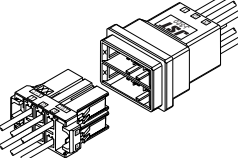
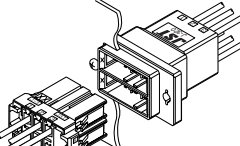
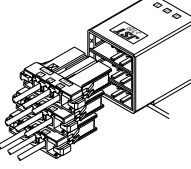
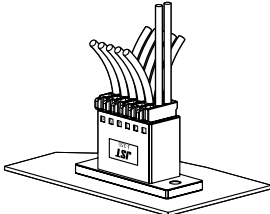
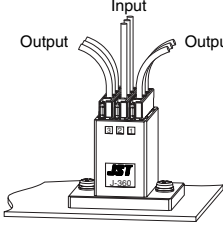
### 3.81mm pitch / Voltage rating 250V AC, DC

Type	Wire-to-board		Wire-to-wire	
	Top entry type	Side entry type	Free hanging type	Panel mounting type
<b>J310S</b> Single-row type				
Circuits	3, 4, 5, 6, 8, 10	3, 4, 5, 6, 8, 10	3, 5, 8, 10	3, 5, 8, 10
<b>J310D</b> Double-row type [line pitch 5.08mm]				
Circuits	6, 8, 10, 12, 16, 20	6, 8, 10, 12, 16, 20	6, 8, 10, 12, 16, 20	6, 8, 10, 12, 16, 20
<b>J310M</b> Double-row module type [line pitch 7.62mm]				
Circuits	6	6		
<b>J340F</b> Four-row type [line pitch 5.08mm]				
Circuits		12, 20		
—				
Circuits				

# JFA CONNECTOR/J300 SERIES

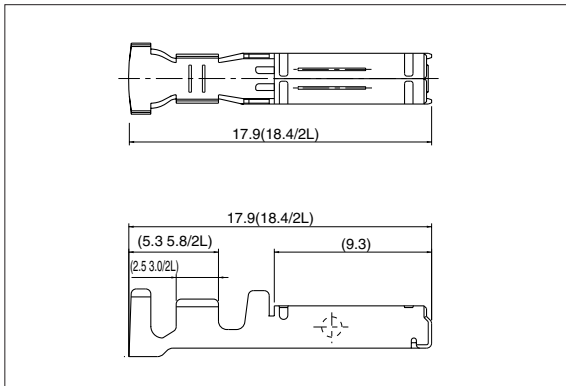
## List of J300 series products

5.08mm pitch / Voltage rating 600V AC, DC

Wire-to-board		Wire-to-wire		Type
Top entry type	Side entry type	Free hanging type	Panel mounting type	
				<b>J320S</b> Single-row type
2, 3, 4, 5, 6	2, 3, 4, 5, 6	1, 2, 3, 4	1, 2, 3, 4	
				<b>J350D</b> Double-row type [line pitch 5.08mm]
12, 20	12, 20		12	
				<b>J320M</b> Double-row module type [line pitch 7.62mm]
6,10,12	6, 8,10,12	6,12	6,12, 20	
				<b>J320T</b> Triple-row module type [line pitch 7.62mm]
	9			
Double-row common type (J350DC)		Triple-row common type (J360T)		<b>J350DC</b> <b>J360T</b> Common type
 (line pitch 5.08mm)		 Input Output Output (line pitch 6.5mm)		
12		9, 18, 24		Circuits

# JFA CONNECTOR/J300 SERIES

## Receptacle contact



Model No.		Applicable wire			Insulation O.D.	Q'ty	
Strip contact	Loose piece	Nominal	mm <sup>2</sup>	AWG#	(mm)	reel	Box/Loose piece
SF3F-002 (*) -P2.0	BF3F-002 (*) -P2.0	S	0.08 ~ 0.20	28 ~ 24	0.8 ~ 1.4	3,700	1,000
SF3F-01 (*) -P2.0	BF3F-01 (*) -P2.0	M	0.20 ~ 0.50	24 ~ 20	1.2 ~ 2.6	3,700	1,000
SF3F-41 (*) -P2.0	LF3F-41 (*) -P2.0	L	0.50 ~ 1.25	20 ~ 16	1.8 ~ 2.8	3,200	1,000
*SF3F-71 (*) -P2.0	*BF3F-71 (*) -P2.0	2L	1.25 ~ 2.0	16 ~ 14	2.4 ~ 3.4	3,200	1,000

### Material and Finish

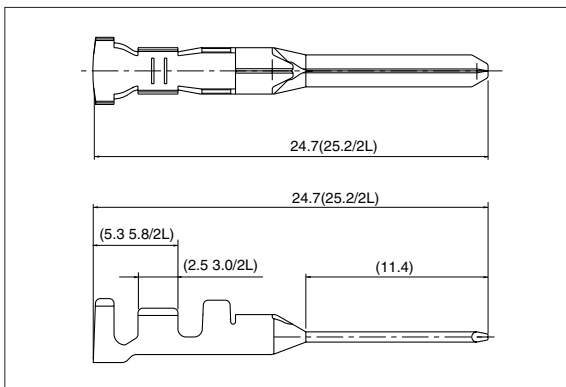
Copper alloy (superior conductivity), nickel-underplated, selective gold-plated tin-plated (reflow treatment)

### RoHS compliance

Note: 1. Finish (\*): GF...Nickel-undercoated, 0.38 μm selective gold-plated  
 GI...Nickel-undercoated, 0.76 μm selective gold-plated  
 T.....Tin-plated

2. \*Marked products are not CSA/TÜV approved.

## Tab contact



Model No.		Applicable wire			Insulation O.D.	Q'ty	
Strip contact	Loose piece	Nominal	mm <sup>2</sup>	AWG#	(mm)	reel	Box/Loose piece
Under planning	Under planning	S	0.08 ~ 0.20	28 ~ 24	0.8 ~ 1.4	—	—
SF3M-01 (*) -M2.0N	BF3M-01 (*) -M2.0N	M	0.20 ~ 0.50	24 ~ 20	1.2 ~ 2.6	3,500	1,000
SF3M-41 (*) -M2.0N	LF3M-41 (*) -M2.0N	L	0.50 ~ 1.25	20 ~ 16	1.8 ~ 2.8	3,300	1,000
*SF3M-71 (*) -M2.0N	*BF3M-71 (*) -M2.0N	2L	1.25 ~ 2.0	16 ~ 14	2.4 ~ 3.4	3,200	1,000

### Material and Finish

Copper alloy (superior conductivity), nickel-underplated, selective gold-plated tin-plated (reflow treatment)

### RoHS compliance

Note: 1. Finish (\*): GF...Nickel-undercoated, 0.38 μm selective gold-plated  
 GI...Nickel-undercoated, 0.76 μm selective gold-plated  
 T.....Tin-plated

2. \*Marked products are not CSA/TÜV approved.

## Crimping machine, Applicator

Strip contact Model No.	Crimping machine	Crimp applicator	Dies	Crimp applicator with dies	Hand crimp tools	
SF3F-002 (*) -P2.0	AP-K2N	MKS-L	MK/SF3F-002-20	APLMK SF3F/M002-20	YRK-8821	
SF3F-01 (*) -P2.0			MK/SF3F/M-01-20	APLMK SF3F/M01-20	YRK-8811	
SF3M-01 (*) -M2.0N			MK/SF3F/M-41-20	APLMK SF3F/M41-20	YRK-8801	
SF3F-41 (*) -P2.0				MK/SF3F/M-71-20	APLMK SF3F/M71-20	YRK-1071
SF3M-41 (*) -M2.0N					YRK-1071	
SF3F-71 (*) -P2.0						
SF3M-71 (*) -M2.0N						

Note: Finish (\*): GF...Nickel-undercoated, 0.38 μm selective gold-plated  
 GI...Nickel-undercoated, 0.76 μm selective gold-plated  
 T.....Tin-plated

Loose piece	Hand crimp tools
BF3F-002 (*) -P2.0	YRF-882
BF3F-01 (*) -P2.0	YRF-881
BF3M-01 (*) -M2.0N	
LF3F-41 (*) -P2.0	YRF-880
LF3M-41 (*) -M2.0N	
BF3F-71 (*) -P2.0	YRF-1070
BF3M-71 (*) -M2.0N	YRF-1071

Note: Finish (\*): GF...Nickel-undercoated, 0.38 μm selective gold-plated  
 GI...Nickel-undercoated, 0.76 μm selective gold-plated  
 T.....Tin-plated

• Extraction tool for J300 series: EJ-JFAJ3  
 • Refer to page 576, 577 for details of YRK series hand crimping tool that uses a strip contact.

## Recognition mark

### • Plating of the contact

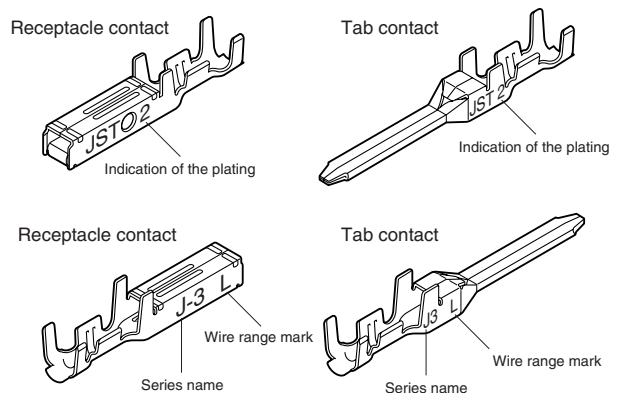
Each contact has a marking on its side so that the type or thickness of the plating is recognized.

ex. 2 ... gold-plated 0.38 μm thickness  
 3 ... gold-plated 0.76 μm thickness  
 5 ... tin-plated

### • Common marking on the contact and its application tools

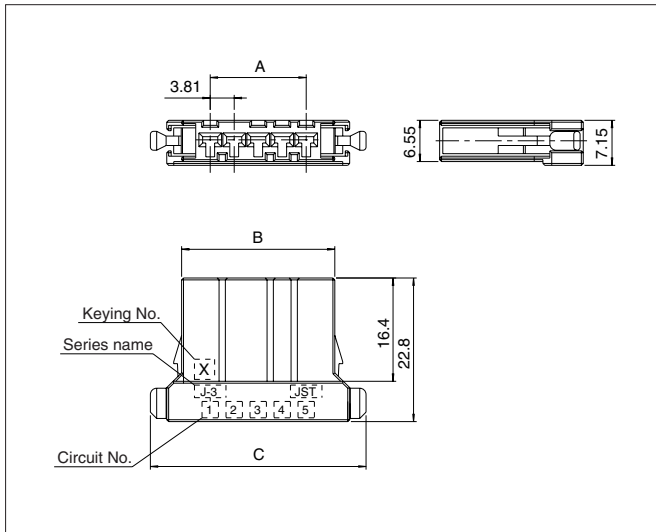
In order to avoid incorrect combination of the hand crimp tools or extraction tools and the contacts, the series name (for example J-3) and wire range mark (S, M, L, 2L) are shown on both the tools and the contacts.

For example J-3 S..... AWG #28 ~ #24  
 M..... AWG #24 ~ #20  
 L..... AWG #20 ~ #16  
 2L.... AWG #16 ~ #14



# J300 SERIES/J310S

## Receptacle housing



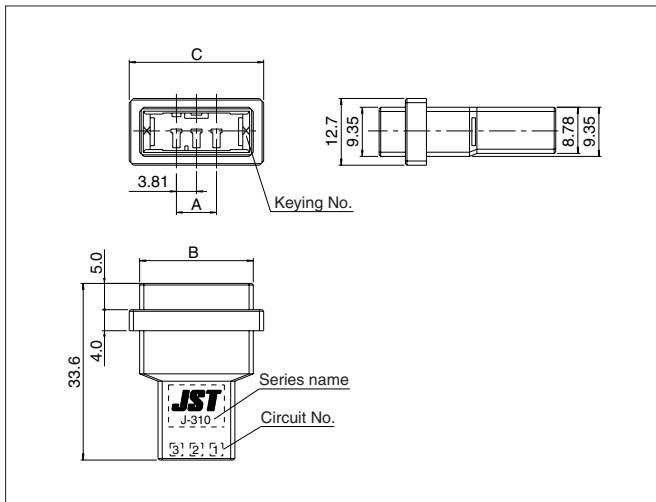
Circuits	Keying	Model No.	Dimensions (mm)			Q'ty / bag
			A	B	C	
3	X	<b>F31FSS-03V-KX</b>	7.62	16.70	26.62	200
	Y	<b>F31FSS-03V-KY</b>	7.62	16.70	26.62	200
4	X	<b>F31FSS-04V-KX</b>	11.43	20.51	30.43	200
	Y	<b>F31FSS-04V-KY</b>	11.43	20.51	30.43	200
5	X	<b>F31FSS-05V-KX</b>	15.24	24.32	34.24	200
	Y	<b>F31FSS-05V-KY</b>	15.24	24.32	34.24	200
6	X	<b>F31FSS-06V-KX</b>	19.05	28.13	38.05	200
	Y	<b>F31FSS-06V-KY</b>	19.05	28.13	38.05	200
8	X	<b>F31FSS-08V-KX</b>	26.67	35.75	45.67	100
	Y	<b>F31FSS-08V-KY</b>	26.67	35.75	45.67	100
10	X	<b>F31FSS-10V-KX</b>	34.29	43.37	53.29	100
	Y	<b>F31FSS-10V-KY</b>	34.29	43.37	53.29	100

### Material

Glass-filled PBT, UL94V-0, black

**RoHS compliance**

## Tab housing (Free hanging type)



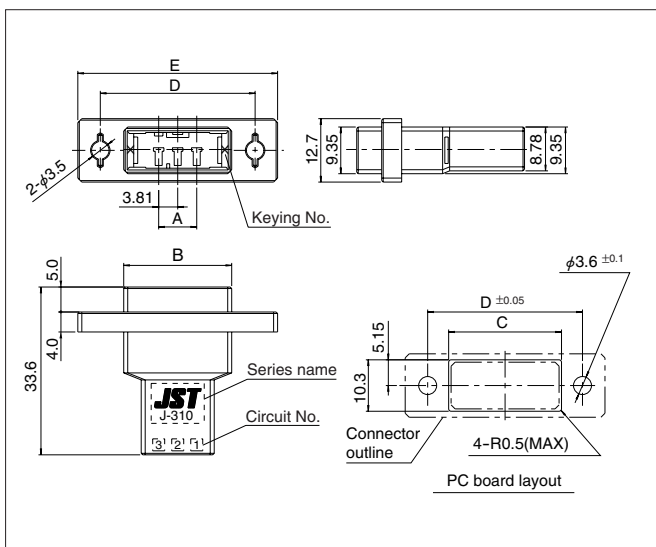
Circuits	Keying	Model No.	Dimensions (mm)			Q'ty / bag
			A	B	C	
3	X	<b>F31MSF-03V-KX</b>	7.62	21.62	25.57	200
	Y	<b>F31MSF-03V-KY</b>	7.62	21.62	25.57	200
5	X	<b>F31MSF-05V-KX</b>	15.24	29.24	33.19	200
	Y	<b>F31MSF-05V-KY</b>	15.24	29.24	33.19	200
8	X	<b>F31MSF-08V-KX</b>	26.67	40.67	44.62	100
	Y	<b>F31MSF-08V-KY</b>	26.67	40.67	44.62	100
10	X	<b>F31MSF-10V-KX</b>	34.29	48.29	52.24	100
	Y	<b>F31MSF-10V-KY</b>	34.29	48.29	52.24	100

### Material

Glass-filled PBT, UL94V-0, black

**RoHS compliance**

## Tab housing (Panel mounting type)



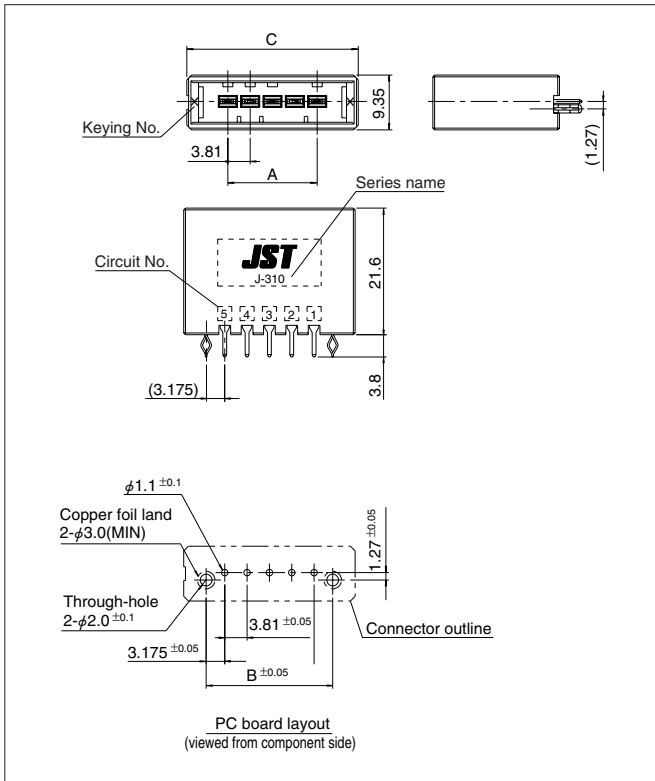
Circuits	Keying	Model No.	Dimensions (mm)					Q'ty / bag
			A	B	C	D	E	
3	X	<b>F31MSP-03V-KX</b>	7.62	21.62	22.60	31.00	40.00	200
	Y	<b>F31MSP-03V-KY</b>	7.62	21.62	22.60	31.00	40.00	200
5	X	<b>F31MSP-05V-KX</b>	15.24	29.24	30.20	38.00	47.00	200
	Y	<b>F31MSP-05V-KY</b>	15.24	29.24	30.20	38.00	47.00	200
8	X	<b>F31MSP-08V-KX</b>	26.67	40.67	41.60	50.00	59.00	100
	Y	<b>F31MSP-08V-KY</b>	26.67	40.67	41.60	50.00	59.00	100
10	X	<b>F31MSP-10V-KX</b>	34.29	48.29	49.20	58.00	67.00	100
	Y	<b>F31MSP-10V-KY</b>	34.29	48.29	49.20	58.00	67.00	100

### Material

Glass-filled PBT, UL94V-0, black

**RoHS compliance**

## Header (Top entry type)



Circuits	Keying	Model No.	Dimensions (mm)			Q'ty / box
			A	B	C	
3	X	B03B-F31SK-GGXR	7.62	13.97	21.62	220
	Y	B03B-F31SK-GGYR	7.62	13.97	21.62	220
4	X	B04B-F31SK-GGXR	11.43	17.78	25.43	180
	Y	B04B-F31SK-GGYR	11.43	17.78	25.43	180
5	X	B05B-F31SK-GGXR	15.24	21.59	29.24	160
	Y	B05B-F31SK-GGYR	15.24	21.59	29.24	160
6	X	B06B-F31SK-GGXR	19.05	25.40	33.05	140
	Y	B06B-F31SK-GGYR	19.05	25.40	33.05	140
8	X	B08B-F31SK-GGXR	26.67	33.02	40.67	120
	Y	B08B-F31SK-GGYR	26.67	33.02	40.67	120
10	X	B10B-F31SK-GGXR	34.29	40.64	48.29	100
	Y	B10B-F31SK-GGYR	34.29	40.64	48.29	100

### Material and Finish

Tab contact: Copper alloy, nickel-undercoated, selective gold-plated

Housing: Glass-filled PBT, UL94V-0, black

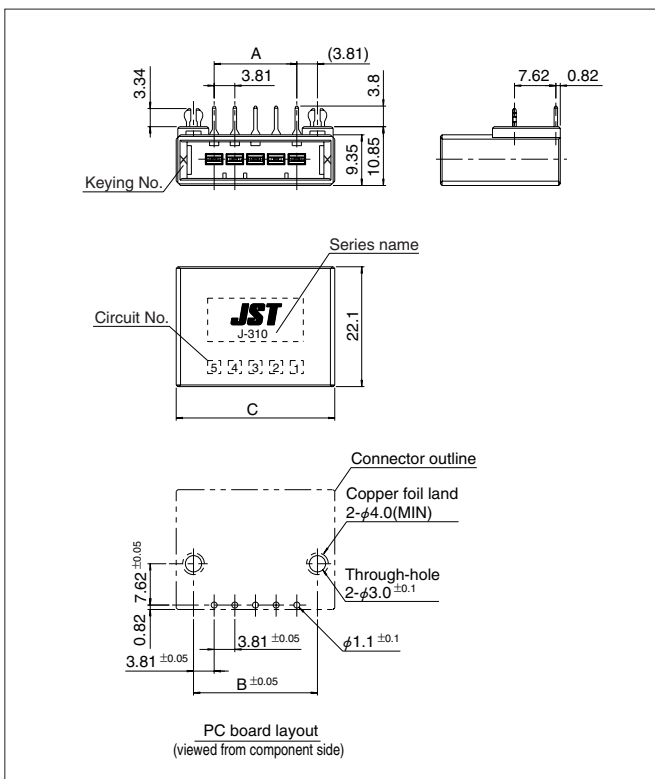
Reinforcing metal fixture: Copper alloy, nickel-undercoated, selective gold-plated

**RoHS compliance** This product displays (LF)(AU) on a label.

Note: 1. Contact JST for the headers supplied in magazine stick.

2. Contact JST for 0.76 μm gold-plated product and tin-plated product.

## Header (Side entry type)



Circuits	Keying	Model No.	Dimensions (mm)			Q'ty / box
			A	B	C	
3	X	S03B-F31SK-GGXR	7.62	15.24	21.62	165
	Y	S03B-F31SK-GGYR	7.62	15.24	21.62	165
4	X	S04B-F31SK-GGXR	11.43	19.05	25.43	135
	Y	S04B-F31SK-GGYR	11.43	19.05	25.43	135
5	X	S05B-F31SK-GGXR	15.24	22.86	29.24	120
	Y	S05B-F31SK-GGYR	15.24	22.86	29.24	120
6	X	S06B-F31SK-GGXR	19.05	26.67	33.05	105
	Y	S06B-F31SK-GGYR	19.05	26.67	33.05	105
8	X	S08B-F31SK-GGXR	26.67	34.29	40.67	90
	Y	S08B-F31SK-GGYR	26.67	34.29	40.67	90
10	X	S10B-F31SK-GGXR	34.29	41.91	48.29	75
	Y	S10B-F31SK-GGYR	34.29	41.91	48.29	75

### Material and Finish

Tab contact: Copper alloy, nickel-undercoated, selective gold-plated

Housing: Glass-filled PBT, UL94V-0, black

Reinforcing metal fixture: Copper alloy, nickel-undercoated, selective gold-plated

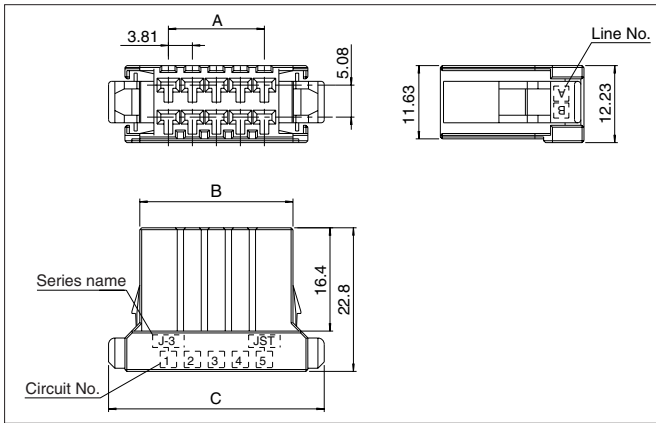
**RoHS compliance** This product displays (LF)(AU) on a label.

Note: 1. Contact JST for the headers supplied in magazine stick.

2. Contact JST for 0.76 μm gold-plated product and tin-plated product.

# J300 SERIES/J310D

## Receptacle housing



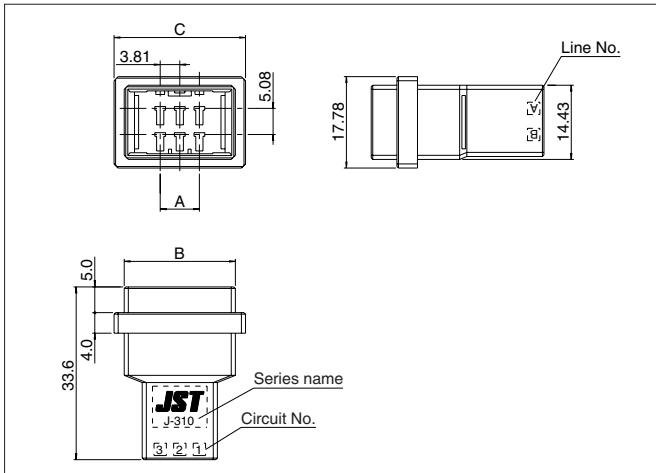
Circuits	Keying	Model No.	Dimensions (mm)			Q'ty /bag
			A	B	C	
6	—	<b>F31FDS-06V-K</b>	7.62	16.70	26.62	200
8	—	<b>F31FDS-08V-K</b>	11.43	20.51	30.43	100
10	—	<b>F31FDS-10V-K</b>	15.24	24.32	34.24	100
12	—	<b>F31FDS-12V-K</b>	19.05	28.13	38.05	100
16	—	<b>F31FDS-16V-K</b>	26.67	35.75	45.67	100
20	—	<b>F31FDS-20V-K</b>	34.29	43.37	53.29	100

### Material

Glass-filled PBT, UL94V-0, black

### RoHS compliance

## Tab housing (Free hanging type)



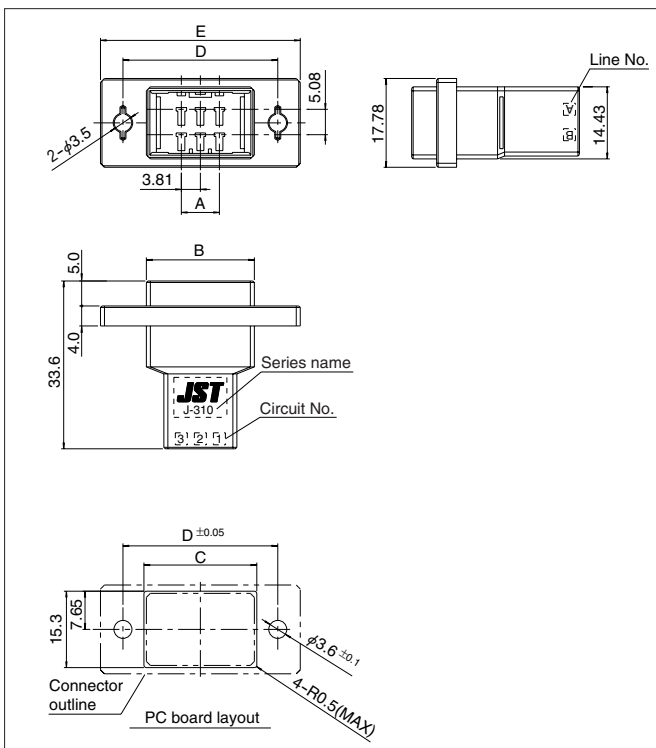
Circuits	Keying	Model No.	Dimensions (mm)			Q'ty /bag
			A	B	C	
6	—	<b>F31MDF-06V-K</b>	7.62	21.62	25.57	200
8	—	<b>F31MDF-08V-K</b>	11.43	25.43	29.38	100
10	—	<b>F31MDF-10V-K</b>	15.24	29.24	33.19	100
12	—	<b>F31MDF-12V-K</b>	19.05	33.05	37.00	100
16	—	<b>F31MDF-16V-K</b>	26.67	40.67	44.62	100
20	—	<b>F31MDF-20V-K</b>	34.29	48.29	52.24	100

### Material

Glass-filled PBT, UL94V-0, black

### RoHS compliance

## Tab housing (Panel mounting type)



Circuits	Keying	Model No.	Dimensions (mm)					Q'ty /bag
			A	B	C	D	E	
6	—	<b>F31MDP-06V-K</b>	7.62	21.62	22.60	31.00	40.00	200
8	—	<b>F31MDP-08V-K</b>	11.43	25.43	26.40	34.50	43.50	100
10	—	<b>F31MDP-10V-K</b>	15.24	29.24	30.20	38.00	47.00	100
12	—	<b>F31MDP-12V-K</b>	19.05	33.05	34.00	42.00	51.00	100
16	—	<b>F31MDP-16V-K</b>	26.67	40.67	41.60	50.00	59.00	100
20	—	<b>F31MDP-20V-K</b>	34.29	48.29	49.20	58.00	67.00	100

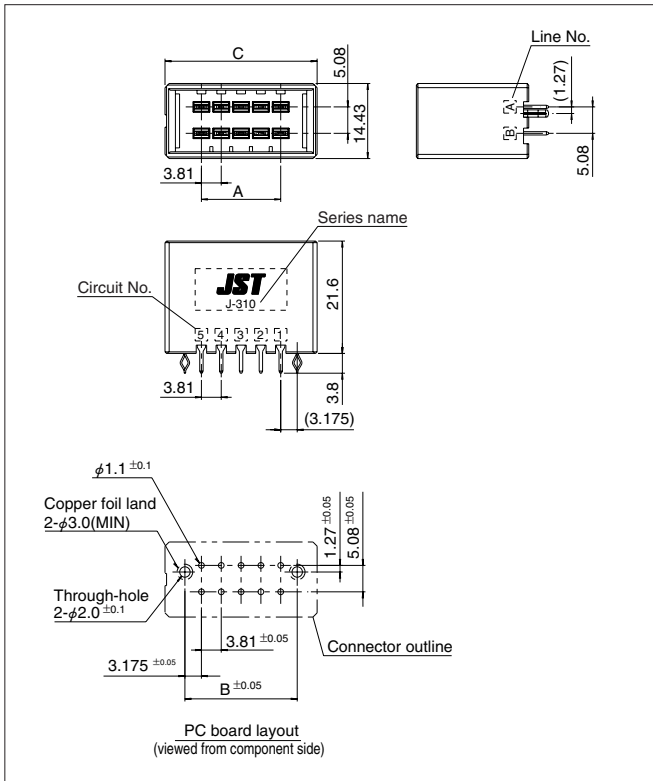
### Material

Glass-filled PBT, UL94V-0, black

### RoHS compliance



## Header (Top entry type)



Circuits	Keying	Model No.	Dimensions (mm)			Q'ty / box
			A	B	C	
6	—	B06B-F31DK-GGR	7.62	13.97	21.62	132
8	—	B08B-F31DK-GGR	11.43	17.78	25.43	108
10	—	B10B-F31DK-GGR	15.24	21.59	29.24	96
12	—	B12B-F31DK-GGR	19.05	25.40	33.05	84
16	—	B16B-F31DK-GGR	26.67	33.02	40.67	72
20	—	B20B-F31DK-GGR	34.29	40.64	48.29	60

### Material and Finish

Tab contact: Copper alloy, nickel-undercoated, selective gold-plated

Housing: Glass-filled PBT, UL94V-0, black

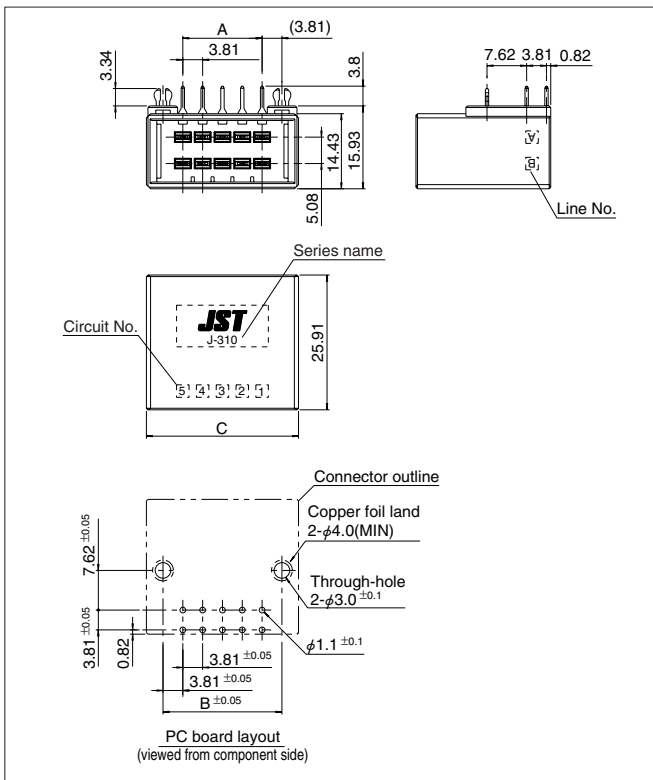
Reinforcing metal fixture: Copper alloy, nickel-undercoated, selective gold-plated

**RoHS compliance** This product displays (LF) (AU) on a label.

Note: 1. Contact JST for the headers supplied in magazine stick.

2. Contact JST for 0.76 μm gold-plated product and tin-plated product.

## Header (Side entry type)



Circuits	Keying	Model No.	Dimensions (mm)			Q'ty / box
			A	B	C	
6	—	S06B-F31DK-GGR	7.62	15.24	21.62	88
8	—	S08B-F31DK-GGR	11.43	19.05	25.43	72
10	—	S10B-F31DK-GGR	15.24	22.86	29.24	64
12	—	S12B-F31DK-GGR	19.05	26.67	33.05	56
16	—	S16B-F31DK-GGR	26.67	34.29	40.67	48
20	—	S20B-F31DK-GGR	34.29	41.91	48.29	40

### Material and Finish

Tab contact: Copper alloy, nickel-undercoated, selective gold-plated

Housing: Glass-filled PBT, UL94V-0, black

Reinforcing metal fixture: Copper alloy, nickel-undercoated, selective gold-plated

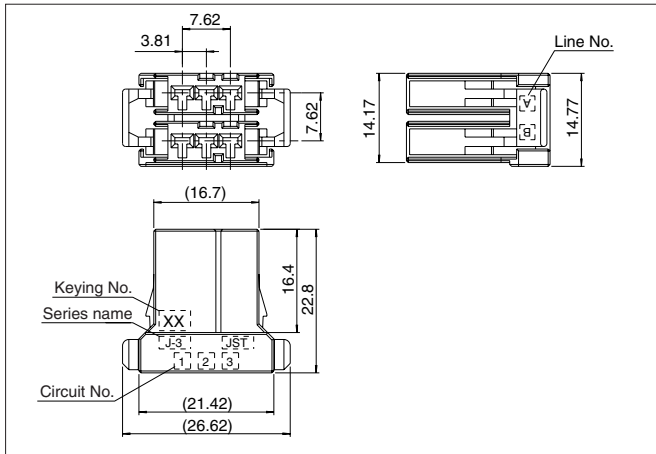
**RoHS compliance** This product displays (LF) (AU) on a label.

Note: 1. Contact JST for the headers supplied in magazine stick.

2. Contact JST for 0.76 μm gold-plated product and tin-plated product.

# J300 SERIES/J310M

## Receptacle housing



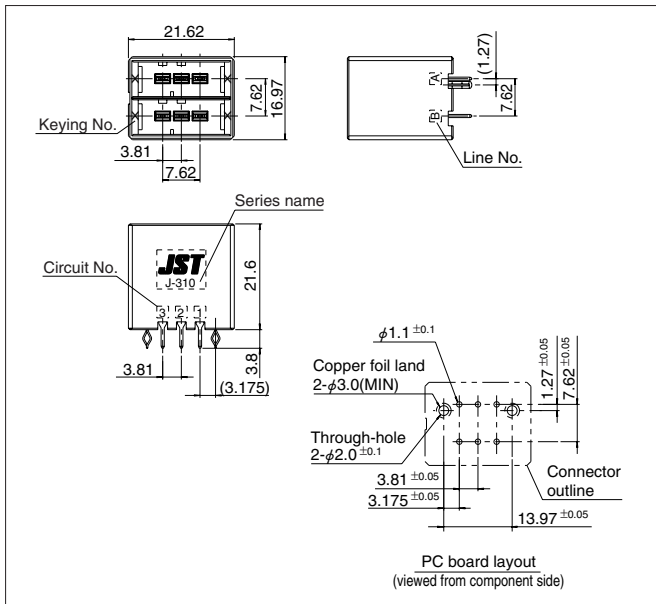
Circuits	Keying	Model No.	Q'ty / box
6	XX	<b>F31FMS-06V-KXX</b>	100
	YY	<b>F31FMS-06V-KYY</b>	100
	XY	<b>F31FMS-06V-KXY</b>	100

### Material

Glass-filled PBT, UL94V-0, black

### RoHS compliance

## Header (Top entry type)



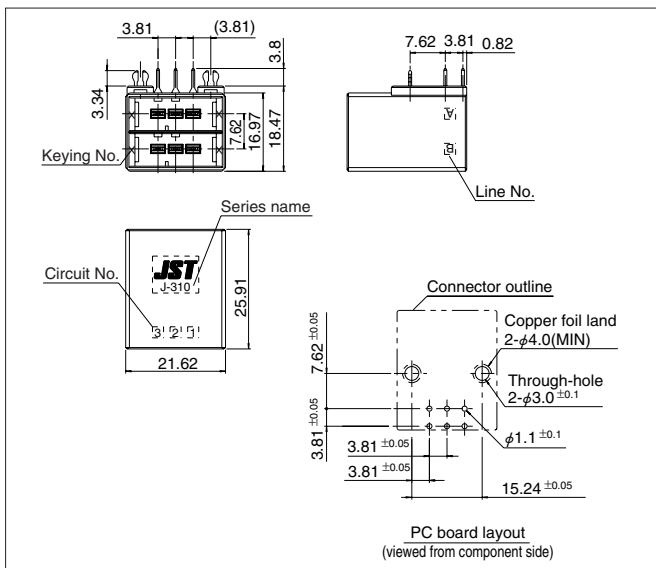
Circuits	Keying	Model No.	Q'ty / box
6	XX	<b>B06B-F31MK-GGXXR</b>	132
	YY	<b>B06B-F31MK-GGYR</b>	132
	XY	<b>B06B-F31MK-GGXYR</b>	132

### Material and Finish

Tab contact: Copper alloy, nickel-undercoated, selective gold-plated  
Housing: Glass-filled PBT, UL94V-0, black  
Reinforcing metal fixture: Copper alloy, nickel-undercoated, selective gold-plated

**RoHS compliance** This product displays (LF)(AU) on a label.  
Note: 1. Contact JST for the headers supplied in magazine stick.  
2. Contact JST for 0.76 μm gold-plated product and tin-plated product.

## Header (Side entry type)



Circuits	Keying	Model No.	Q'ty / box
6	XX	<b>S06B-F31MK-GGXXR</b>	88
	YY	<b>S06B-F31MK-GGYR</b>	88
	XY	<b>S06B-F31MK-GGXYR</b>	88

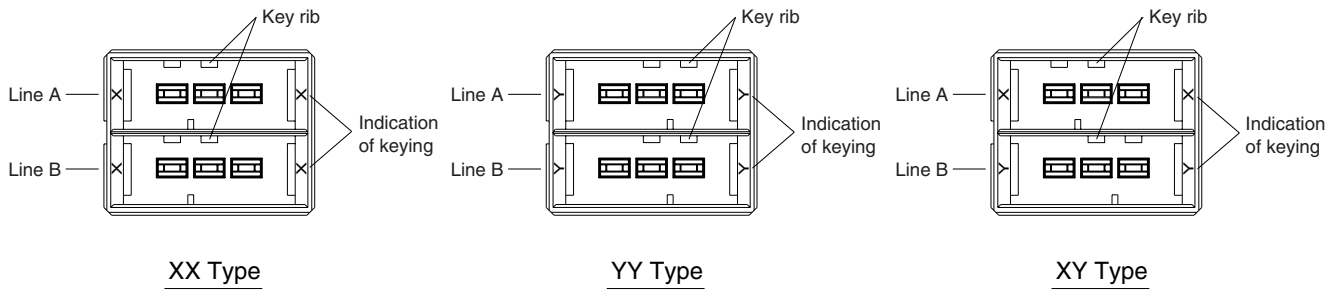
### Material and Finish

Tab contact: Copper alloy, nickel-undercoated, selective gold-plated  
Housing: Glass-filled PBT, UL94V-0, black  
Reinforcing metal fixture: Copper alloy, nickel-undercoated, selective gold-plated

**RoHS compliance** This product displays (LF)(AU) on a label.  
Note: 1. Contact JST for the headers supplied in magazine stick.  
2. Contact JST for 0.76 μm gold-plated product and tin-plated product.

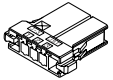
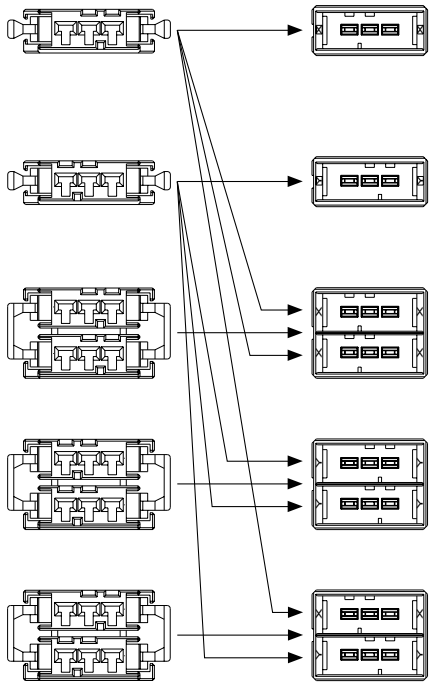
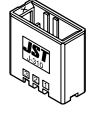

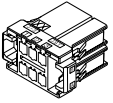
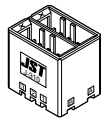
## Keying

J310M series have mis-insertion preventive keying.  
Available in 3 types — XX type, YY type and XY type.  
(Headers viewed from the mating side are shown below.)



## List of combinations

With the combination of the J310M headers and the J310M/J310S (3 circuits) receptacle housings, the following modular combinations are possible.

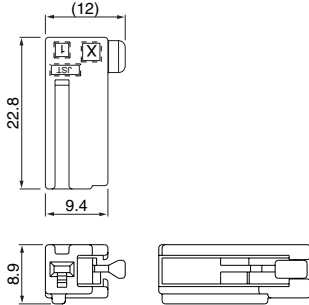
Receptacle housing		Header				
		Top entry type		Side entry type		
Single-row 3 circuits (J310S) 	X Type F31FSS-03V-KX		Single-row 3 circuits (J310S) 	X Type B03B-F31SK-GGX ■	Single-row 3 circuits (J310S) 	X Type S03B-F31SK-GGX ■
	Y Type F31FSS-03V-KY		Y Type B03B-F31SK-GGY ■	Y Type S03B-F31SK-GGY ■		
Double-row 6 circuits (J310M) 	XX Type F31FMS-06V-KXX		XX Type B06B-F31MK-GGXX ■	Double-row 6 circuits (J310M) 	XX Type S06B-F31MK-GGXX ■	
	YY Type F31FMS-06V-KYY		YY Type B06B-F31MK-GGY ■	YY Type S06B-F31MK-GGY ■		
	XY Type F31FMS-06V-KXY		XY Type B06B-F31MK-GGXY ■	XY Type S06B-F31MK-GGXY ■		

Note: Packaging method is indicated in ■. (R=Tray)

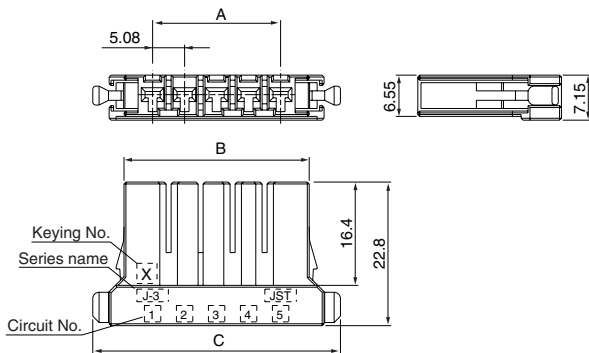
# J300 SERIES/J320S

## Receptacle housing

- Single circuit



- 2 to 6 circuits



Circuits	Keying	Model No.	Dimensions (mm)			Q'ty / bag
			A	B	C	
1	X	F32FSS-01V-KX	—	—	—	200
	Y	F32FSS-01V-KY	—	—	—	200
2	X	F32FSS-02V-KX	5.08	14.16	24.08	200
	Y	F32FSS-02V-KY	5.08	14.16	24.08	200
3	X	F32FSS-03V-KX	10.16	19.24	29.16	200
	Y	F32FSS-03V-KY	10.16	19.24	29.16	200
4	X	F32FSS-04V-KX	15.24	24.32	34.24	200
	Y	F32FSS-04V-KY	15.24	24.32	34.24	200
5	X	F32FSS-05V-KX	20.32	29.40	39.32	200
	Y	F32FSS-05V-KY	20.32	29.40	39.32	200
6	X	F32FSS-06V-KX	25.40	34.48	44.40	100
	Y	F32FSS-06V-KY	25.40	34.48	44.40	100

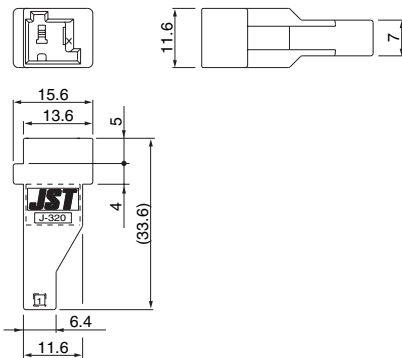
### Material

Glass-filled PBT, UL94V-0, black

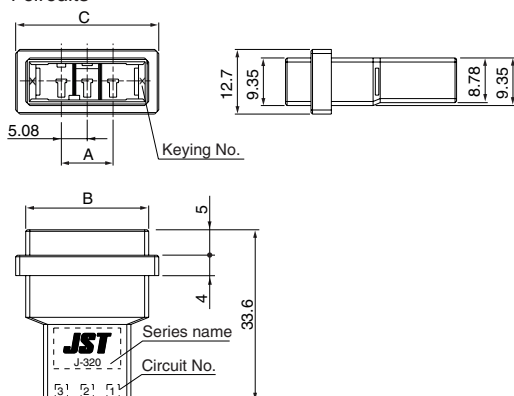
### RoHS compliance

## Tab housing (Free hanging type)

- Single circuit



- 2 to 4 circuits



Circuits	Keying	Model No.	Dimensions (mm)			Q'ty / bag
			A	B	C	
1	X	F32MSF-01V-KX	—	—	—	150
	Y	F32MSF-01V-KY	—	—	—	150
2	X	F32MSF-02V-KX	5.08	19.08	23.03	200
	Y	F32MSF-02V-KY	5.08	19.08	23.03	200
3	X	F32MSF-03V-KX	10.16	24.16	28.11	200
	Y	F32MSF-03V-KY	10.16	24.16	28.11	200
4	X	F32MSF-04V-KX	15.24	29.24	33.19	200
	Y	F32MSF-04V-KY	15.24	29.24	33.19	200

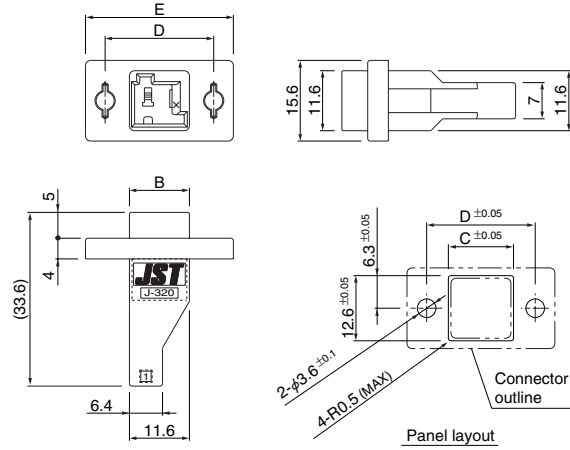
### Material

Glass-filled PBT, UL94V-0, black

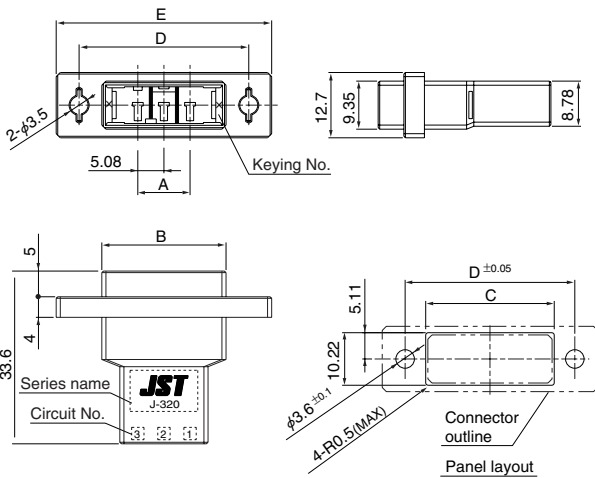
### RoHS compliance

## Tab housing (Panel mounting type)

### • Single circuit



### • 2 to 4 circuits



Circuits	Keying	Model No.	Dimensions (mm)					Q'ty / bag
			A	B	C	D	E	
1	X	F32MSP-01V-KX	—	11.60	12.60	21.00	28.60	150
	Y	F32MSP-01V-KY	—	11.60	12.60	21.00	28.60	150
2	X	F32MSP-02V-KX	5.08	19.08	20.00	28.00	36.83	200
	Y	F32MSP-02V-KY	5.08	19.08	20.00	28.00	36.83	200
3	X	F32MSP-03V-KX	10.16	24.16	25.00	33.00	41.91	200
	Y	F32MSP-03V-KY	10.16	24.16	25.00	33.00	41.91	200
4	X	F32MSP-04V-KX	15.24	29.24	30.00	38.00	46.99	200
	Y	F32MSP-04V-KY	15.24	29.24	30.00	38.00	46.99	200

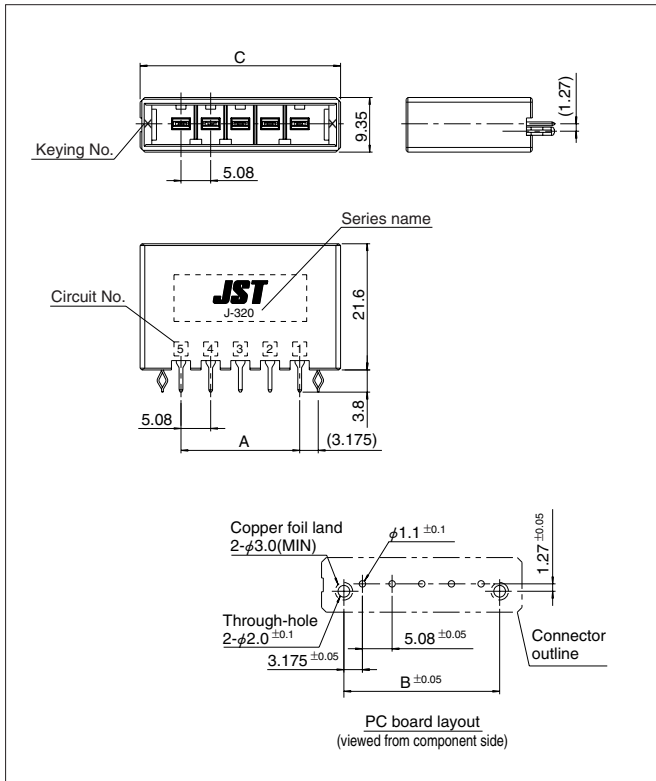
#### Material

Glass-filled PBT, UL94V-0, black

#### RoHS compliance

# J300 SERIES/J320S

## Header (Top entry type)



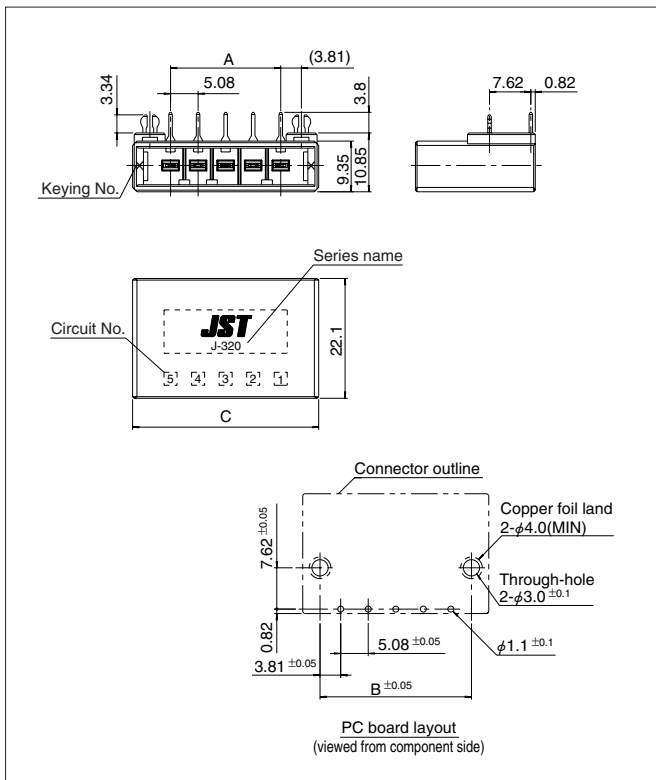
Circuits	Keying	Model No.	Dimensions (mm)			Q'ty / box
			A	B	C	
2	X	<b>B02B-F32SK-GGXR</b>	5.08	11.43	19.08	240
	Y	<b>B02B-F32SK-GGYR</b>	5.08	11.43	19.08	240
3	X	<b>B03B-F32SK-GGXR</b>	10.16	16.51	24.16	200
	Y	<b>B03B-F32SK-GGYR</b>	10.16	16.51	24.16	200
4	X	<b>B04B-F32SK-GGXR</b>	15.24	21.59	29.24	160
	Y	<b>B04B-F32SK-GGYR</b>	15.24	21.59	29.24	160
5	X	<b>B05B-F32SK-GGXR</b>	20.32	26.67	34.32	140
	Y	<b>B05B-F32SK-GGYR</b>	20.32	26.67	34.32	140
6	X	<b>B06B-F32SK-GGXR</b>	25.40	31.75	39.40	120
	Y	<b>B06B-F32SK-GGYR</b>	25.40	31.75	39.40	120

### Material and Finish

Tab contact: Copper alloy, nickel-undercoated, selective gold-plated  
Housing: Glass-filled PBT, UL94V-0, black  
Reinforcing metal fixture: Copper alloy, nickel-undercoated, selective gold-plated

**RoHS compliance** This product displays (LF)(AU) on a label.  
Note: 1. Contact JST for the headers supplied in magazine stick.  
2. Contact JST for 0.76 μm gold-plated product and tin-plated product.

## Header (Side entry type)



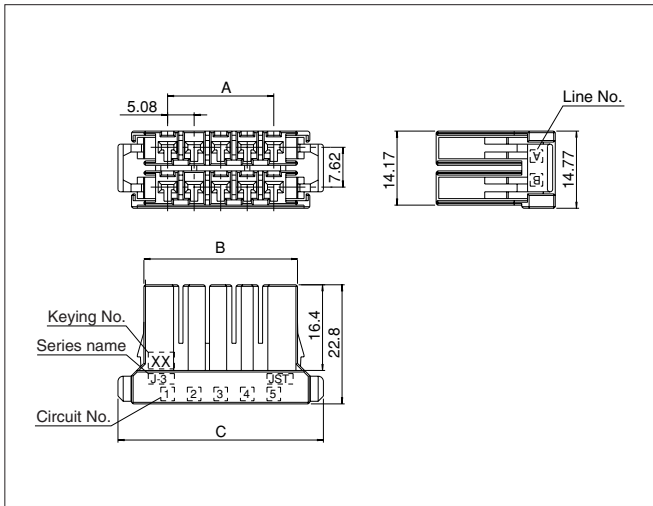
Circuits	Keying	Model No.	Dimensions (mm)			Q'ty / box
			A	B	C	
2	X	<b>S02B-F32SK-GGXR</b>	5.08	12.70	19.08	180
	Y	<b>S02B-F32SK-GGYR</b>	5.08	12.70	19.08	180
3	X	<b>S03B-F32SK-GGXR</b>	10.16	17.78	24.16	150
	Y	<b>S03B-F32SK-GGYR</b>	10.16	17.78	24.16	150
4	X	<b>S04B-F32SK-GGXR</b>	15.24	22.86	29.24	120
	Y	<b>S04B-F32SK-GGYR</b>	15.24	22.86	29.24	120
5	X	<b>S05B-F32SK-GGXR</b>	20.32	27.94	34.32	105
	Y	<b>S05B-F32SK-GGYR</b>	20.32	27.94	34.32	105
6	X	<b>S06B-F32SK-GGXR</b>	25.40	33.02	39.40	90
	Y	<b>S06B-F32SK-GGYR</b>	25.40	33.02	39.40	90

### Material and Finish

Tab contact: Copper alloy, nickel-undercoated, selective gold-plated  
Housing: Glass-filled PBT, UL94V-0, black  
Reinforcing metal fixture: Copper alloy, nickel-undercoated, selective gold-plated

**RoHS compliance** This product displays (LF)(AU) on a label.  
Note: 1. Contact JST for the headers supplied in magazine stick.  
2. Contact JST for 0.76 μm gold-plated product and tin-plated product.

## Receptacle housing



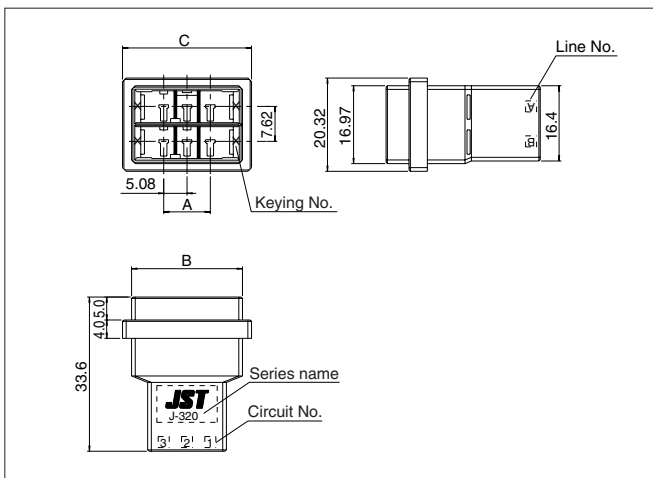
Circuits	Keying	Model No.	Dimensions (mm)			Qty / bag
			A	B	C	
6	XX	F32FMS-06V-KXX	10.16	19.24	29.16	100
	YY	F32FMS-06V-KYY	10.16	19.24	29.16	100
	XY	F32FMS-06V-KXY	10.16	19.24	29.16	100
10	XX	F32FMS-10V-KXX	20.32	29.40	39.32	100
	YY	F32FMS-10V-KYY	20.32	29.40	39.32	100
	XY	F32FMS-10V-KXY	20.32	29.40	39.32	100
12	XX	F32FMS-12V-KXX	25.40	34.48	44.40	100
	YY	F32FMS-12V-KYY	25.40	34.48	44.40	100
	XY	F32FMS-12V-KXY	25.40	34.48	44.40	100
20	XX	F32FMS-20V-KXX	45.72	54.80	64.72	96(box)
	YY	Under planning	—	—	—	—
	XY	Under planning	—	—	—	—

### Material

Glass-filled PBT, UL94V-0, black

### RoHS compliance

## Tab housing (Free hanging type)



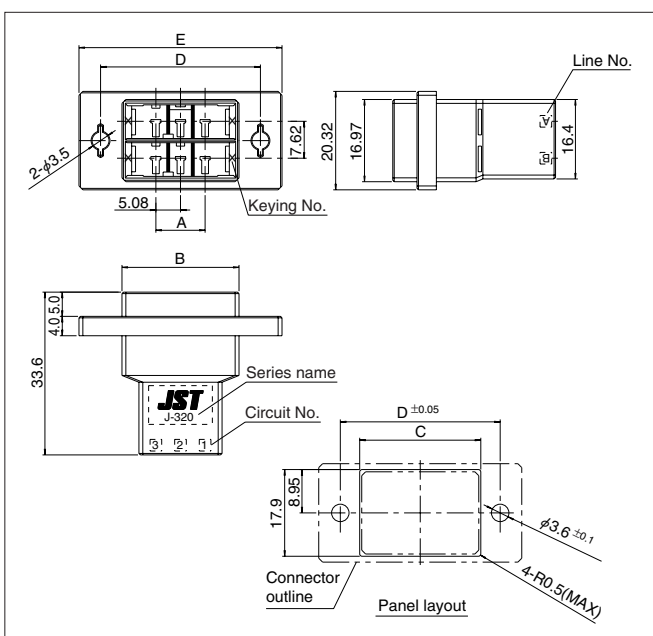
Circuits	Keying	Model No.	Dimensions (mm)			Qty / bag
			A	B	C	
6	XX	F32MDF-06V-KXX	10.16	24.16	28.11	100
	YY	F32MDF-06V-KYY	10.16	24.16	28.11	100
	XY	F32MDF-06V-KXY	10.16	24.16	28.11	100
12	XX	F32MDF-12V-KXX	25.40	39.40	43.35	100
	YY	F32MDF-12V-KYY	25.40	39.40	43.35	100
	XY	F32MDF-12V-KXY	25.40	39.40	43.35	100

### Material

Glass-filled PBT, UL94V-0, black

### RoHS compliance

## Tab housing (Panel mounting type)



Circuits	Keying	Model No.	Dimensions (mm)					Qty / bag
			A	B	C	D	E	
6	XX	F32MDP-06V-KXX	10.16	24.16	25.00	33.00	41.91	100
	YY	F32MDP-06V-KYY	10.16	24.16	25.00	33.00	41.91	100
	XY	F32MDP-06V-KXY	10.16	24.16	25.00	33.00	41.91	100
12	XX	F32MDP-12V-KXX	25.40	39.40	41.00	49.00	57.91	100
	YY	F32MDP-12V-KYY	25.40	39.40	41.00	49.00	57.91	100
	XY	F32MDP-12V-KXY	25.40	39.40	41.00	49.00	57.91	100
20	XX	F32MDP-20V-KXX	45.72	59.72	61.00	70.00	78.23	40(box)
	YY	Under planning	—	—	—	—	—	—
	XY	Under planning	—	—	—	—	—	—

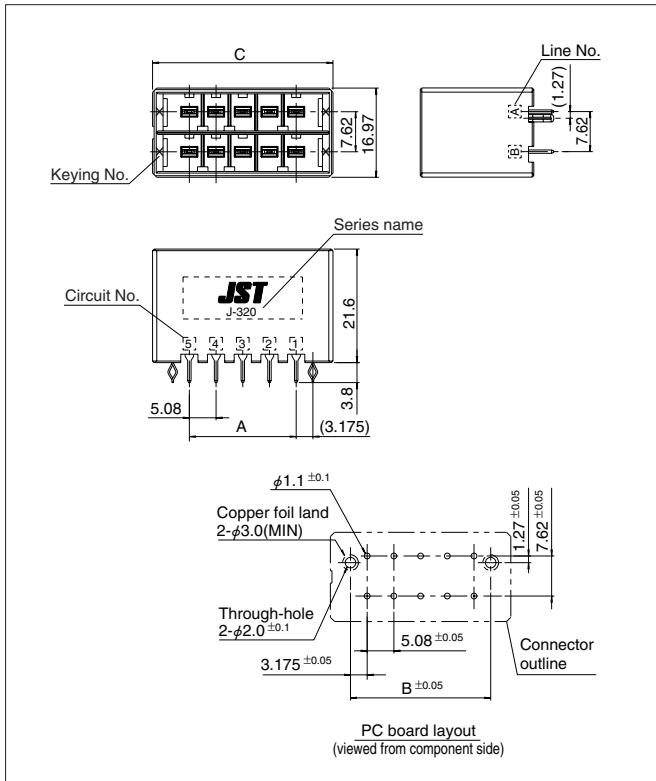
### Material

Glass-filled PBT, UL94V-0, black

### RoHS compliance

# J300 SERIES/J320M

## Header (Top entry type)



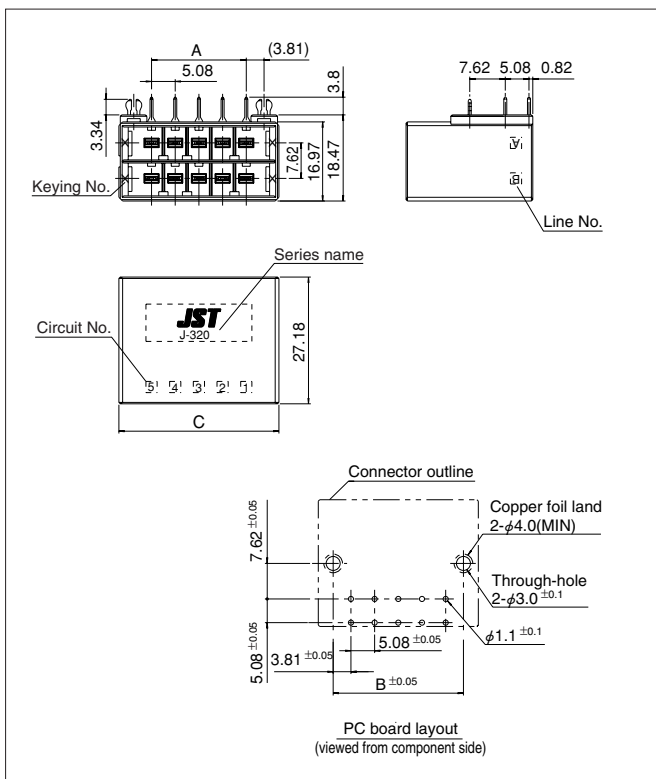
Circuits	Keying	Model No.	Dimensions (mm)			Q'ty / box
			A	B	C	
6	XX	<b>B06B-F32MK-GGXXR</b>	10.16	16.51	24.16	120
	YY	<b>B06B-F32MK-GGYR</b>	10.16	16.51	24.16	120
	XY	<b>B06B-F32MK-GGX</b>	10.16	16.51	24.16	120
10	XX	<b>B10B-F32MK-GGXXR</b>	20.32	26.67	34.32	84
	YY	<b>B10B-F32MK-GGYR</b>	20.32	26.67	34.32	84
12	XX	<b>B12B-F32MK-GGXXR</b>	25.40	31.75	39.40	72
	YY	<b>B12B-F32MK-GGYR</b>	25.40	31.75	39.40	72
	XY	<b>B12B-F32MK-GGX</b>	25.40	31.75	39.40	72

### Material and Finish

Tab contact: Copper alloy, nickel-undercoated, selective gold-plated  
Housing: Glass-filled PBT, UL94V-0, black  
Reinforcing metal fixture: Copper alloy, nickel-undercoated, selective gold-plated

**RoHS compliance** This product displays (LF)(AU) on a label.  
Note: 1. Contact JST for the headers supplied in magazine stick.  
2. Contact JST for 0.76 μm gold-plated product and tin-plated product.

## Header (Side entry type)



Circuits	Keying	Model No.	Dimensions (mm)			Q'ty / box
			A	B	C	
6	XX	<b>S06B-F32MK-GGXXR</b>	10.16	17.78	24.16	80
	YY	<b>S06B-F32MK-GGYR</b>	10.16	17.78	24.16	80
	XY	<b>S06B-F32MK-GGX</b>	10.16	17.78	24.16	80
8	XY	<b>S08B-F32MK-GGX</b>	15.24	22.86	29.24	64
10	XX	<b>S10B-F32MK-GGXXR</b>	20.32	27.94	34.32	56
	YY	<b>S10B-F32MK-GGYR</b>	20.32	27.94	34.32	56
12	XX	<b>S12B-F32MK-GGXXR</b>	25.40	33.02	39.40	48
	YY	<b>S12B-F32MK-GGYR</b>	25.40	33.02	39.40	48
	XY	<b>S12B-F32MK-GGX</b>	25.40	33.02	39.40	48

### Material and Finish

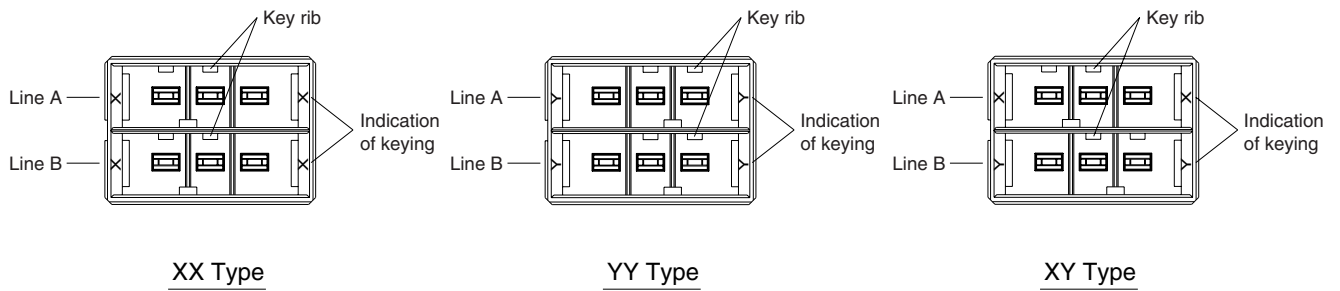
Tab contact: Copper alloy, nickel-undercoated, selective gold-plated  
Housing: Glass-filled PBT, UL94V-0, black  
Reinforcing metal fixture: Copper alloy, nickel-undercoated, selective gold-plated

**RoHS compliance** This product displays (LF)(AU) on a label.  
Note: 1. Contact JST for the headers supplied in magazine stick.  
2. Contact JST for 0.76 μm gold-plated product and tin-plated product.



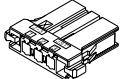
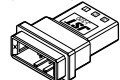



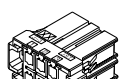
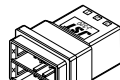



## Keying

J320M series have mis-insertion preventive keying.  
Available in 3 types – XX type, YY type and XY type.  
(Headers viewed from the mating side are shown below.)



## List of combinations

With the combination of the J320M headers and the J320M/J320S receptacle housings, the following modular combinations are possible.

Receptacle housing		Tab housing		Header		
Single-row 3, 5, 6 circuits (J320S)  	X type F32FSS-■V-KX	 Free hanging type  Panel mounting type	X type Free hanging type F32MSF-■V-KX Panel mounting type F32MSP-■V-KX	Single-row 3, 5, 6 circuits (J320S)   Top entry type  Side entry type	X type Top entry type B■B-F32SK-GGX■ Side entry type S■B-F32SK-GGX■	
	Y type F32FSS-■V-KY		Y type Free hanging type F32MSF-■V-KY Panel mounting type F32MSP-■V-KY		Y type Free hanging type F32MSF-■V-KY Panel mounting type F32MSP-■V-KY	Y type Top entry type B■B-F32SK-GGY■ Side entry type S■B-F32SK-GGY■
Double-row 6, 10, 12, 20 circuits (J320M)  	XX type F32FMS-■V-KXX	 Free hanging type  Panel mounting type	XX type Free hanging type F32MDF-■V-KXX Panel mounting type F32MDP-■V-KXX	Double-row 6, 10, 12 circuits (J320M)   Top entry type  Side entry type	XX type Top entry type B■B-F32MK-GGXX■ Side entry type S■B-F32MK-GGXX■	
	YY type F32FMS-■V-KYY		YY type Free hanging type F32MDF-■V-KYY Panel mounting type F32MDP-■V-KYY		YY type Free hanging type F32MDF-■V-KYY Panel mounting type F32MDP-■V-KYY	YY type Top entry type B■B-F32MK-GGY■ Side entry type S■B-F32MK-GGY■
	XY type F32FMS-■V-KXY		XY type Free hanging type F32MDF-■V-KXY Panel mounting type F32MDP-■V-KXY		XY type Free hanging type F32MDF-■V-KXY Panel mounting type F32MDP-■V-KXY	XY type Top entry type B■B-F32MK-GGXY■ Side entry type S■B-F32MK-GGXY■

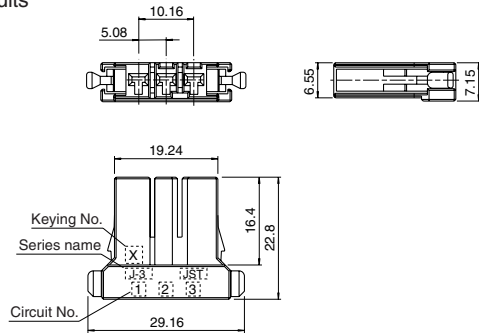
Note: Number of circuits is indicated in ■■.  
Packaging method is indicated in ■.

# J300 SERIES/J320T

## Receptacle housing

### Single-row type

- 3 circuits



Circuits	Keying	Model No.	Q'ty / bag
3	X	<b>F32FSS-03V-KX</b>	200
	Y	<b>F32FSS-03V-KY</b>	200

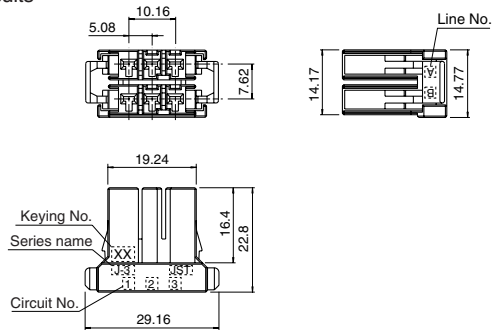
#### Material

Glass-filled PBT, UL94V-0, black

#### RoHS compliance

### Double-row type

- 6 circuits



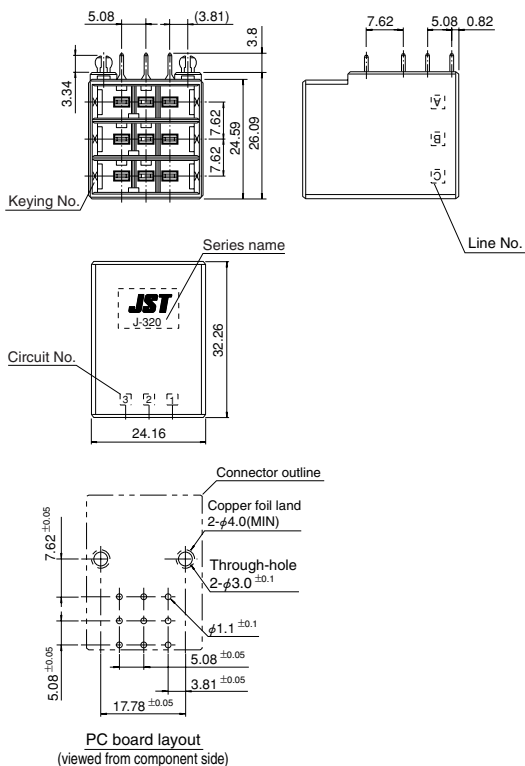
Circuits	Keying	Model No.	Q'ty / bag
6	XX	<b>F32FMS-06V-KXX</b>	100
	YY	<b>F32FMS-06V-KYY</b>	100
	XY	<b>F32FMS-06V-KXY</b>	100

#### Material

Glass-filled PBT, UL94V-0, black

#### RoHS compliance

## Header (Side entry type)



Circuits	Keying	Model No.	Q'ty / box
9	XXX	<b>S09B-F32TK-GGXAR</b>	42
	XXY	<b>S09B-F32TK-GGXBR</b>	42
	XYX	<b>S09B-F32TK-GGXCR</b>	42
	YYX	<b>S09B-F32TK-GGXDR</b>	42

#### Material and Finish

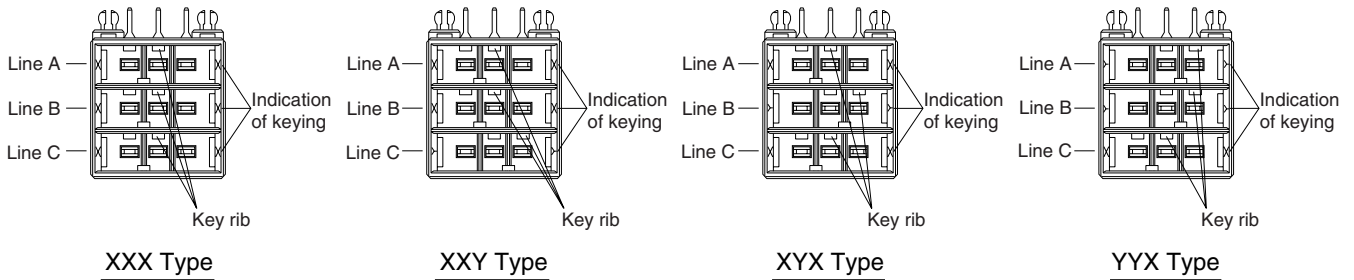
Tab contact: Copper alloy, nickel-undercoated, selective gold-plated  
Housing: Glass-filled PBT, UL94V-0, black  
Reinforcing metal fixture: Copper alloy, nickel-undercoated, selective gold-plated

#### RoHS compliance

This product displays (LF)(AU) on a label.  
Note: 1. Contact JST for tin-plated product.  
2. Not CSA/TÜV approved

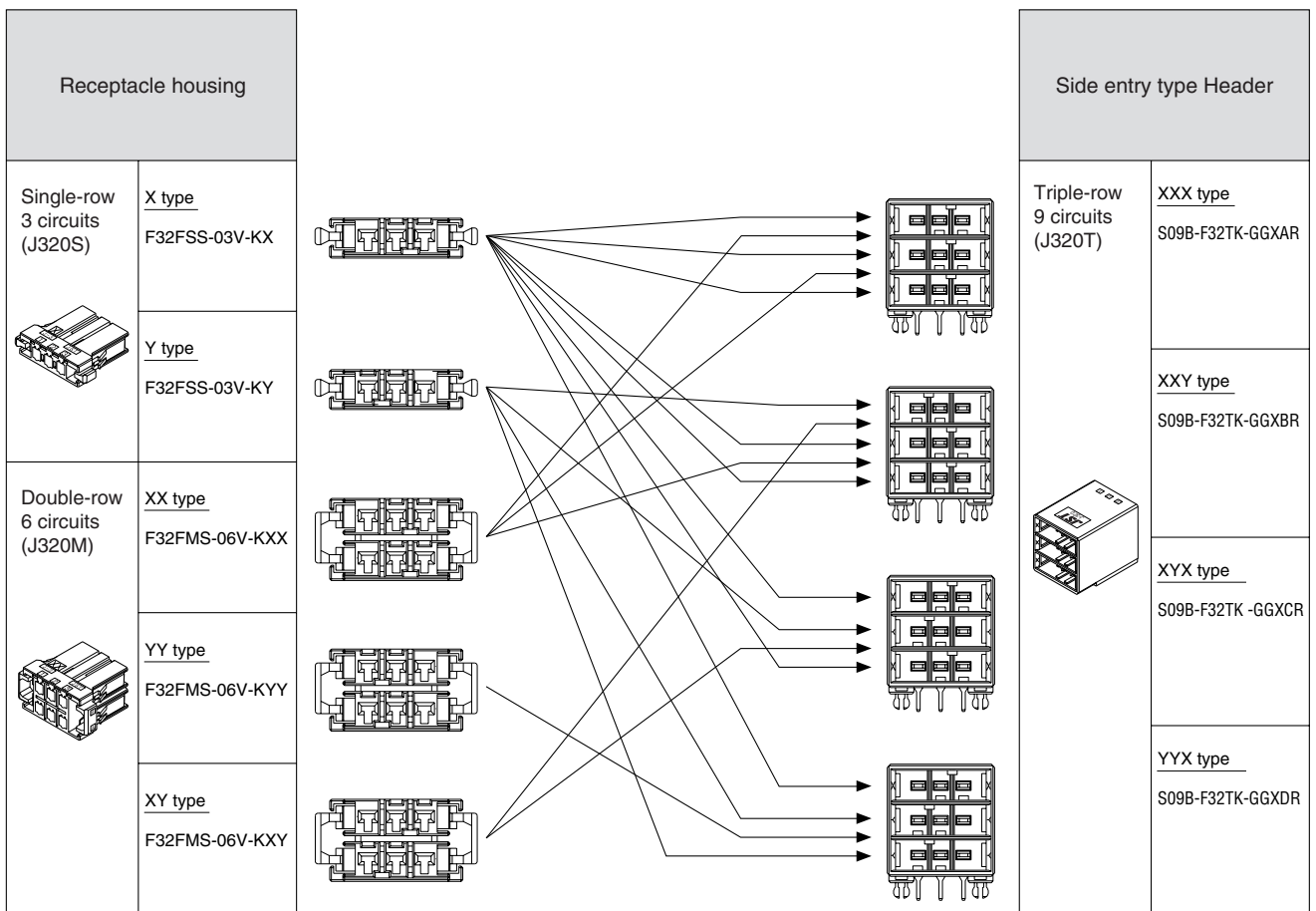
## Keying

J320T series have mis-insertion preventive keying.  
Available in 4 types – XXX type, XXY type, XYX type and YYX type.  
(Headers viewed from the mating side are shown below.)



## List of combinations

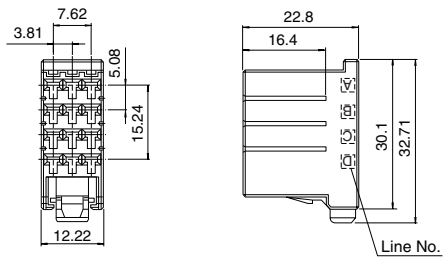
With the combination of the J320T headers and the J320S/J320M receptacle housings, the following modular combinations are possible.



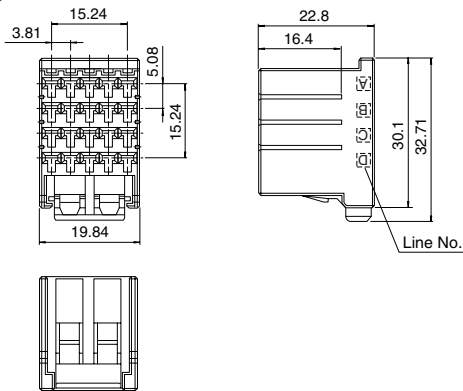
# J300 SERIES/J340F

## Receptacle housing

• 12 circuits



• 20 circuits



Circuits	Keying	Model No.	Q'ty / bag
12	—	<b>F34FFC-12V-K</b>	100
20	—	<b>F34FFC-20V-K</b>	100

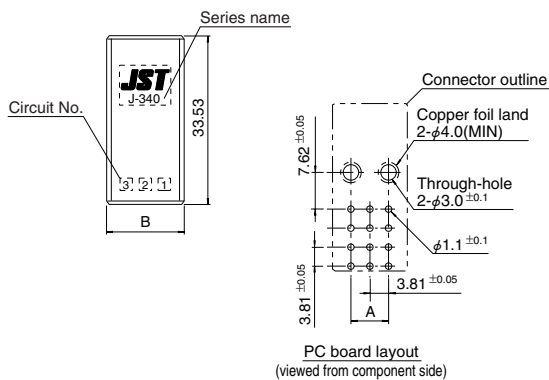
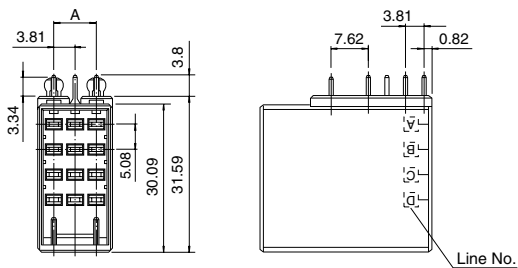
### Material

Glass-filled PBT, UL94V-0, black

### RoHS compliance

Note: Not CSA/TÜV approved.

## Header (Side entry type)



Circuits	Keying	Model No.	Dimensions (mm)		Q'ty / box
			A	B	
12	—	<b>SC12B-F34FK-GGR</b>	7.62	15.02	63
20	—	<b>SC20B-F34FK-GGR</b>	15.24	22.64	42

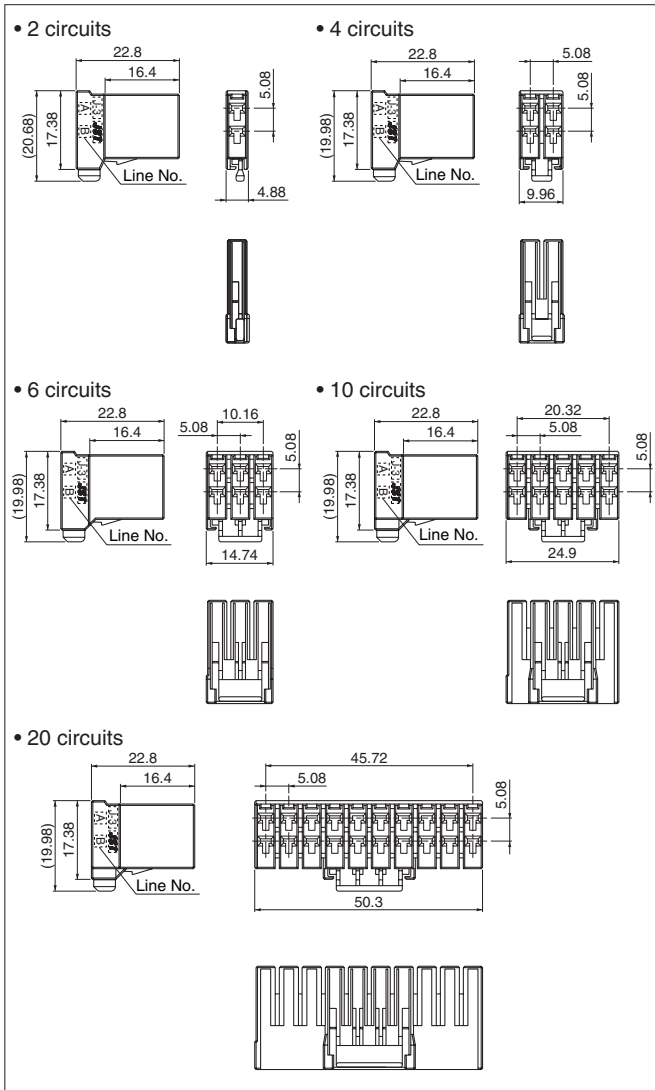
### Material and Finish

Tab contact: Copper alloy, nickel-undercoated, selective gold-plated  
 Housing: Glass-filled PBT, UL94V-0, black  
 Reinforcing metal fixture: Copper alloy, nickel-undercoated, selective gold-plated

### RoHS compliance

This product displays (LF)(AU) on a label.  
 Note: 1. Contact JST for tin-plated product.  
 2. Not CSA/TÜV approved

## Receptacle housing



Circuits	Keying	Model No.	Q'ty / bag
2	—	F35FDC-02V-K	200
4	—	F35FDC-04V-K	200
6	—	F35FDC-06V-K	200
10	—	F35FDC-10V-K	100
20	—	F35FDC-20V-K	100

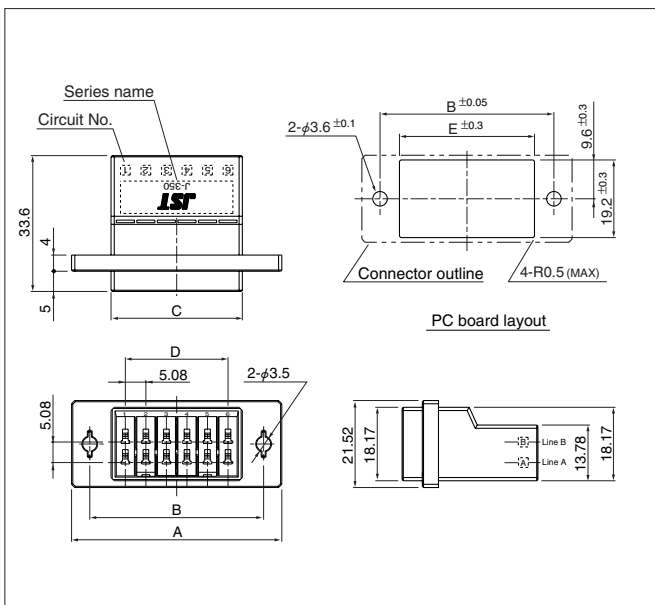
### Material

Glass-filled PBT, UL94V-0, black

### RoHS compliance

Note: Not CSA/TÜV approved.

## Tab housing (Panel mounting type)



Circuits	Keying	Model No.	Dimensions (mm)					Q'ty / box
			A	B	C	D	E	
12	—	F35MDP-12V-K	52.00	43.00	32.48	25.40	33.40	41

### Material

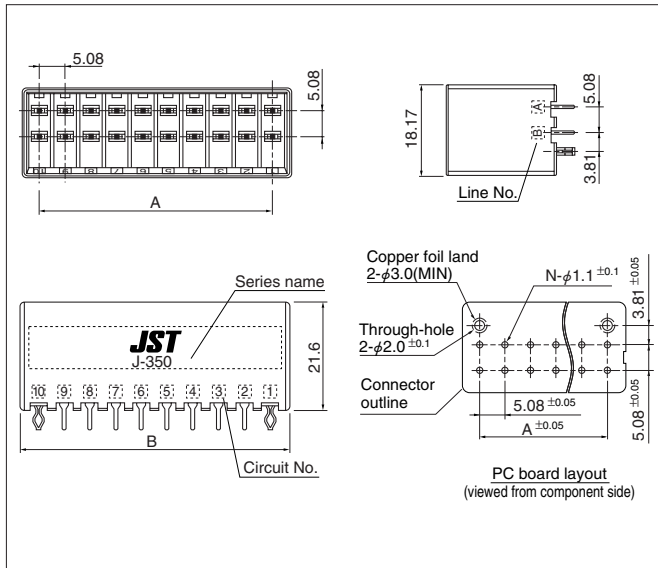
Glass-filled PBT, UL94V-0, black

### RoHS compliance

Note: Not CSA/UL/TÜV approved.

# J300 SERIES/J350D

## Header (Top entry type)



Circuits	Keying	Model No.	Dimensions (mm)		Q'ty / box
			A	B	
12	—	BC12B-F35DK-GGR	25.4	32.48	56
20	—	BC20B-F35DK-GGR	45.72	52.8	32

### Material and Finish

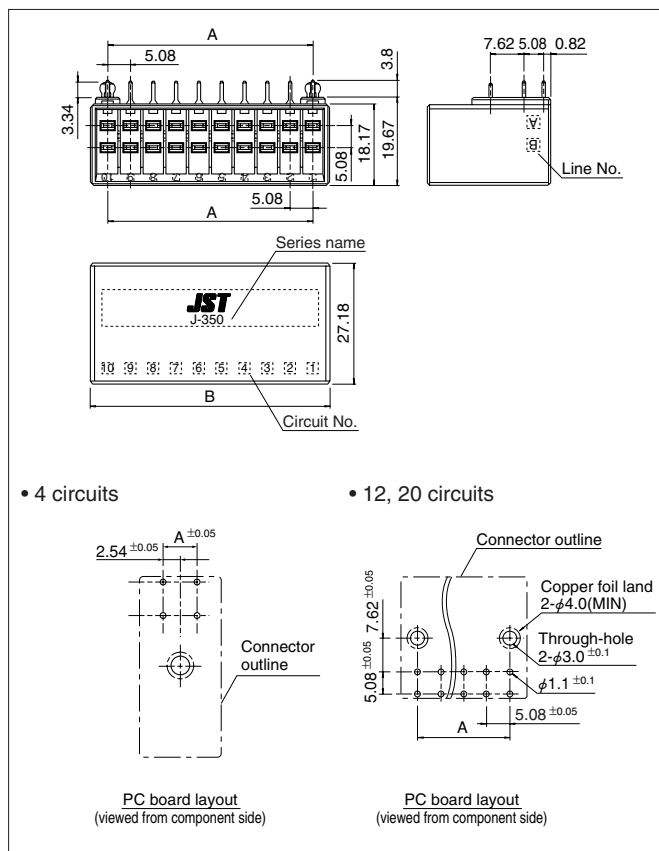
Tab contact: Copper alloy, nickel-undercoated, selective gold-plated  
Housing: Glass-filled PBT, UL94V-0, black  
Reinforcing metal fixture: Copper alloy, nickel-undercoated, selective gold-plated

**RoHS compliance** This product displays (LF)(AU) on a label.

Note: 1. Contact JST for tin-plated product.

2. Not CSA/TÜV approved

## Header (Side entry type)



Circuits	Keying	Model No.	Dimensions (mm)		Q'ty / box
			A	B	
4	—	SC04B-F35DK-GGR	5.08	12.16	152
12	—	SC12B-F35DK-GGR	25.4	32.48	56
20	—	SC20B-F35DK-GGR	45.72	52.8	32

### Material and Finish

Tab contact: Copper alloy, nickel-undercoated, selective gold-plated  
Housing: Glass-filled PBT, UL94V-0, black  
Reinforcing metal fixture: Copper alloy, nickel-undercoated, selective gold-plated

**RoHS compliance** This product displays (LF)(AU) on a label.

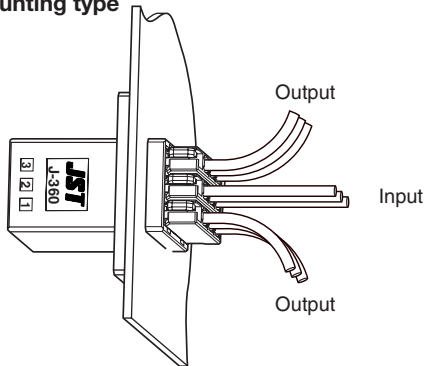
Note: 1. Contact JST for tin-plated product.

2. Not CSA/TÜV approved

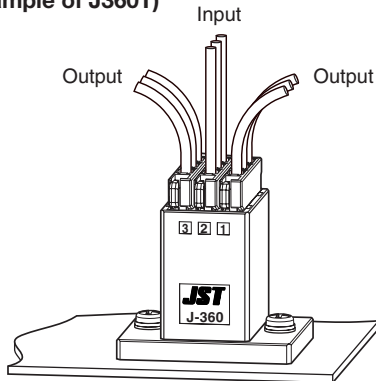


# J300 SERIES/COMMON TYPE CONNECTOR

## • Panel mounting type



## • Direct mounting type (Example of J360T)



- Receptacle terminal of JFA J300 series can be used.
- Between rows are commonly connected.
- Proposing rationalization of wiring.
- Mounting method of connector.

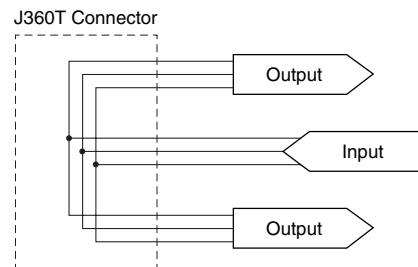
## Specifications

- Current rating: 18A AC, DC (18 circuits/AWG #14)
- Voltage rating: 600V AC, DC
- Temperature range:  $-55^{\circ}\text{C}$  to  $\sim 105^{\circ}\text{C}$   
(including temperature rise in applying electrical current)

\*Contact JST for details.

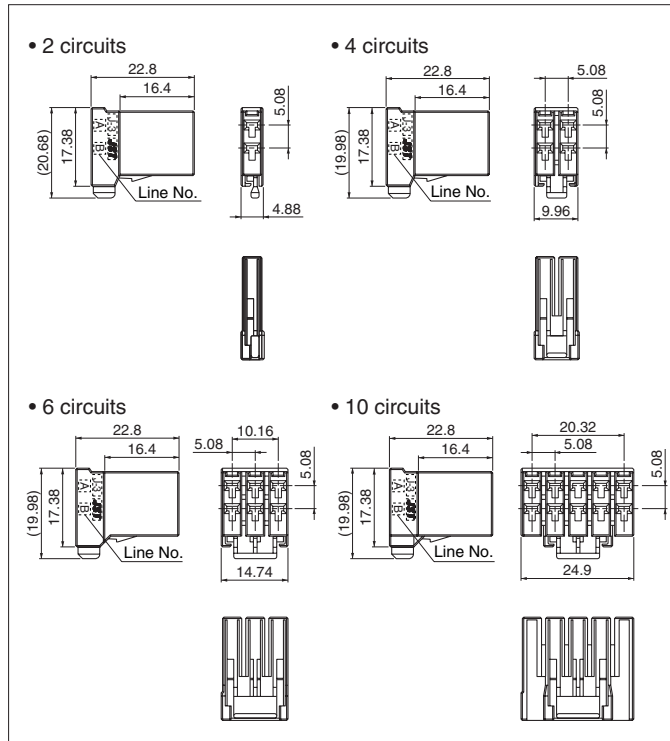
\*RoHS compliant products are published.

## Circuit figure



# COMMON TYPE/J350DC

## Receptacle housing



Circuits	Keying	Model No.	Q'ty / bag
2	—	<b>F35FDC-02V-K</b>	200
4	—	<b>F35FDC-04V-K</b>	200
6	—	<b>F35FDC-06V-K</b>	200
10	—	<b>F35FDC-10V-K</b>	100

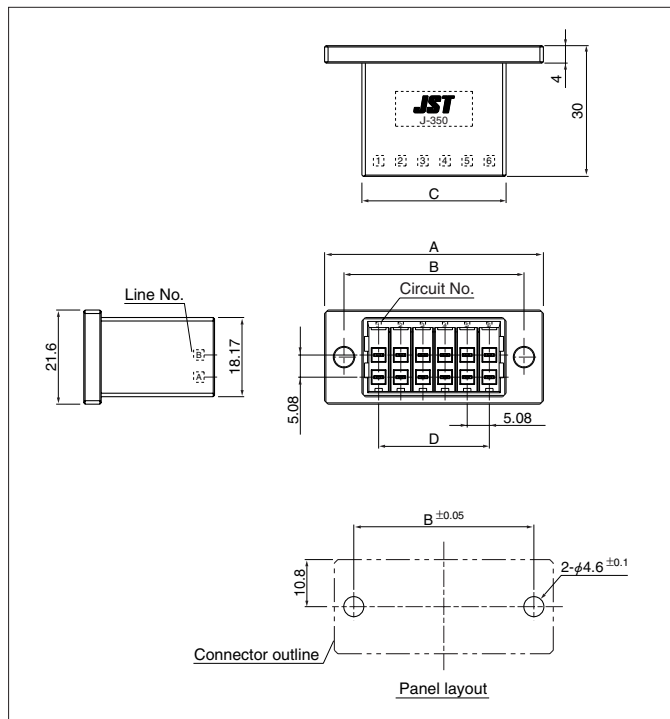
### Material

Glass-filled PBT, UL94V-0, black

### RoHS compliance

Note: Not CSA/TÜV approved.

## Tab housing assembly



Circuits	Keying	Model No.	Dimensions (mm)				Q'ty / box
			A	B	C	D	
12	—	<b>P12B-F35DK-GFAR</b>	57.0	44.6	33.08	25.4	196

### Material and Finish

Tab contact: Copper alloy, nickel-undercoated, selective gold-plated  
Housing: Glass-filled PBT, UL94V-0, black

### RoHS compliance

This product displays (LF)(AU) on a label.  
Note: 1. Tightening torque of M3 screw varies depending on screw and material to be tighten as follows.

Steel: 50cN • m max.

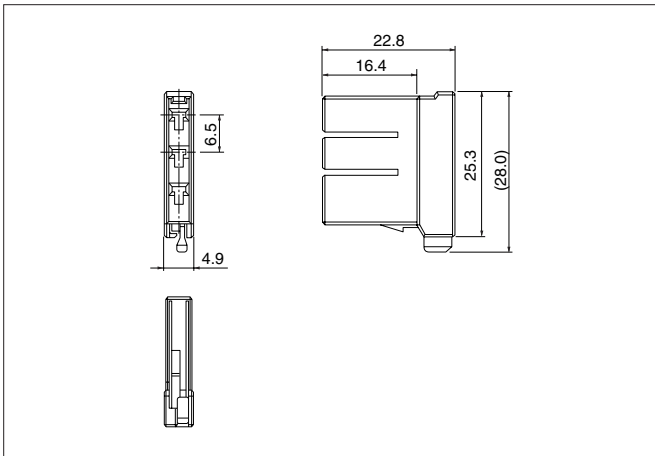
Copper, aluminum and plastics: 30cN • m (reference target value)

2. Not CSA/TÜV approved.



# COMMON TYPE/J360T

## Receptacle housing



Circuits	Keying	Model No.	Q'ty / bag
3	—	<b>F36FTC-03V-K</b>	200

### Material

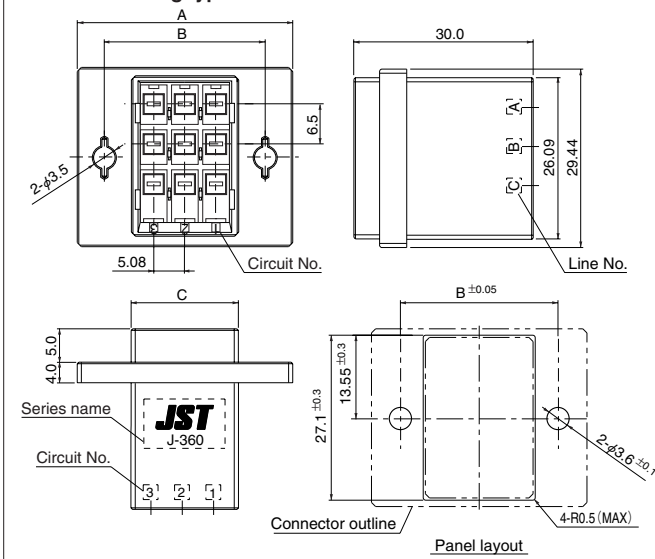
Glass-filled PBT, UL94V-0, black

### RoHS compliance

Note: Not CSA/TÜV approved.

## Tab housing assembly

### • Panel mounting type



Circuits	Keying	Model No.	Dimensions (mm)			Q'ty / box
			A	B	C	
9	—	<b>P09B-F36TK-GFR</b>	35.0	26.1	17.8	364
18	—	<b>P18B-F36TK-GFR</b>	50.2	41.3	33.1	224

### Material and Finish

Tab contact: Copper alloy, nickel-undercoated, selective gold-plated  
Housing: Glass-filled PBT, UL94V-0, black

### RoHS compliance

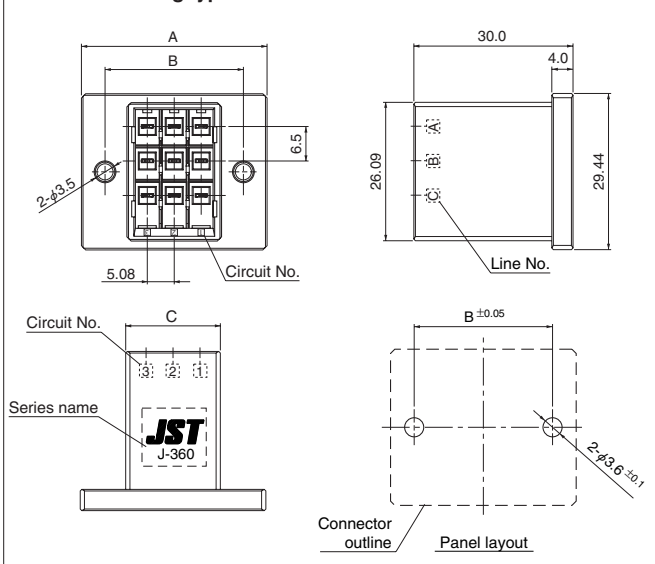
Note: 1. Tightening torque of M3 screw varies depending on screw and material to be tighten as follows.

Steel: 50cN • m max.

Copper, aluminum and plastics: 30cN • m (reference target value)

2. Not CSA/TÜV approved.

### • Direct mounting type



Circuits	Keying	Model No.	Dimensions (mm)			Q'ty / box
			A	B	C	
9	—	<b>P09B-F36TK-GFAR</b>	35.0	26.1	17.8	364
18	—	<b>P18B-F36TK-GFAR</b>	50.2	41.3	33.1	224
24	—	<b>P24B-F36TK-GFANR</b>	60.4	51.5	43.2	168

### Material and Finish

Tab contact: Copper alloy, nickel-undercoated, selective gold-plated  
Housing: Glass-filled PBT, UL94V-0, black

### RoHS compliance

Note: 1. Tightening torque of M3 screw varies depending on screw and material to be tighten as follows.

Steel: 50cN • m max.

Copper, aluminum and plastics: 30cN • m (reference target value)

2. There is no cover of common tab side for 24 circuits.

P24B-F36TK-GFANR

N means no cover.

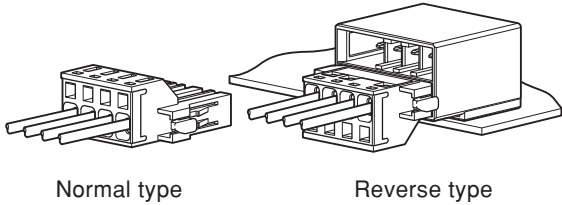
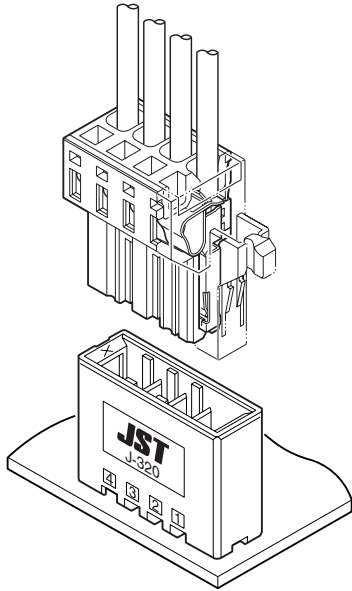
3. The top and bottom for both the logo mark and the series name of 24 circuits reverse display of 9 or 18 circuits.

4. Not CSA/TÜV approved.



# JFA CONNECTOR J-FAT SPRING TYPE

5.08mm pitch/Disconnectable Spring Terminal connectors(Terminal block type)



- No crimp tool is necessary.
- Mating with the JFA J320S/J320M

## Specifications

- Current rating: Refer to the following matrix table.
  - Voltage rating: 300V AC, DC
  - Temperature range: -55°C to +105°C  
(including temperature rise in applying electrical current)
  - Applicable wire: AWG #18 to #14 (0.82 to 2.0mm<sup>2</sup>)
- \*Contact JST for details.  
\*RoHS compliant products are published.

### Current rating

Unit: A

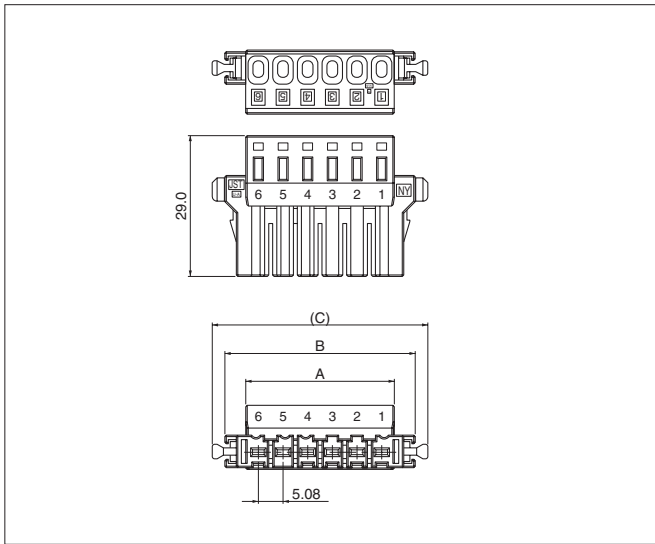
Circuits	Wire size (AWG)		
	#14	#16	#18
3	12.0	11.25	10.0
4	12.0	11.25	10.0
5	11.25	10.5	9.5
6	10.5	9.75	9.0

## Standards

Recognized E239668 (J-FAT-S-i)

# J300 SERIES/J-FAT-S-i

## Receptacle assembly (Normal type)



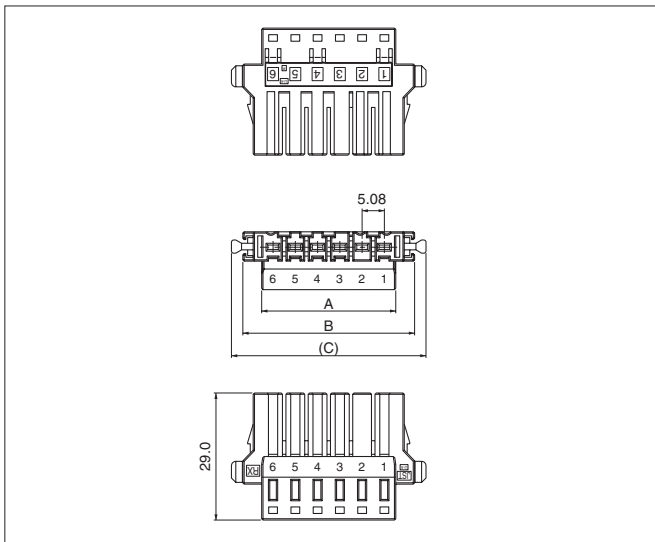
Circuits	Keying	Model No.	Dimensions (mm)			Q'ty /box
			A	B	(C)	
3	X	—	15.36	23.96	29.16	280
	Y	<b>03JFAT-SAYGF- I</b>				
4	X	—	20.44	29.04	34.24	245
	Y	<b>04JFAT-SAYGF- I</b>				
5	X	—	25.52	34.12	39.32	—
	Y	<b>05JFAT-SAYGF- I</b>				
6	X	—	30.60	39.20	44.40	175
	Y	<b>06JFAT-SAYGF- I</b>				

### Material and Finish

Tab contact: Copper alloy, nickel-undercoated, selective gold-plated  
Housing: Glass-filled PBT, UL94V-0, black  
Cover: Glass-filled PBT, UL94V-0, black  
Spring: Stainless

### RoHS compliance

## Receptacle assembly (Reverse type)



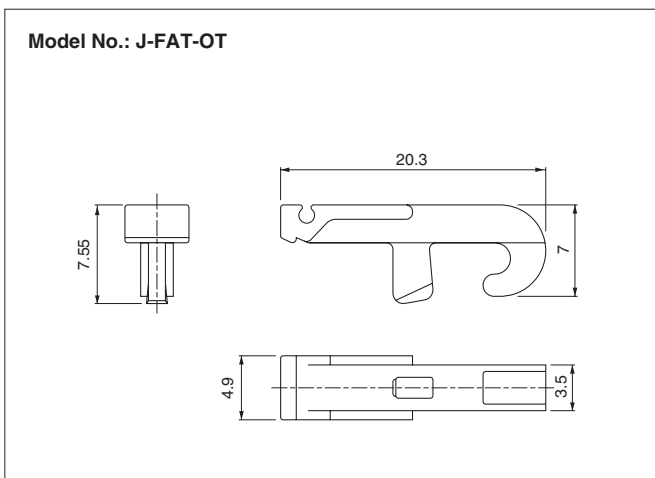
Circuits	Keying	Model No.	Dimensions (mm)			Q'ty /box
			A	B	(C)	
3	X	—	15.36	23.96	29.16	280
	Y	<b>03JFAT-SBYGF- I</b>				
4	X	<b>04JFAT-SBXGF- I</b>	20.44	29.04	34.24	245
	Y	—				
5	X	<b>05JFAT-SBXGF- I</b>	25.52	34.12	39.32	210
	Y	—				
6	X	<b>06JFAT-SBXGF- I</b>	30.60	39.20	44.40	175
	Y	—				

### Material and Finish

Tab contact: Copper alloy, nickel-undercoated, selective gold-plated  
Housing: Glass-filled PBT, UL94V-0, black  
Cover: Glass-filled PBT, UL94V-0, white  
Spring: Stainless

### RoHS compliance

## Open tool

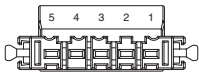


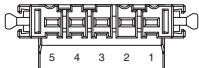
### RoHS compliance

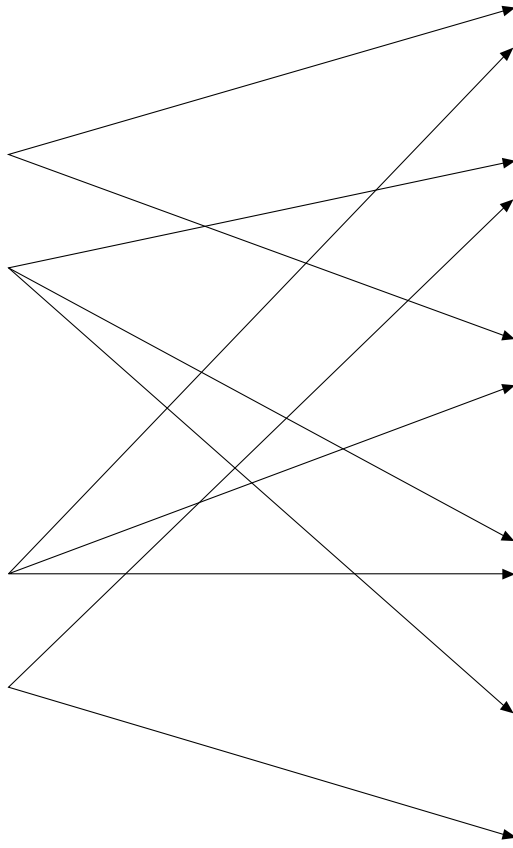
# J300 SERIES/J-FAT-S-i

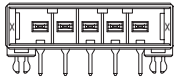

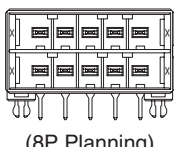
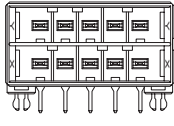
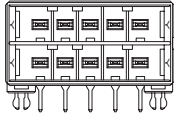
## List of combinations

J-FAT-S-i is used with the following combinations.

J-FAT-S-i Normal type	
X Keying	Planning
Y Keying	

J-FAT-S-i Reverse type	
X Keying	 (3P Planning)
Y Keying	Planning (3P Exist)



	J320S X Keying
	J320S Y Keying
 (8P Planning)	J320M X-X Keying
	J320M X-Y Keying
 (8P Planning)	J320M Y-Y Keying

# JFA CONNECTOR/J300 SERIES

## Model number identification

### Receptacle contact

**S F3 F - 41 GF - P 2.0**

Form: S...Strip form, B...Loose piece  
L...Loose piece with curled barrels

Series name

Kind of terminal: F...Receptacle contact

Applicable wire: 002...AWG #28 ~ #24, 01...AWG #24 ~ #20  
41...AWG #20 ~ #16, 71...AWG #16 ~ #14

Surface finish: GF...Nickel-undercoated, 0.38 $\mu$ m selective gold-plated  
G1...Nickel-undercoated, 0.76 $\mu$ m selective gold-plated  
T...Tin-plated (Reflow treatment)

Material: P...Copper alloy

Terminal size

### Tab contact

**S F3 M - 41 GF - M 2.0 N**

Form: S...Strip form, B...Loose piece  
L...Loose piece with curled barrels

Series name

Kind of terminal: M...Tab contact

Applicable wire: 01...AWG #24 ~ #20, 41...AWG #20 ~ #16  
71...AWG #16 ~ #14

Surface finish: GF...Nickel-undercoated, 0.38 $\mu$ m selective gold-plated  
G1...Nickel-undercoated, 0.76 $\mu$ m selective gold-plated  
T...Tin-plated (Reflow treatment)

Material: M...Copper alloy

Terminal size

Sequential identification

### Receptacle housing

**F31 F S S - 03 V - K X**

Series name

Type of connector: F...Receptacle housing

Rows: S...Single-row  
D...Double-row with 5.08mm line pitch  
M...Double-row with 7.62mm line pitch  
F...Quadruple-row with 5.08mm line pitch

Configuration: S...Side locking, C...Center locking

No. of circuits: 1 ~ 6, 8, 10, 12, 16, 20

Flammability: V...UL94V-0

Color indication: K...Black, S...White, E...Blue

Keying: X...X-Keyping, Y...Y-Keyping, XX...XX-Keyping  
YY...YY-Keyping, XY...XY-Keyping, Blank...Without Keyping No.

### Tab housing

**F31 M S F - 03 V - K X**

Series name

Kind of terminal: M...Tab housing

Rows: S...Single-row, D...Double-row with 5.08mm line pitch  
M...Double-row with 7.62mm line pitch

Configuration: F...Free hanging, P...Panel mounting

No. of circuits: 1 ~ 6, 8, 10, 12, 16, 20

Flammability: V...UL94V-0

Color indication: K...Black, S...White, E...Blue

Keying: X...X-Keyping, Y...Y-Keyping, XX...XX-Keyping  
YY...YY-Keyping, XY...XY-Keyping, Blank...Without Keyping No.

### Header

**B 05 B - F31 S K - GG X R**

PC board mounting direction:  
B...Top entry type  
S...Side entry type  
BC...Top & center locking  
SC...Side & center locking

No. of circuits: 2 ~ 6, 8, 10, 12, 16, 20

Product name: Header

Series name

Rows: S...Single-row  
D...Double-row with 5.08mm line pitch  
M...Double-row with 7.62mm line pitch  
T...Triple-row with 7.62mm line pitch  
F...Quadruple-row with 5.08mm line pitch

Color indication: K...Black, S...White, E...Blue

Surface finish: GG...Nickel-undercoated, 0.38 $\mu$ m selective gold-plated  
GK...Nickel-undercoated, 0.76 $\mu$ m selective gold-plated  
T...Tin-plated (Reflow treatment)

Keying: X...X-Keyping, Y...Y-Keyping, XX...XX-Keyping, YY...YY-Keyping,  
XY...XY-Keyping, XA...XX-Keyping, XB...XXY-Keyping,  
XC...XYX-Keyping, XD...YYX-Keyping, Blank...Without Keyping No.

Packaging form: R...Tray, M...Magazine stick

### Receptacle assembly

**03 JFAT - SA Y GF - I**

No. of circuits: 3 ~ 6

Series name

Mating type: SA...Normal type, SB...Reverse type

Keying: X...X-Keyping, Y...Y-Keyping

Surface finish: GF...Nickel-undercoated, 0.38 $\mu$ m selective gold-plated

Shape: I ... I type

### Tab housing assembly

**P 18B-F36T K - GF A R**

PC board mounting direction: Panel mounting type

No. of circuits - Assembly: 9, 12, 18, 24

Series name: F36T...J360T, F35D...J350DC

Color indication: K...Black

Surface finish: GF...Nickel-undercoated, 0.38 $\mu$ m selective gold-plated

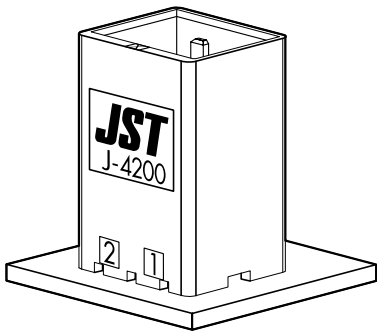
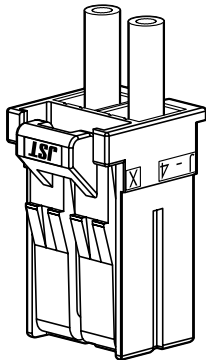
Configuration: A...Direct mounting type, AF...Direct mounting without housing cover type,  
Blank...Panel mounting type

Packaging form: R...Tray



# JFA CONNECTOR J4000 SERIES

6.0mm pitch/Disconnectable Crimp style connectors



**Compact and high current capacity connector.**  
**This connector realizes high-density mounting on PC board.**

- High current capacity
- Center locking
- Housing lance
- Countermeasure for insertion of foreign substances

## Specifications

- Current rating: 20A AC, DC (3 circuits/AWG #12)
  - Voltage rating: 600V AC, DC
  - Temperature range: -55°C to +105°C  
 (including temperature rise in applying electrical current)
  - Applicable wire: AWG #16 to #12 (1.25 to 3.5mm<sup>2</sup>)
- \*Contact JST for details.  
 \*RoHS compliant products are published.

### Current rating

Unit: A

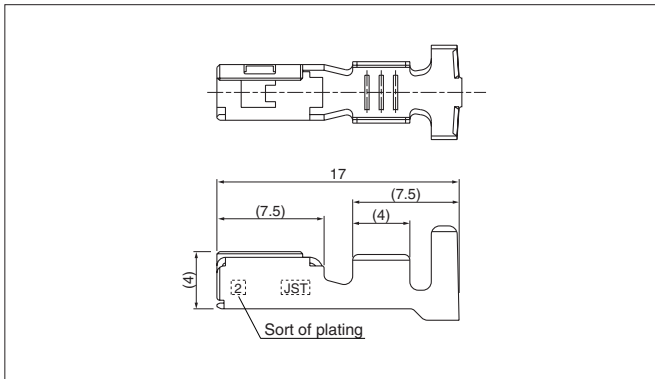
Circuits	Wire size (AWG)		
	#12	#14	#16
2	—	18.0	14.0
3	20.0	17.0	13.5
6	—	16.0	12.5

## Standards

Recognized E60389

# JFA CONNECTOR/J4000 SERIES

## Receptacle contact



Strip contact Model No.	Applicable wire			Insulation O.D. (mm)	Q'ty / reel
	Nominal	mm <sup>2</sup>	AWG#		
SJ4F-71GF-M3.0	M	1.25 ~ 2.0	16 ~ 14	2.0 ~ 3.8	1,400
SJ4F-81GF-M3.0	L	2.0 ~ 3.5	14 ~ 12	2.9 ~ 4.2	—

### Material and Finish

Copper alloy (superior conductivity), nickel-undercoated, selective gold-plated

### RoHS compliance

Note: Finish(GF): Nickel-undercoated, 0.38 μm selective gold-plated

## Crimping machine, Applicator

Strip contact Model No.	Crimping machine	Crimp applicator	Dies	Crimp applicator with dies
SJ4F-71GF-M3.0	AP-K2N	MKS-L-SIN3	MK/SJ4F71-30	APLMK SJ4F71-30
SJ4F-81GF-M3.0			MK/SJ4F81-30	APLMK SJ4F81-30

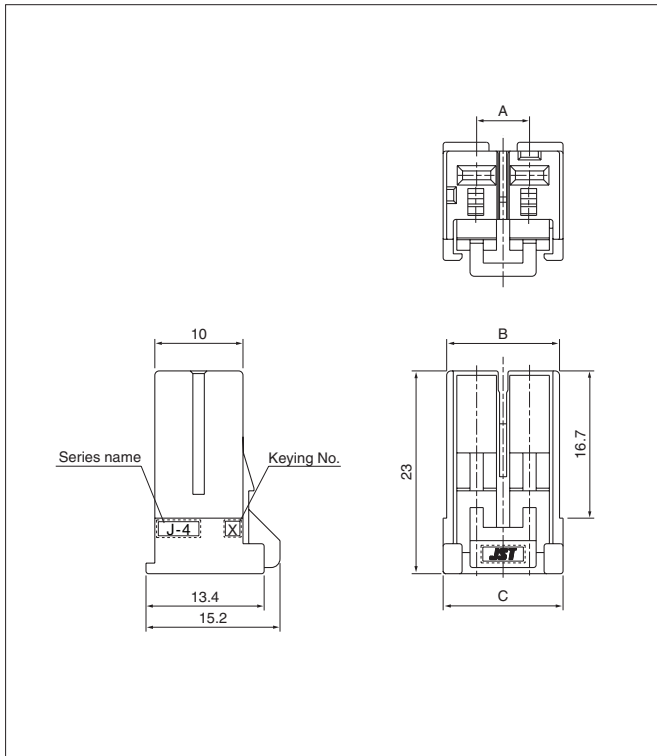
Loose piece	Hand crimp tools
BJ4F-71GF-M3.0	YRF1130
BJ4F-81GF-M3.0	YRF1370

Extraction tool for J4000 series : EJ-JFAJ4

Note: Contact JST for fully automatic crimping applicator.

# J4000 SERIES/J4200S

## Receptacle housing



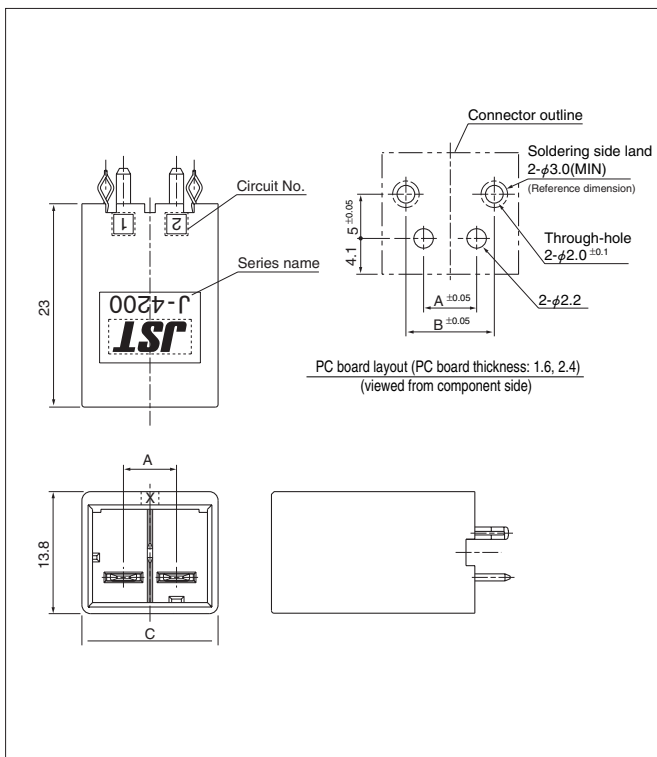
Circuits	Keying	Model No.	Dimensions (mm)			Qty / bag
			A	B	C	
2	X	<b>J42FSC-02V-KX</b>	6.0	12.8	13.6	200
	Y	<b>J42FSC-02V-KY</b>	6.0	12.8	13.6	200
3	X	<b>J42FSC-03V-KX</b>	12.0	18.8	19.6	—
	Y	<b>J42FSC-03V-KY</b>	12.0	18.8	19.6	—
6	X	<b>J42FSC-06V-KX</b>	30.0	36.8	37.6	—
	Y	<b>J42FSC-06V-KY</b>	30.0	36.8	37.6	—

### Material

Glass-filled PBT, UL94V-0, black

### RoHS compliance

## Header (Top entry type)



Circuits	Keying	Model No.	Dimensions (mm)			Qty / box
			A	B	C	
2	X	<b>BC02B-J42SK-GHXR</b>	6.0	10.0	15.4	168
	Y	<b>BC02B-J42SK-GHYR</b>	6.0	10.0	15.4	168
3	X	<b>BC03B-J42SK-GHXR</b>	12.0	16.0	21.4	—
	Y	<b>BC03B-J42SK-GHYR</b>	12.0	16.0	21.4	—
6	X	<b>BC06B-J42SK-GHXR</b>	30.0	34.0	39.4	—
	Y	<b>BC06B-J42SK-GHYR</b>	30.0	34.0	39.4	—

### Material and Finish

Tab contact: Copper alloy, nickel-undercoated, selective gold-plated

Housing: Glass-filled PBT, UL94V-0, black

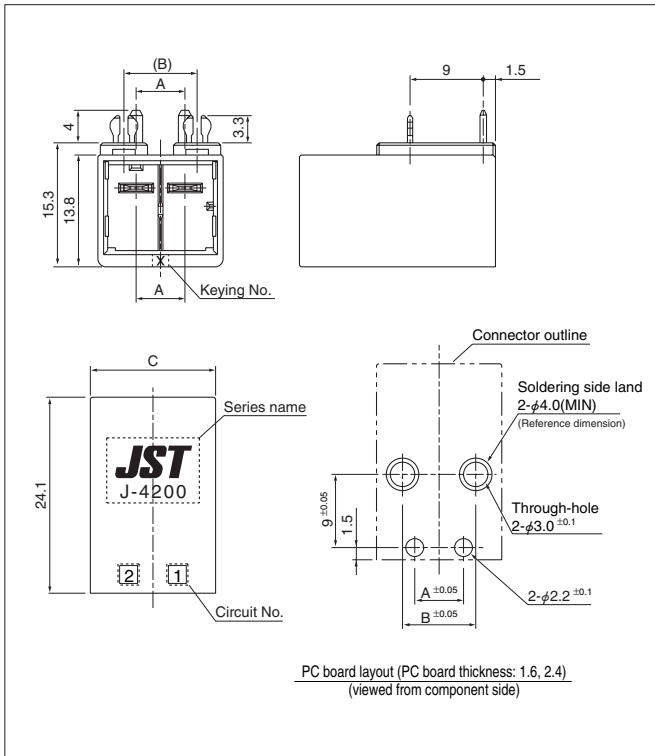
Reinforcing metal fixture: Copper alloy, nickel-undercoated, selective gold-plated

### RoHS compliance



# J4000 SERIES/J4200S

## Header (Side entry type)



Circuits	Keying	Model No.	Dimensions (mm)			Qty / box
			A	B	C	
2	X	SC02B-J42SK-GHXR	6.0	9.0	15.4	—
	Y	SC02B-J42SK-GHYR	6.0	9.0	15.4	—

### Material and Finish

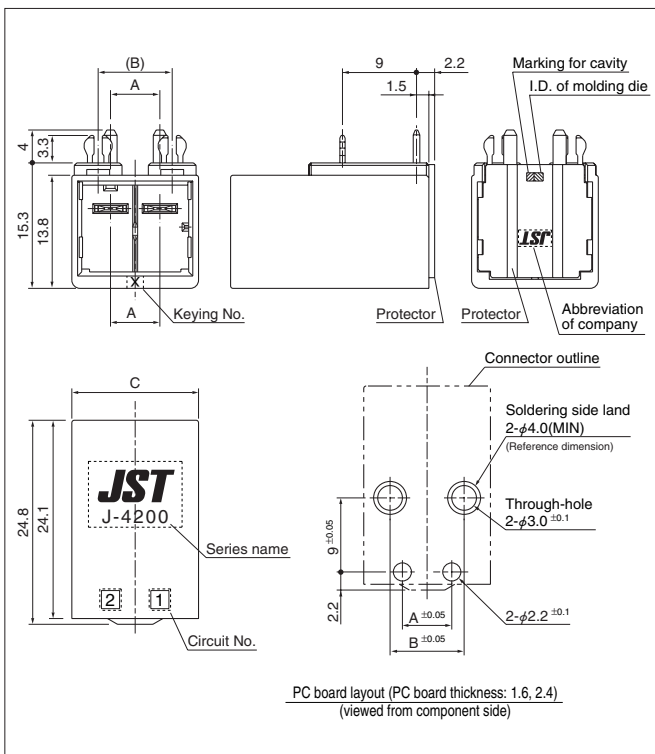
Tab contact: Copper alloy, nickel-undercoated, selective gold-plated

Housing: Glass-filled PBT, UL94V-0, black

Reinforcing metal fixture: Copper alloy, nickel-undercoated, gold-plated

### RoHS compliance

## Header (Side entry type with protector)



Circuits	Keying	Model No.	Dimensions (mm)			Qty / box
			A	B	C	
2	X	SC02B-J42SK-GHXPR	6.0	9.0	15.4	120

### Material and Finish

Tab contact: Copper alloy, nickel-undercoated, selective gold-plated

Housing: Glass-filled PBT, UL94V-0, black

Reinforcing metal fixture: Copper alloy, nickel-undercoated, gold-plated

Protector: Glass-filled PBT, UL94V-0, black

### RoHS compliance

(Patent pending)

When applying a current to the connector, the protector prevents foreign substances being inserted into mating part from the back of the connector.

# JFA CONNECTOR/J4000 SERIES

## Model number identification

### Receptacle contact

**S J4 F - 71 GF - M 3.0 B**

Form: S...Strip form, B...Loose piece  
L...Loose piece with curled barrels

Series name

Kind of terminal: F...Receptacle contact

Applicable wire: 71...AWG #16 ~ #14  
81...AWG #14 ~ #12

Surface finish: GF...Nickel-undercoated, 0.38μm selective gold-plated

Material: M...Copper alloy

Terminal size

Plating type: B...Selective spot gold-plated, Blank...Selective stripe gold-plated

### Receptacle housing

**J42 F S C - 02 V - K X**

Series name

Type of connector: F...Receptacle housing

Rows: S...Single-row

Configuration: C...Center locking

No. of circuits: 2, 3, 6

Flammability: V...UL94V-0

Color indication: K...Black

Keying: X...X-Keying, Y...Y-Keying

### Header

**SC 02 B -J42 S K - GH X P R**

Form: BC...Top & center locking  
SC...Side & center locking

No. of circuits: 2, 3, 6

Product name: Header

Series name

Rows: S...Single-row

Color indication: K...Black

Surface finish: GH...Nickel-undercoated, selective gold-plated

Keying: X...X-Keying, Y...Y-Keying

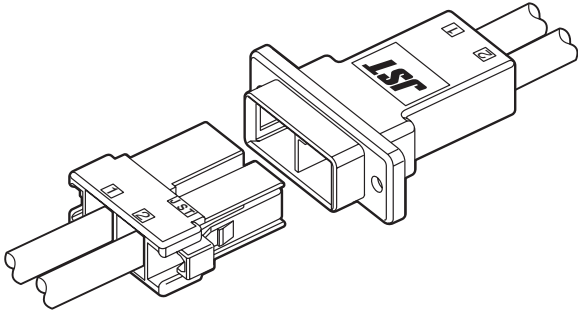
Special product: P...With protector, Blank...Standard product

Packaging form: R...Tray, M...Magazine stick



# JFA CONNECTOR J5000 SERIES

11.0mm pitch/Disconnectable Crimp style Wire-to-wire connectors



**One touch mating and unmating connector corresponding to high current. Modular type is also available.**

- High current capacity
- Easy mating connector

## Specifications

- Current rating: Refer to the following matrix table.
- Voltage rating: 600V AC, DC
- Temperature range: -55°C to +105°C  
(including temperature rise in applying electrical current)
- Withstanding voltage: 3.0kV AC/minute
- Applicable wire: AWG #16 to #8 (1.25 to 8.0mm<sup>2</sup>)

\*Contact JST for details.

\*RoHS compliant products are published.

### Current rating

Unit: A

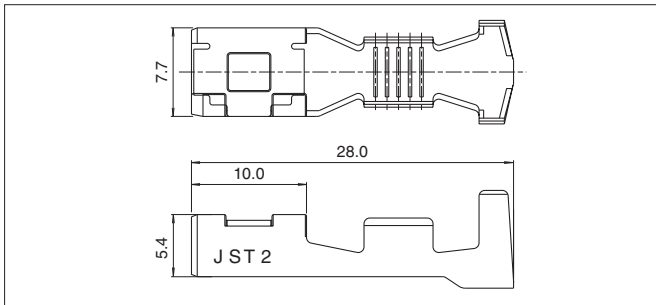
Circuits	Wire size (AWG)				
	#8	#10	#12	#14	#16
1	50	37	30	24	20
2	45	34	28	22	18
3	43	34	27	21	17
4	42	32	26	20	16
6	40	32	26	20	16

## Standards

Recognized E60389

# JFA CONNECTOR/J5000 SERIES

## Receptacle contact



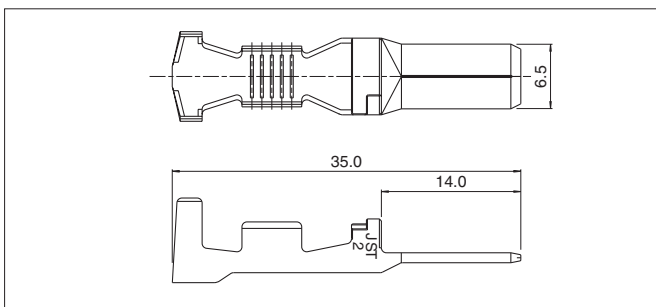
Model No.		Applicable wire			Insulation O.D.	Q'ty	
Strip contact	Loose piece	Nominal	mm <sup>2</sup>	AWG#	(mm)	reel	Box(Loose piece)
SJ5F-71GF-M6.5	BJ5F-71GF-M6.5	S	1.25 ~ 2.0	16 ~ 14	3.1 ~ 4.0	800	200
SJ5F-81GF-M6.5	LJ5F-81GF-M6.5	M	3.5 ~ 5.5	12 ~ 10	4.0 ~ 5.3	600	150
SJ5F-91GF-M6.5	LJ5F-91GF-M6.5	L	8.0	8	7.2 ~ 8.2	450	100

### Material and Finish

Copper alloy (superior conductivity), nickel-undercoated, selective gold-plated

### RoHS compliance

## Tab contact



Model No.		Applicable wire			Insulation O.D.	Q'ty	
Strip contact	Loose piece	Nominal	mm <sup>2</sup>	AWG#	(mm)	reel	Box(Loose piece)
SJ5M-71GF-M6.5	BJ5M-71GF-M6.5	S	1.25 ~ 2.0	16 ~ 14	3.1 ~ 4.0	800	200
SJ5M-81GF-M6.5	LJ5M-81GF-M6.5	M	3.5 ~ 5.5	12 ~ 10	4.0 ~ 5.3	600	150
SJ5M-91GF-M6.5	LJ5M-91GF-M6.5	L	8.0	8	7.2 ~ 8.2	450	100

### Material and Finish

Copper alloy (superior conductivity), nickel-undercoated, selective gold-plated

### RoHS compliance

## Crimping machine, Applicator

Strip contact Model No.	Crimping machine	Crimp applicator	Dies	Crimp applicator with dies
SJ5F-71GF-M6.5	AP-K2N	MKS-L-J5	MK/SJ5F/M-71-65	APLMK SJ5F/M71-65
SJ5M-71GF-M6.5			MK/SJ5F/M-81-65	APLMK SJ5F/M81-65
SJ5F-81GF-M6.5				
SJ5M-81GF-M6.5				
SJ5F-91GF-M6.5	*	*	*	*
SJ5M-91GF-M6.5	*	*	*	*

Loose piece	Hand crimp tools
BJ5F-71GF-M6.5	YRF-888
BJ5M-71GF-M6.5	
LJ5F-81GF-M6.5	
LJ5M-81GF-M6.5	YRF-889
LJ5F-91GF-M6.5	
LJ5M-91GF-M6.5	Battery operated type * BCT-860JFA

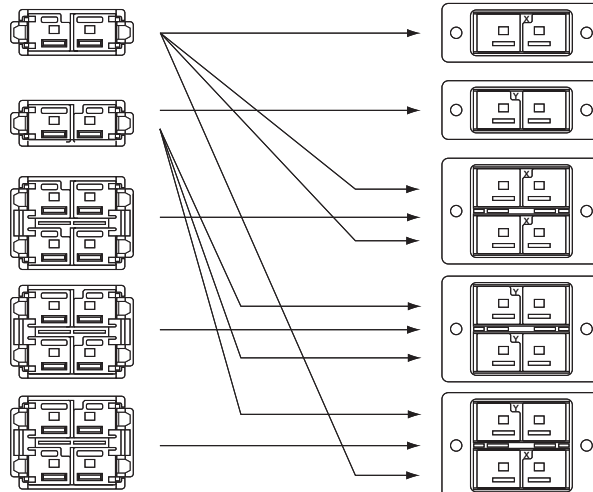
\* Extraction tool for J5000 series: EJ-JFAJ5

\* Contact JST for details.

## List of combinations

The combination of the J5200 series.

Receptacle housing	
Single-row 2, 3 circuits (J5200S)	X type J5FS-■■■V-KX
	Y type J5FS-■■■V-KY
Double-row 4, 6 circuits (J5200M)	XX type J5FM-■■■V-KXX
	YY type J5FM-■■■V-KYY
	XY type J5FM-■■■V-KXY

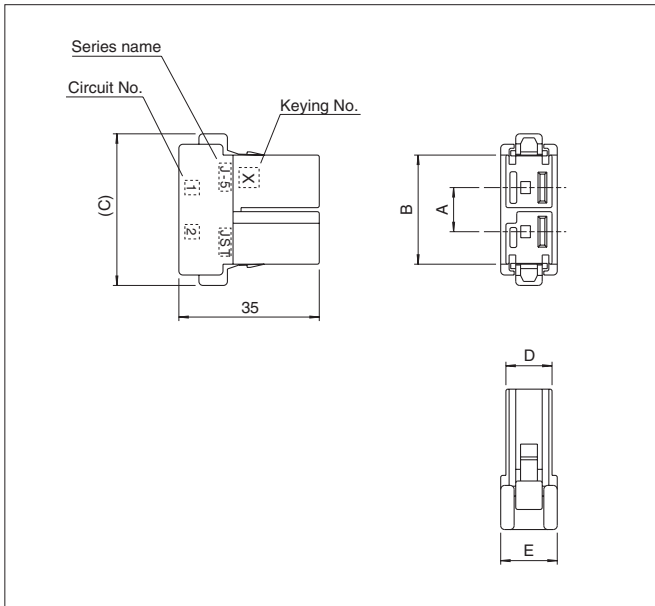


Tab housing	
Single-row 2, 3 circuits (J5200S)	X type J5MSP-■■■V-KX
	Y type J5MSP-■■■V-KY
Double-row 4, 6 circuits (J5200M)	XX type J5MMP-■■■V-KXX
	YY type J5MMP-■■■V-KYY
	XY type J5MMP-■■■V-KXY

Note: Number of circuits is indicated in ■■■.

# J5000 SERIES/J5200

## Receptacle housing



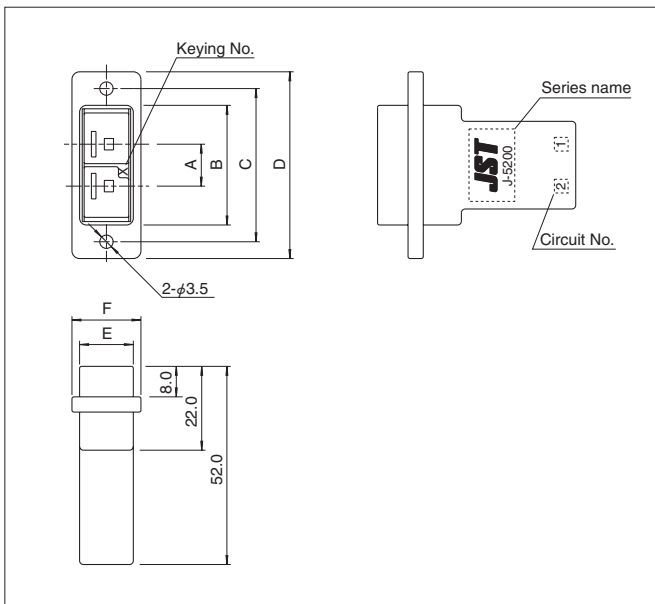
Circuits	Keying	Model No.	Dimensions (mm)					Q'ty / box
			A	B	C	D	E	
2	X	J5FS-02V-KX	11.0	27.2	37.8	11.5	14.1	50(bag)
	Y	J5FS-02V-KY	11.0	27.2	37.8	11.5	14.1	50(bag)
3	X	J5FS-03V-KX	22.0	38.2	48.8	11.5	14.1	50(bag)
	Y	J5FS-03V-KY	22.0	38.2	48.8	11.5	14.1	50(bag)
4	XX	J5FM-04V-KXX	11.0	27.2	37.8	26.0	28.6	180
	YY	J5FM-04V-KYY	11.0	27.2	37.8	26.0	28.6	180
	XY	J5FM-04V-KXY	11.0	27.2	37.8	26.0	28.6	180
6	XX	J5FM-06V-KXX	22.0	38.2	48.8	26.0	28.6	126
	YY	J5FM-06V-KYY	22.0	38.2	48.8	26.0	28.6	126
	XY	J5FM-06V-KXY	22.0	38.2	48.8	26.0	28.6	126
10	XX	J5FM-10V-KXX	44.0	60.2	70.8	26.0	28.6	—
	YY	J5FM-10V-KYY	44.0	60.2	70.8	26.0	28.6	—
	XY	J5FM-10V-KXY	44.0	60.2	70.8	26.0	28.6	—

### Material

Glass-filled PBT, UL94V-0, black

### RoHS compliance

## Tab housing (Panel mounting type)



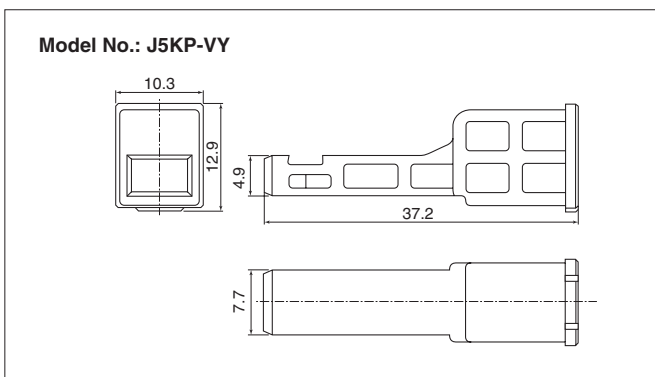
Circuits	Keying	Model No.	Dimensions (mm)						Q'ty / box
			A	B	C	D	E	F	
2	X	J5MSP-02V-KX	11.0	31.4	40.2	49.0	14.1	18.1	40(bag)
	Y	J5MSP-02V-KY	11.0	31.4	40.2	49.0	14.1	18.1	40(bag)
3	X	J5MSP-03V-KX	22.0	42.4	51.2	60.0	14.1	18.1	40(bag)
	Y	J5MSP-03V-KY	22.0	42.4	51.2	60.0	14.1	18.1	40(bag)
4	XX	J5MMP-04V-KXX	11.0	31.4	40.2	49.0	28.6	32.6	72
	YY	J5MMP-04V-KYY	11.0	31.4	40.2	49.0	28.6	32.6	72
	XY	J5MMP-04V-KXY	11.0	31.4	40.2	49.0	28.6	32.6	72
6	XX	J5MMP-06V-KXX	22.0	42.4	51.2	60.0	28.6	32.6	63
	YY	J5MMP-06V-KYY	22.0	42.4	51.2	60.0	28.6	32.6	63
	XY	J5MMP-06V-KXY	22.0	42.4	51.2	60.0	28.6	32.6	63
10	XX	J5MMP-10V-KXX	44.0	64.4	73.2	82.0	28.6	32.6	—
	YY	J5MMP-10V-KYY	44.0	64.4	73.2	82.0	28.6	32.6	—
	XY	J5MMP-10V-KXY	44.0	64.4	73.2	82.0	28.6	32.6	—

### Material

Glass-filled PBT, UL94V-0, black

### RoHS compliance

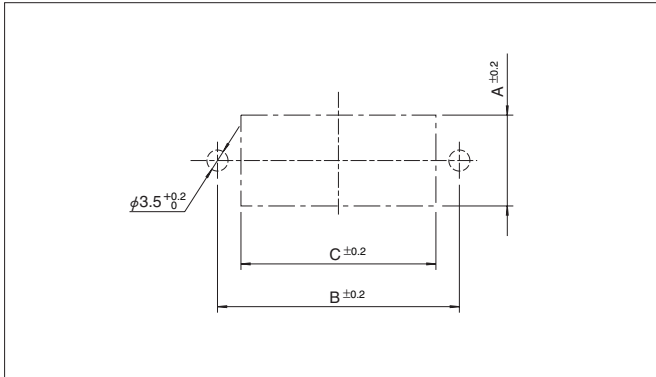
## Keying plug



### RoHS compliance

# JFA CONNECTOR/J5000 SERIES

## Panel layout



Circuits	Dimensions (mm)		
	A	B	C
2	15.1	40.2	32.4
3	15.1	51.2	43.4
4	29.6	40.2	32.4
6	29.6	51.2	43.4
10	29.6	65.4	73.2

## Model number identification

### Receptacle contact

**S J5 F - 71 GF - M 6.5**

Form: S...Strip form, B...Loose piece  
L...Loose piece with curled barrels

Series name

Kind of terminal: F...Receptacle contact

Applicable wire: 71...AWG #16 ~ #14, 81...AWG #12 ~ #10,  
91...AWG #8

Surface finish: GF...Nickel-undercoated, selective gold-plated

Material: M...Copper alloy

Terminal size

### Tab contact

**S J5 M - 71 GF - M 6.5**

Form: S...Strip form, B...Loose piece  
L...Loose piece with curled barrels

Series name

Kind of terminal: M...Tab contact

Applicable wire: 71...AWG #16 ~ #14, 81...AWG #12 ~ #10,  
91...AWG #8

Surface finish: GF...Nickel-undercoated, selective gold-plated

Material: M...Copper alloy

Terminal size

### Receptacle housing

**J5 F S - 02 V - K X**

Series name

Type of connector: F...Receptacle housing

Rows: S...Single-row, M...Double-row modular type

No. of circuits: 2, 3, 4, 6

Flammability: UL94V-0

Color indication: K...Black

Keying: X...X-Keying, Y...Y-Keying, XX...XX-Keying  
YY...YY-Keying, XY...XY-Keying

### Tab housing

**J5 M S P - 02 V - K X**

Series name

Kind of terminal: M...Tab housing

Rows: S...Single-row, M...Double-row modular type

Configuration: P...Panel type

No. of circuits: 2, 3, 4, 6

Flammability: UL94V-0

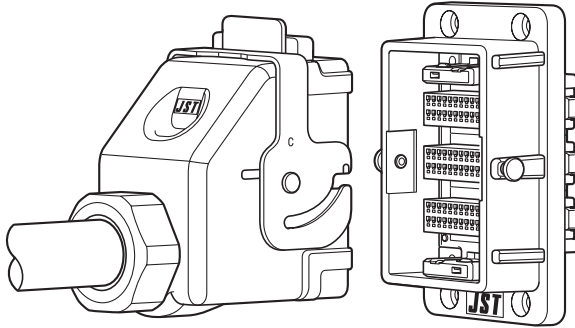
Color indication: K...Black

Keying: X...X-Keying, Y...Y-Keying, XX...XX-Keying  
YY...YY-Keying, XY...XY-Keying



# **JFA CONNECTOR METAL SHELL SERIES**

***Disconnectable Crimp style (Wire-to-wire connectors)***



***Metal shell type I/O connector which contacts are used also with JFA connector J2000 series and J300 series.  
2, 3 or 4 modules for contacts are available.***

- ***Applicable contact and tooling can be unified***
- ***Rigid metal shell***
- ***Waterproof performance***
- ***Misinsertion prevention***
- ***Sequential circuit***

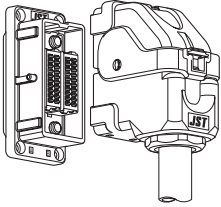
\*Contact JST for details.

\*RoHS compliant products are published.

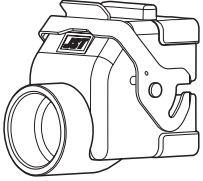
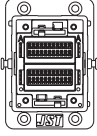

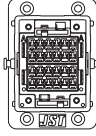
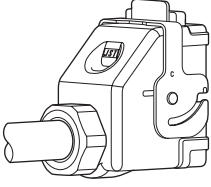
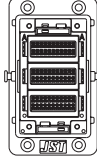
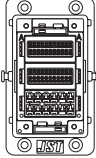
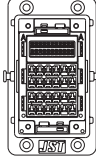
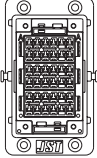
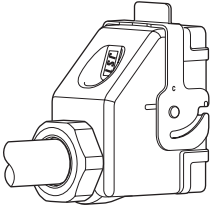
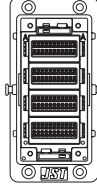
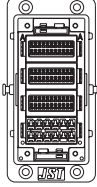
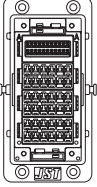
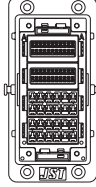
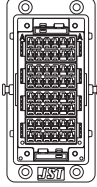
# JFA CONNECTOR/METAL SHELL SERIES

## List of metal shell

### J2900

Connector series	J2000 series 40 circuits
<b>J2900</b>	
Circuits	20 × 2 pcs.

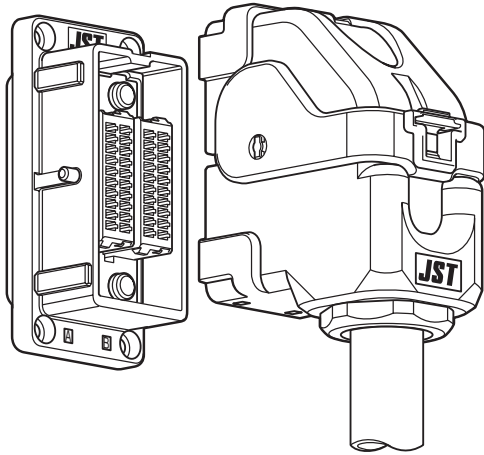
### JFA-M

Type	Shell	Hybrid type			
<b>2 Module</b>		J2000(22P) × 2	J2000(22P) × 1+ J300(12P) × 1	J300(12P) × 2	
					
Circuits		44	34	24	
<b>3 Module</b>		J2000(22P) × 3	J2000(22P) × 2 + J300(12P) × 1	J2000(22P) × 1+ J300(12P) × 2	J300(12P) × 3
					
Circuits		66	56	46	36
<b>4 Module</b>		J2000(22P) × 4	J2000(22P) × 3 + J300(12P) × 1	J2000(22P) × 2 + J300(12P) × 2	J300(12P) × 4
			 		
Circuits		88	78, 58	68	48





# JFA CONNECTOR J2900 SERIES



***This connector is a metal shell type I/O connector and it's completely waterproof. Contacts are designed to be common use with JFA connector J2000 series. The long type tab contact realizes sequential circuit construction.***

- ***Rigid metal shell***
- ***Easy mating operation***
- ***Long type tab contact***

## **Specifications**

- Current rating: 3A max. AC, DC
- Voltage rating: 250V AC, DC
- Temperature range: -55°C to +105°C  
(including temperature rise in applying electrical current)
- Withstanding voltage: 1,500V AC/minute
- Applicable wire: AWG #28 to #20 (0.08 to 0.75mm<sup>2</sup>)
- Cable O.D.: 11.1 to 13.5mm

\*Contact JST for details.

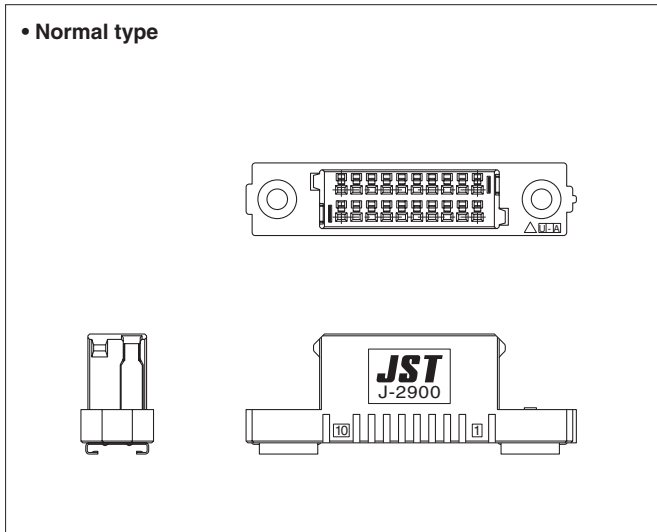
## **Standards**

 Recognized E60389

# METAL SHELL SERIES/J2900

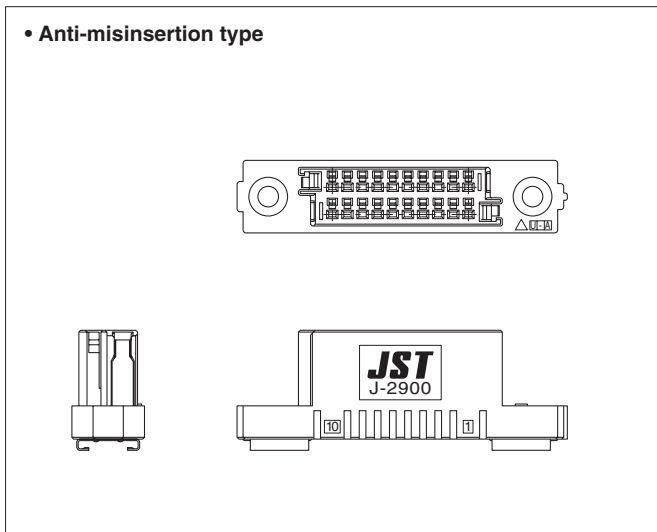
## Receptacle housing assembly

### • Normal type



Circuits	Model No.	Q'ty/bag
20	<b>J29FA-20-K</b>	70

### • Anti-misinsertion type

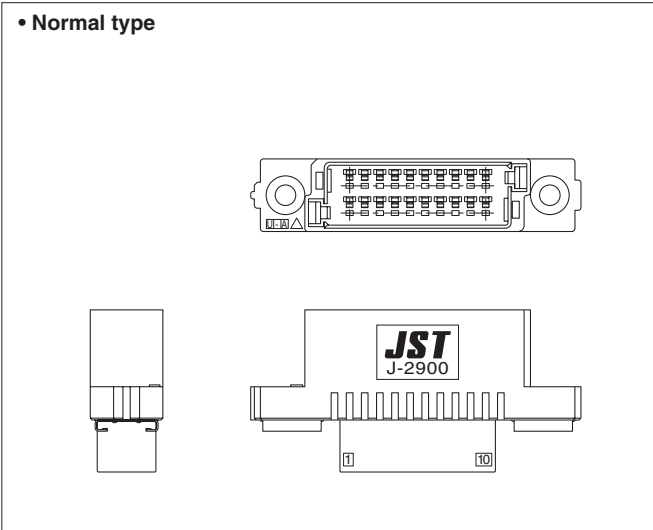


Circuits	Model No.	Q'ty/bag
20	<b>J29FA-20-H-1</b>	70

# METAL SHELL SERIES/J2900

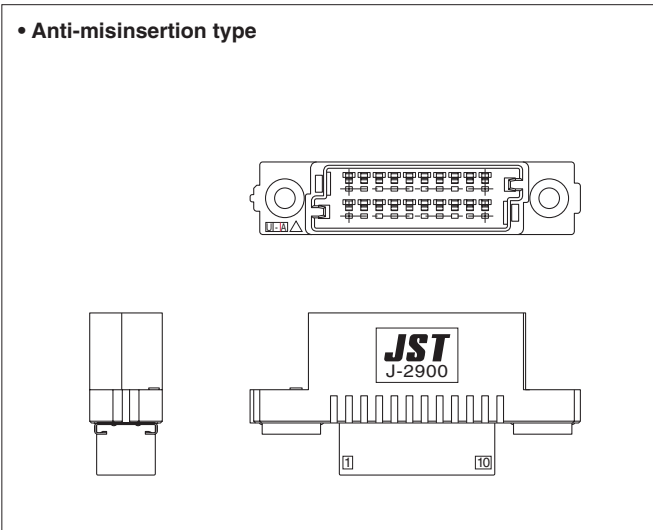
## Tab housing assembly

### • Normal type



Circuits	Model No.	Q'ty/bag
20	<b>J29FA-20-K</b>	70

### • Anti-misinsertion type



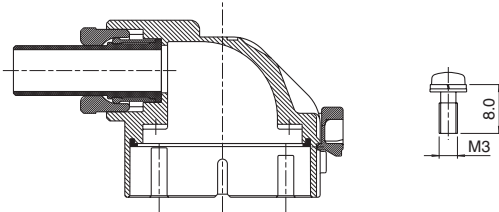
Circuits	Model No.	Q'ty/bag
20	<b>J29MA-20-H-1</b>	70

# METAL SHELL SERIES/J2900

## Wire side

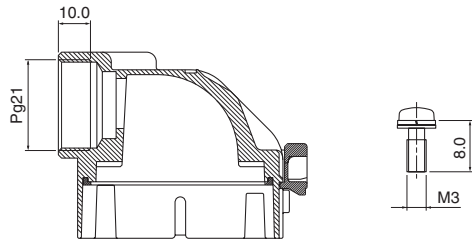
### Shell kit

#### • Normal type



Model No.	Q'ty/bag
J29WK-K-1	30

#### • For Pg21

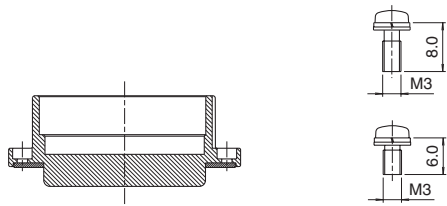


Pg21 screw mounting product (for flexible tubing, etc.)

Model No.	Q'ty/bag
J29WK-K-A	35

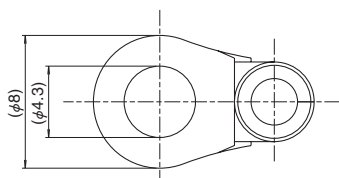
## Panel side

### Shell kit



Model No.	Q'ty/bag
J29PK-K	35

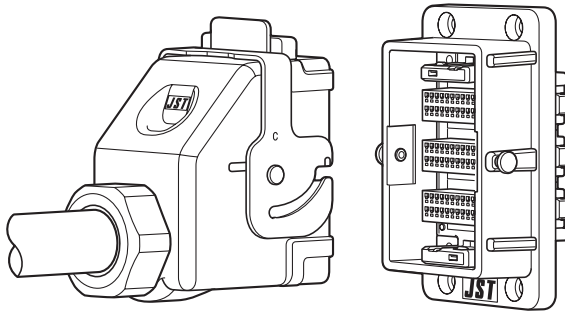
## Ground terminal



Model No.	Q'ty/bag
L3.5-R4	1,000



# JFA CONNECTOR JFA-M SERIES



**Metal shell type I/O connector which contacts are designed to be common use with JFA connector J2000 series and J300 series.**

- Rigid metal shell
- Lever (3 and 4 module type) provides easy mating and unmating connector
- Combination of modular housing

## Specifications

- Current rating: Refer to the following matrix table.
- Voltage rating: 250V AC, DC (J2000 series)  
600V AC, DC (J300 series)
- Temperature range: -55°C to +105°C  
(including temperature rise in applying electrical current)
- Withstanding voltage: 1,500V AC/minute (J2000 series)  
2,200V AC/minute (J300 series)

\*Contact JST for details.

### Current rating

Unit: A

	J2000 Series	J300 Series
	Wire size	
	AWG#20	AWG#16
2 Module	3(44P)	5(24P)
3 Module	3(66P)	5(36P)
4 Module	2.5(88P)	5(48P)

## Standards

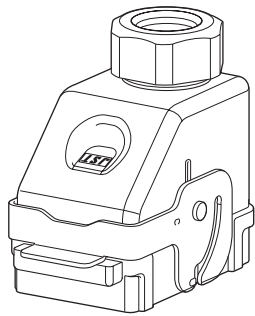
Recognized E60389

# METAL SHELL SERIES/JFA-M

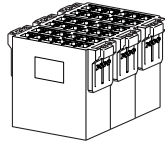
## Components

### Wire side

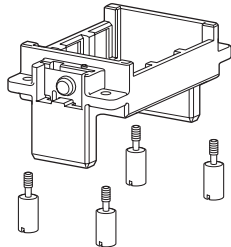
#### Shell assembly



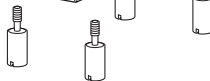
Wire side shell assembly



J2000, J300 — Modules  
Tab housing or receptacle housing



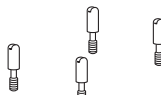
Guide plate A assembly



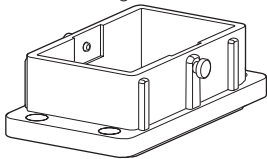
Standard: M3 x 8L washer assembly screw  
Option: Guide pin A or guide pin B

### Panel side

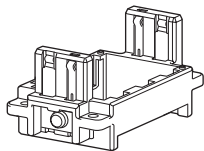
#### Shell assembly



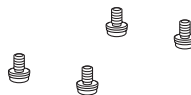
Option: Guide pin A or guide pin B



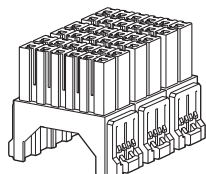
Panel side shell assembly



Guide plate A assembly or guide plate B assembly



When using guide plate A: M3 x 8L washer assembly screw  
When using guide plate B: M4 stepped screw

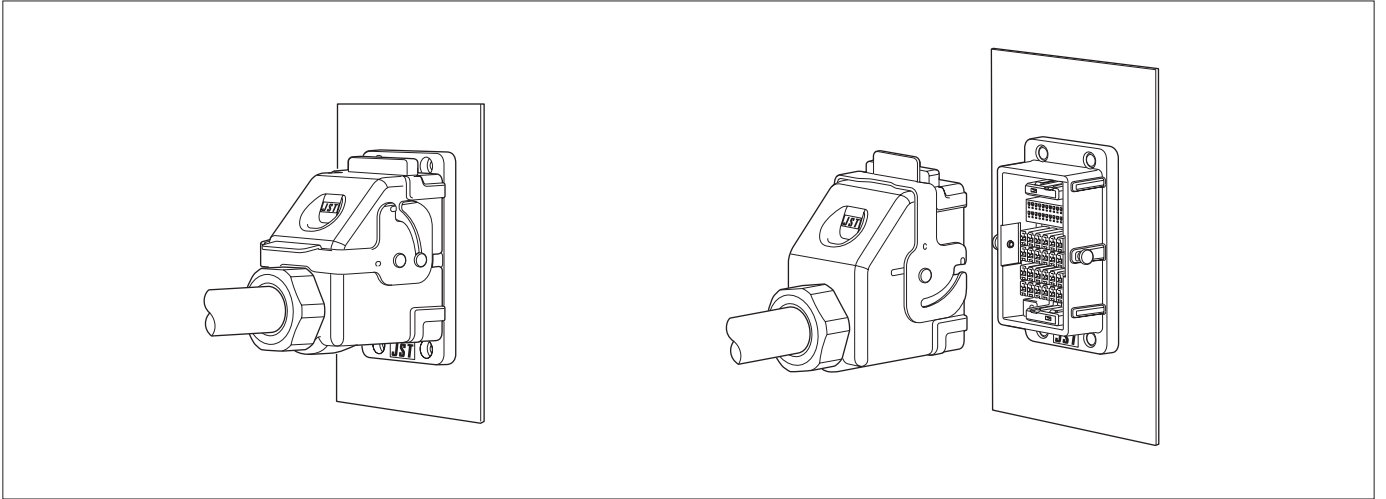


J2000, J300 — Modules  
Tab housing or receptacle housing

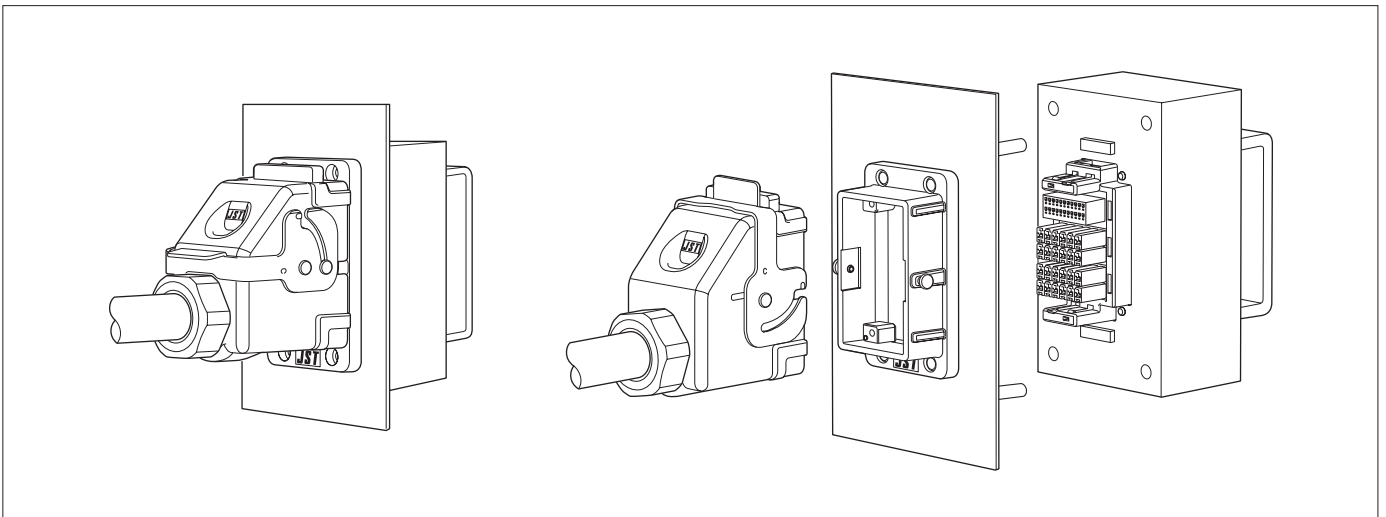
# METAL SHELL SERIES/JFA-M

## Examples of use

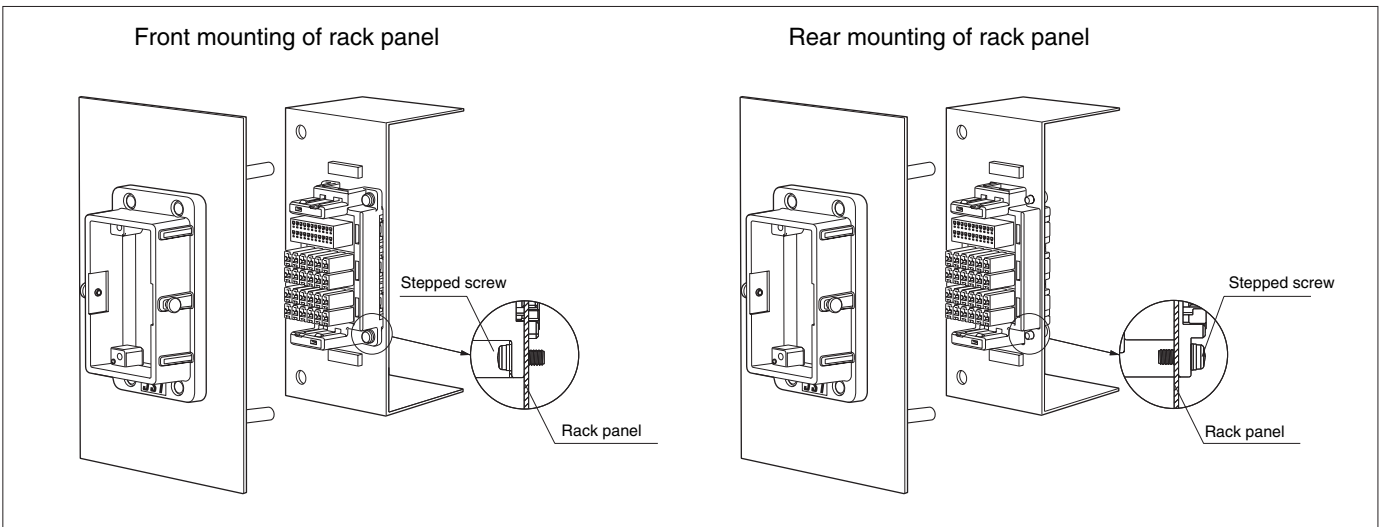
### Waterproof I/O connector



### Drawer type

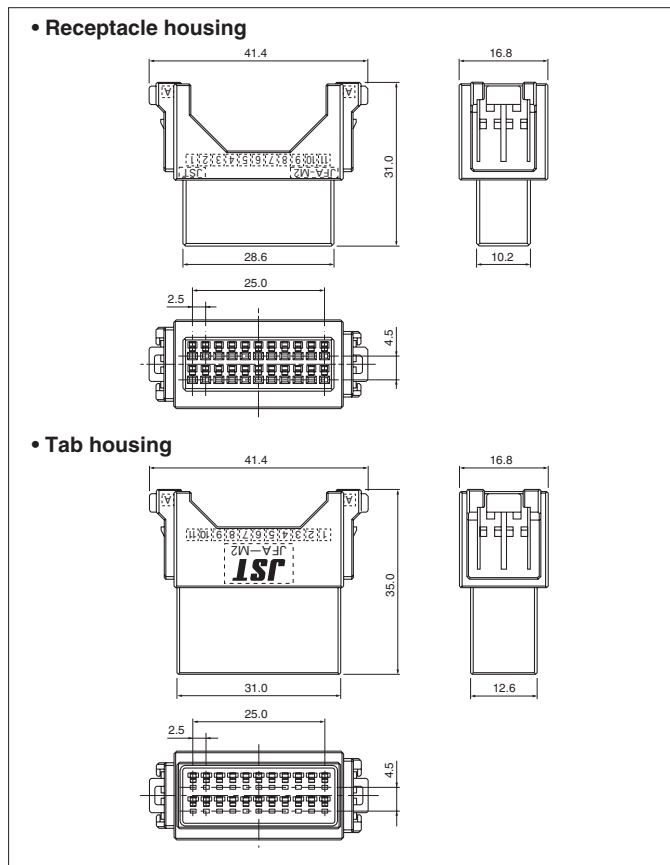


### Drawer type (Rack mounting method)



# METAL SHELL SERIES/JFA-M

## J2000 series housing (Used for both panel mounting and drawer type)

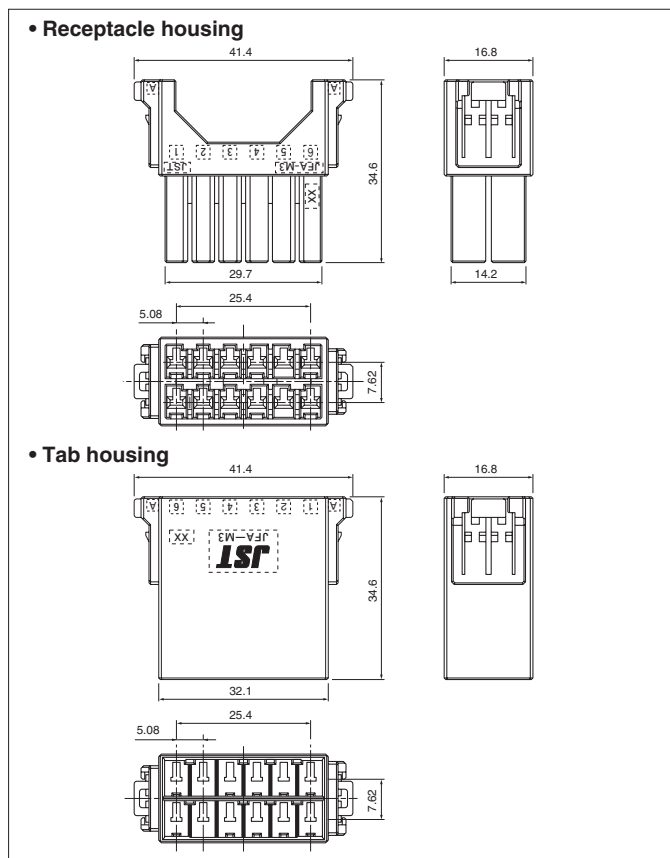


	Model No.	Q'ty/bag
Receptacle housing	<b>JFM2FDN-22V-K</b>	50
Tab housing	<b>JFM2MDN-22V-K</b>	50

**RoHS compliance**

Note: Refer to page 438 about J2000 series contact.

## J300 series housing (Used for both panel mounting and drawer type)



	Model No.	Q'ty/bag
Receptacle housing	<b>JFM3FMN-12V-K</b>	50
Tab housing	<b>JFM3MMN-12V-K</b>	50

**RoHS compliance**

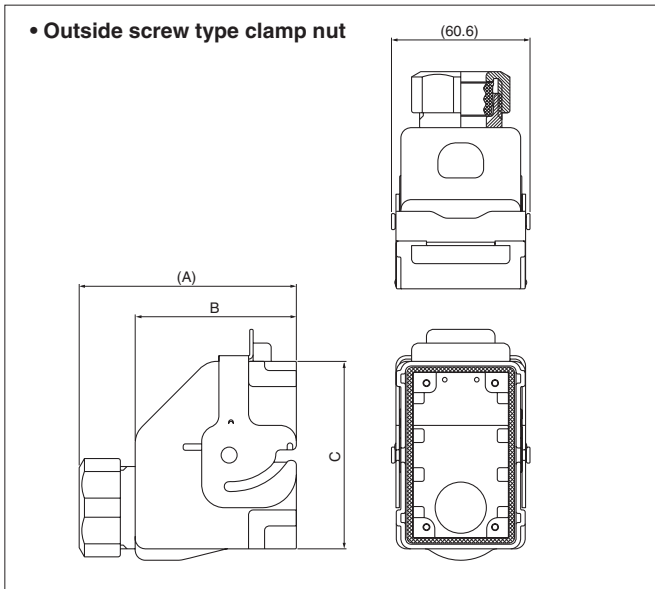
Note: Refer to page 453 about J300 series contact.



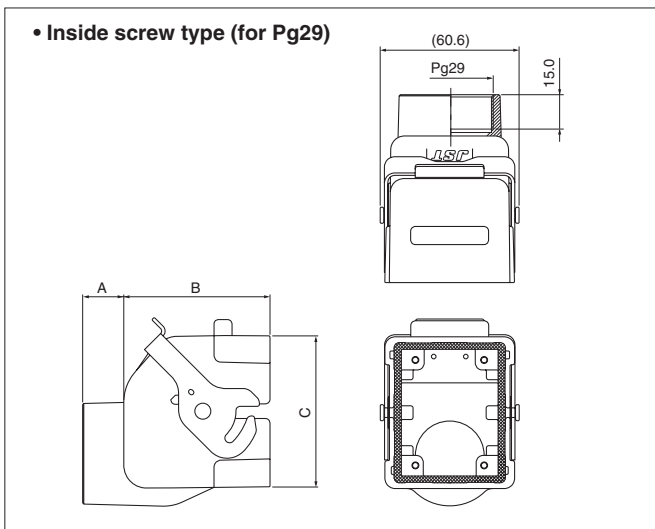
# METAL SHELL SERIES/JFA-M

## Wire side

### Shell assembly



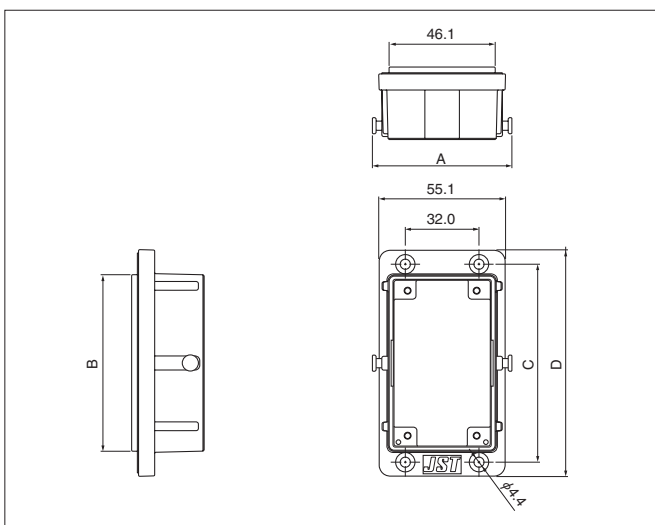
No. of combining housing	Model No.	Dimensions (mm)			Q'ty/bag
		A	B	C	
3 module	<b>JFM-WSA-3-B</b>	(95.0)	70.5	82.0	1
4 module	<b>JFM-WSA-4-A</b>	(103.5)	79.0	99.0	1



No. of combining housing	Model No.	Dimensions (mm)			Q'ty/bag
		A	B	C	
2 module	<b>JFM-WSA-2-1</b>	18.0	64.0	66.2	1

## Panel side

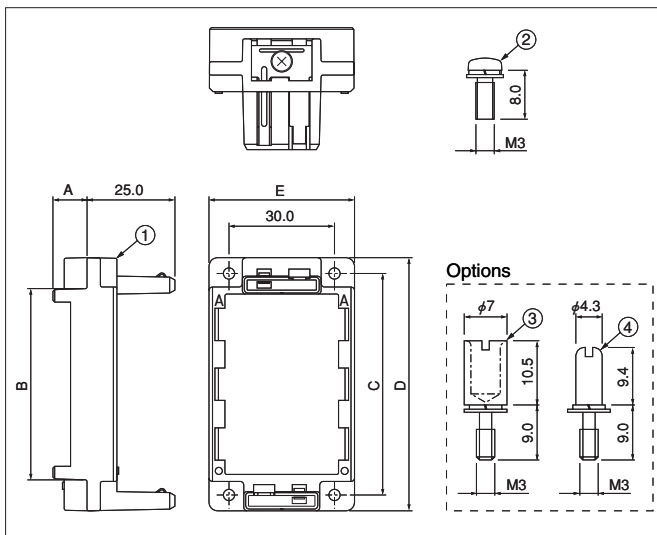
### Shell assembly



No. of combining housing	Model No.	Dimensions (mm)				Q'ty
		A	B	C	D	
2 module	<b>JFM-PSA-2</b>	(60.5)	59.7	69.0	81.5	1 (bag)
3 module	<b>JFM-PSA-3</b>	(60.6)	76.7	86.0	98.5	12 (box)
4 module	<b>JFM-PSA-4</b>	(60.6)	93.7	103.0	115.5	10 (box)

# METAL SHELL SERIES/JFA-M

## Guide plate A (With the combination of wire side and panel side shell assembly)



No. of combining housing	Model No.	Dimensions (mm)					Q'ty
		A	B	C	D	E	
2 module	<b>JFM-GPAK-2</b>	9.6	37.4	46.0	54.8	41.9	1 (bag)
3 module	<b>JFM-GPAK-3</b>	9.7	54.4	63.0	72.0	41.4	24 (box)
4 module	<b>JFM-GPAK-4</b>	9.7	71.4	80.0	89.0	41.4	16 (box)

No.	Parts name	Model No.	Q'ty
①	Guide plate A	—	—
②	Washer assembly screw	—	—
③	Guide pin A	<b>JFM-PIA3-N</b>	1,000 (bag)
④	Guide pin B	<b>JFM-PIB3-N</b>	1,000 (bag)

Note: Guide pin A and guide pin B are option.

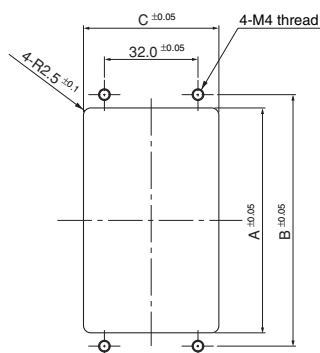
## List of combinations of guide pin A and guide pin B (Shell mounting pattern at panel side)

No. of guide pin	Pattern 1	Pattern 2	Pattern 3	Pattern 4	Pattern 5	Pattern 6
Guide pin A : 0 Guide pin B : 4						
Guide pin A : 1 Guide pin B : 3						
Guide pin A : 2 Guide pin B : 2						
Guide pin A : 3 Guide pin B : 1						
Guide pin A : 4 Guide pin B : 0						

Note: Shell mounting pattern at wire side becomes opposite to the above pattern.

## Panel cut dimension

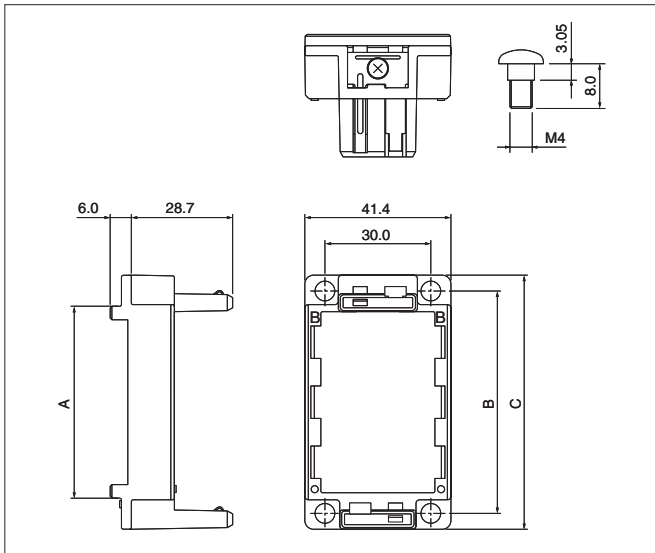
### • Panel side shell mounting



Note: When thread and prepared hole penetrate, use sealing material on the back side of panel.

No. of combining housing	Dimensions (mm)		
	A	B	C
2 module	60.0	69.0	46.4
3 module	76.9	86.0	46.3
4 module	93.9	103.0	46.3

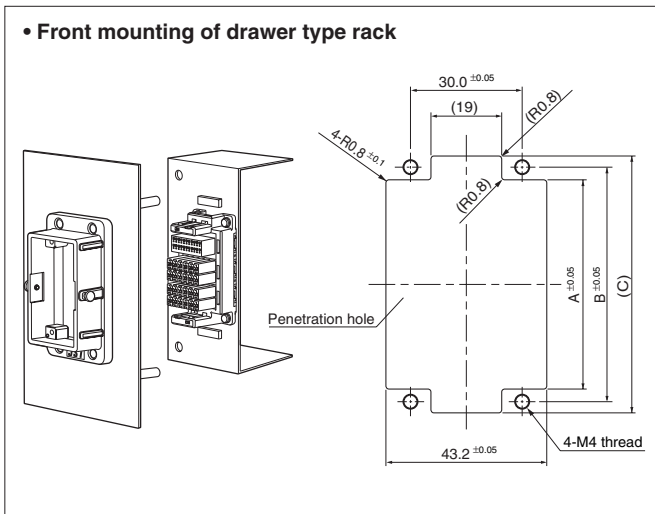
## Guide plate B



No. of combining housing	Model No.	Dimensions (mm)			Q'ty/bag
		A	B	C	
3 module	<b>JFM-GPBK-3</b>	54.4	63.0	72.0	24
4 module	<b>JFM-GPBK-4</b>	71.4	80.0	89.0	16

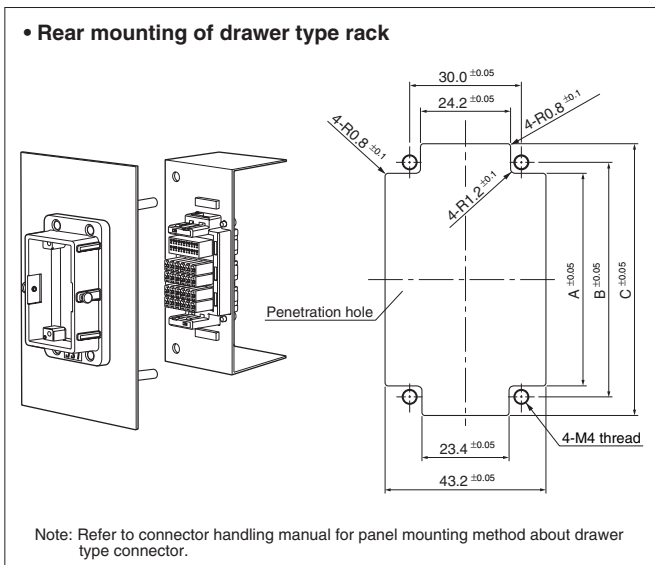
## Panel cut dimension

### • Front mounting of drawer type rack



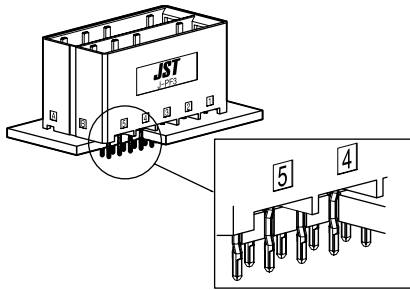
No. of combining housing	Dimensions (mm)		
	A	B	C
3 module	56.2	63.0	69.0
4 module	73.2	80.0	86.0

### • Rear mounting of drawer type rack



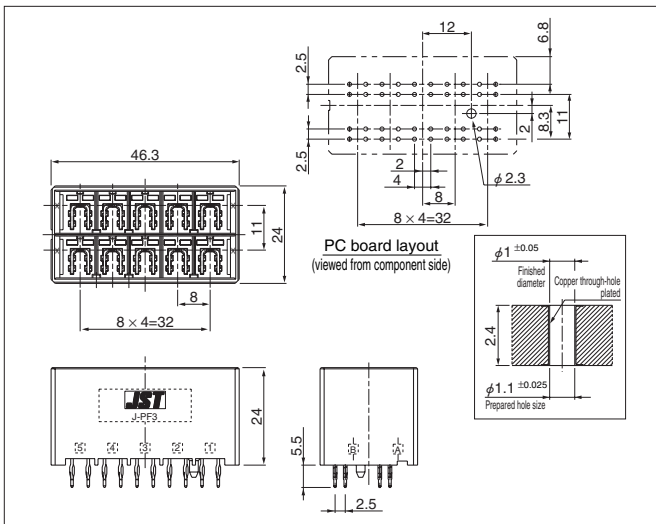
No. of combining housing	Dimensions (mm)		
	A	B	C
3 module	57.1	63.0	73.0
4 module	74.1	80.0	90.0

# J300 SERIES/J-PF3 PRESS FIT TYPE



- Press fit contact is adopted.
- Easy PC board layout
- Use the receptacle contact of J300 series

## Header Top entry type (Press fit type)



Circuits	Keying	Model No.	Q'ty / box
10	XX	<b>B10B-JPF3MK-GKXXR</b>	96
	YY	<b>B10B-JPF3MK-GKYXR</b>	96
	XY	<b>B10B-JPF3MK-GKXYR</b>	96
	YX	<b>B10B-JPF3MK-GKYXR</b>	96

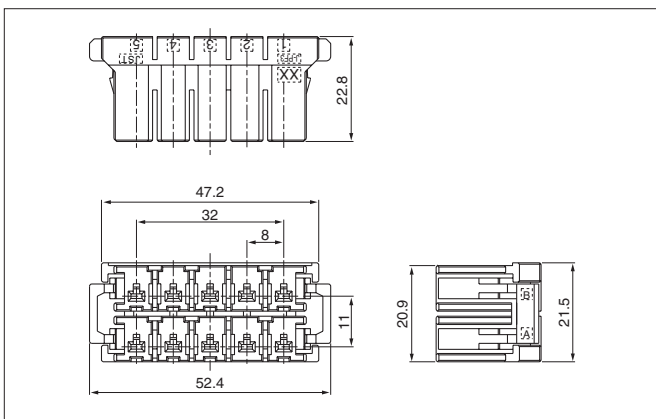
### Material and Finish

Post: Copper alloy, gold-plated  
Housing: Thermoplastic resin

### RoHS compliance

Note: 1. Contact JST for jig for press fit.  
2. Not CSA/UL/TÜV approved.

## Receptacle housing



Circuits	Keying	Model No.	Q'ty / bag
10	XX	<b>JPF3FMS-10V-KXX</b>	400
	YY	<b>JPF3FMS-10V-KYY</b>	400
	XY	<b>JPF3FMS-10V-KXY</b>	400
	YX	<b>JPF3FMS-10V-KYX</b>	400

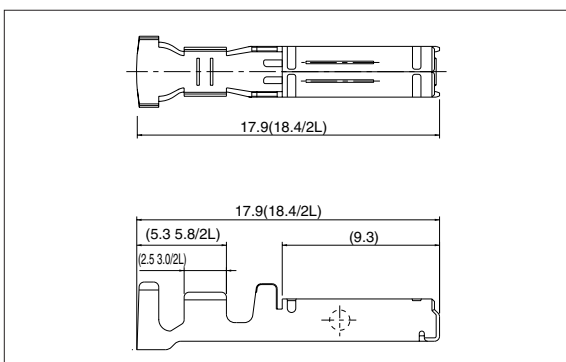
### Material

Housing: Thermoplastic resin

### RoHS compliance

Note: Not CSA/UL/TÜV approved.

## Receptacle contact



Model No.		Applicable wire			Insulation O.D. (mm)	Q'ty	
Strip contact	Loose piece	Nominal	mm <sup>2</sup>	AWG#		reel	Box/Loose piece
<b>SF3F-002GF-P2.0</b>	<b>BF3F-002GF-P2.0</b>	S	0.08 ~ 0.20	28 ~ 24	0.8 ~ 1.4	3,700	1,000
<b>SF3F-01GF-P2.0</b>	<b>BF3F-01GF-P2.0</b>	M	0.20 ~ 0.50	24 ~ 20	1.2 ~ 2.6	3,700	1,000
<b>SF3F-41GF-P2.0</b>	<b>LF3F-41GF-P2.0</b>	L	0.50 ~ 1.25	20 ~ 16	1.8 ~ 2.8	3,200	1,000
<b>*SF3F-71GF-P2.0</b>	<b>*BF3F-71GF-P2.0</b>	2L	1.25 ~ 2.0	16 ~ 14	2.4 ~ 3.4	3,200	1,000

### Material and Finish

Copper alloy (superior conductivity), nickel-undercoated, selective gold-plated tin-plated (reflow treatment)

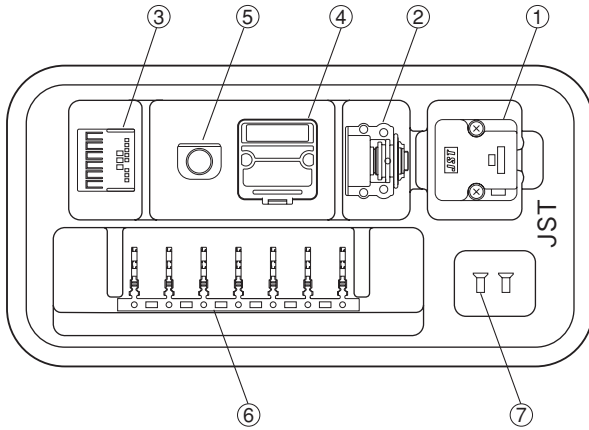
### RoHS compliance

Note: \*Marked products are not CSA/TÜV approved.



# JFA CONNECTOR J1700/2700/3700 SERIES

## Connector kits for motor



- 6 circuits connector for power supply of servomotor

### Specifications

- Current rating: 5.0A AC, DC [J1700 series 2.0mm pitch]  
7.0A AC, DC [J2700 series 2.5mm pitch]  
10.0A AC, DC [J3700 series 3.8mm pitch]
  - Voltage rating: 250V AC, DC
  - Temperature range: -55°C to +105°C  
(including temperature rise in applying electrical current)
  - Waterproof grade: Grade 5 ingress protection of JIS C 0920  
(IEC 60529 IPX5)
- \*Contact JST for details.

### Kit components

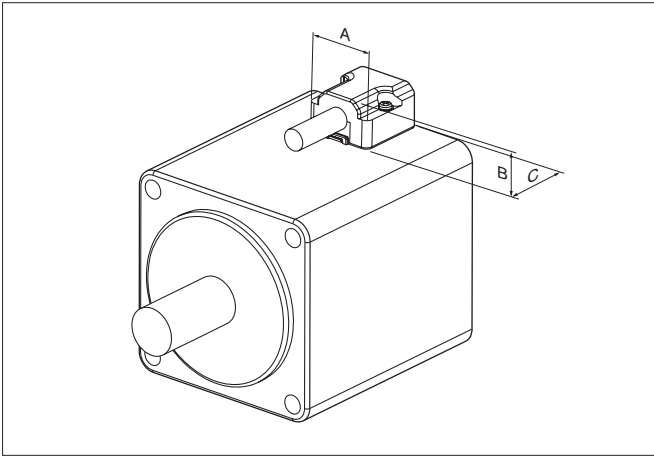
No.	Components	Qty
①	Top cover assembly	1
②	Bottom cover assembly	1
③	Receptacle housing	1
④	Rubber plate seal	1
⑤	Seal ring	1
⑥	Receptacle contact	7
⑦	Flat countersunk head screw	2

### Standards

Recognized E60389

# JFA CONNECTOR/J1700/2700/3700 SERIES

## Connector kit outer dimension



Series	Dimensions (mm)		
	A	B	C
J1700	16.4	12.0	20.2
J2700	21.0	13.0	21.2
J3700	27.0	15.0	21.2

## Connector kit model No.

Series	Pitch (mm)	Model No.	Cable finished diameter (mm)	Nominal
J1700	2.0	J17-06FMH-6KL-1S-CF	6.0	S
		J17-06FMH-6KL-1M-CF	6.0	M
		J17-06FMH-7KL-1S-CF	7.0	S
		J17-06FMH-7KL-1M-CF	7.0	M
J2700	2.5	J27-06FMH-6KL-1S-CF	6.0	S
		J27-06FMH-6KL-1M-CF	6.0	M
		J27-06FMH-7KL-1S-CF	7.0	S
		J27-06FMH-7KL-1M-CF	7.0	M
J3700	3.8	J37-06FMH-8KL-1S-CF	8.0	S
		J37-06FMH-8KL-1M-CF	8.0	M
		J37-06FMH-8KL-1L-CF	8.0	L
		J37-06FMH-9KL-1S-CF	9.0	S
		J37-06FMH-9KL-1M-CF	9.0	M
		J37-06FMH-9KL-1L-CF	9.0	L

RoHS compliance

## Model number identification

J17 - 06 FMH - 6 KL - 1S - CF	
Series name: J17...J1700 Series J27...J2700 Series J37...J3700 Series	
No. of circuits: 6	
Type of connector: Receptacle housing	
Cable insulation O.D.: J1700 Series...6.0, 7.0 J2700 Series...6.0, 7.0 J3700 Series...8.0, 9.0	
Color indication: K...Black	
Packaging form: Tray for kit	
Receptacle contact size: S, M, L	
Hexavalent chromium free	

## Receptacle contact

Nominal	Applicable wire		Wire insulation O.D. (mm)	J1700 Series	J2700 Series	J3700 Series
	mm <sup>2</sup>	AWG #				
S	0.08 ~ 0.20	28 ~ 24	0.88 ~ 1.43	<b>SJ1F-002GF-P0.8</b>	<b>SJ2F-002GF-P1.0</b>	<b>SJ3F-002GF-P1.8</b>
M	0.20 ~ 0.50	24 ~ 20	1.11 ~ 1.53	<b>SJ1F-01GF-P0.8</b>	<b>SJ2F-01GF-P1.0</b>	—
			1.11 ~ 1.86	—	—	<b>SJ3F-01GF-P1.8</b>
L	0.50 ~ 1.25	20 ~ 16	1.53 ~ 2.50	—	—	<b>SJ3F-41GF-P1.8</b>

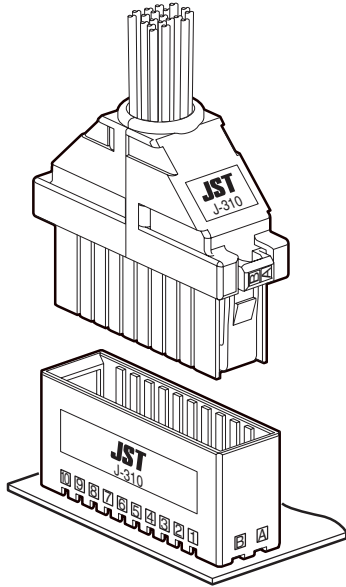
RoHS compliance

## Hand crimping tool

Series	Nominal	Receptacle contact	Hand crimp tool
J1700	S	<b>SJ1F-002GF-P0.8</b>	YRS-8831
	M	<b>SJ1F-01GF-P0.8</b>	YRS-8841
J2700	S	<b>SJ2F-002GF-P1.0</b>	YRS-8851
	M	<b>SJ2F-01GF-P1.0</b>	YRS-8861
J3700	S	<b>SJ3F-002GF-P1.8</b>	YRF-882
	M	<b>SJ3F-01GF-P1.8</b>	YRF-881
	L	<b>SJ3F-41GF-P1.8</b>	YRF-880



# JFA CONNECTOR/PROTECTOR

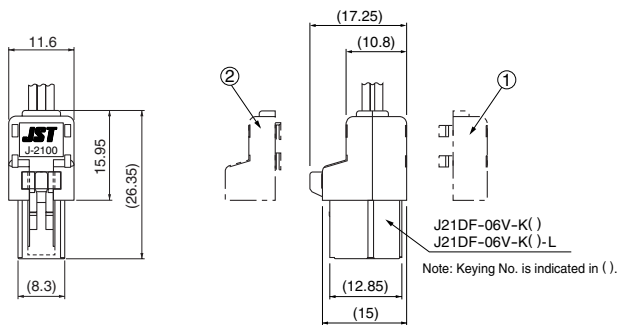


Note: Protector is not UL/CSA/TÜV approved

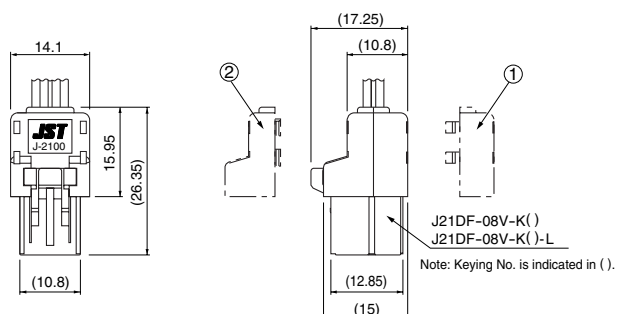
**When applying a current to the connector, the protector prevents foreign substances being inserted into mating part from the wiring side. However it has no function of holding the wire securely.**

## J2000 Series

### •J2100 series for 6 circuits



### •J2100 series for 8 circuits



No.	Model No.	Color
①	<b>J21PF-06SCA</b>	Transparent
②	<b>J21PF-06SCB</b>	Transparent

#### Material

Polycarbonate

#### RoHS compliance

No.	Model No.	Color
①	<b>J21PF-08SCA</b>	Transparent
②	<b>J21PF-08SCB</b>	Transparent

#### Material

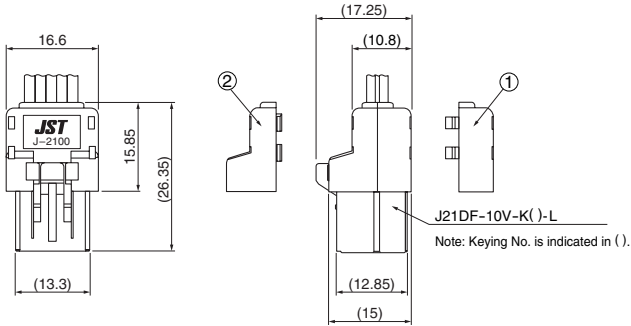
Polycarbonate

#### RoHS compliance

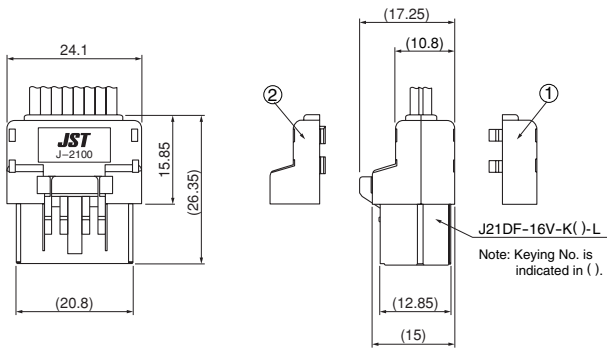
# JFA CONNECTOR/PROTECTOR

## J2000 Series

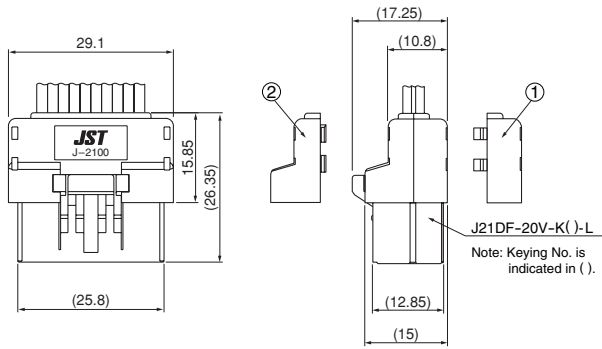
### •J2100 series for 10 circuits



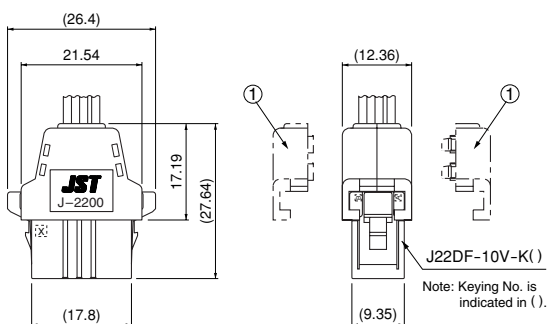
### •J2100 series for 16 circuits



### •J2100 series for 20 circuits



### •J2200 series for 10 circuits



No.	Model No.	Color
①	<b>J21PF-10SCA</b>	Transparent
②	<b>J21PF-10SCB</b>	Transparent
Material		
Polycarbonate		

**RoHS compliance**

No.	Model No.	Color
①	<b>J21PF-16SCA</b>	Transparent
②	<b>J21PF-16SCB</b>	Transparent
Material		
Polycarbonate		

**RoHS compliance**

No.	Model No.	Color
①	<b>J21PF-20SCA</b>	Transparent
②	<b>J21PF-20SCB</b>	Transparent
Material		
Polycarbonate		

**RoHS compliance**

No.	Model No.	Color
①	<b>J22PF-10VK</b>	Black
Material		
Glass-filled PBT		

**RoHS compliance**

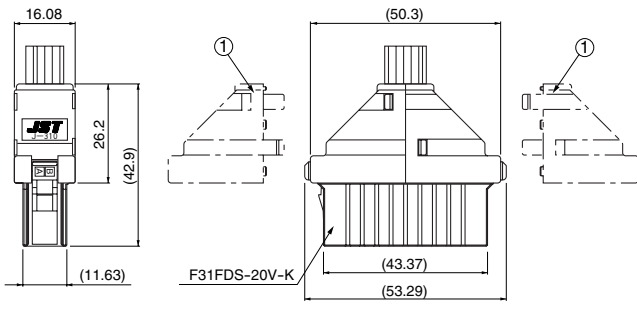
Note: Two protectors are used.



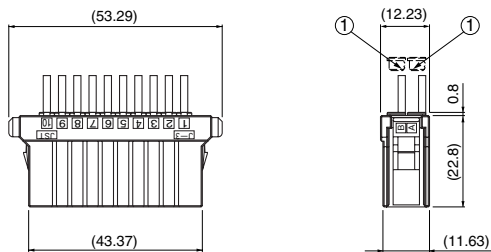
# JFA CONNECTOR/PROTECTOR

## J300 Series

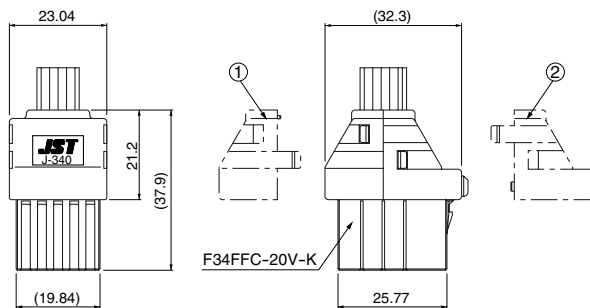
### •J310D series for 20 circuits



### •J310D series / Embedding-type protector for 8, 10 circuits

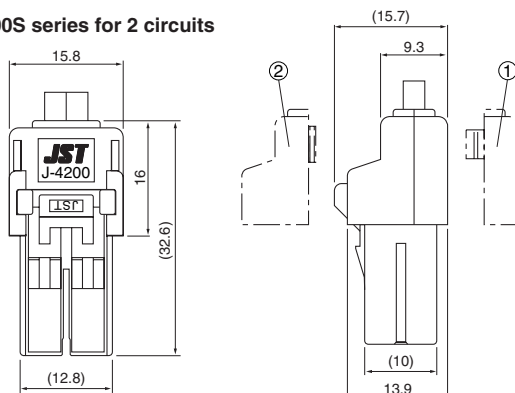


### •J340F series for 20 circuits



## J4000 Series

### •J4200S series for 2 circuits



No.	Model No.	Color
①	<b>F31PFD-20VK</b>	Black
①	<b>F31PFD-20SC</b>	Transparent

#### Material

Black: Glass-filled PBT  
Transparent: Polycarbonate

#### RoHS compliance

Note: Two protectors of the same color are used.

No.	Model No.	Color
①	<b>F31PFS-10KU</b>	Black

#### Material

Glass-filled PBT

#### RoHS compliance

Note: This protector is cut and used for each number of circuits.

No.	Model No.	Color
①	<b>F34PFF-20VKA</b>	Black
	<b>F34PFF-20SCA</b>	Transparent
②	<b>F34PFF-20VKB</b>	Black
	<b>F34PFF-20SCB</b>	Transparent

#### Material

Black: Glass-filled PBT  
Transparent: Polycarbonate

#### RoHS compliance

Note: Both 1 and 2 protectors in the same color are used.

No.	Model No.	Color
①	<b>J42PF-02SCA</b>	Transparent
②	<b>J42PF-02SCB</b>	Transparent

#### Material

Polycarbonate

#### RoHS compliance

(Patent pending)

When applying a current to the connector, the protector prevents foreign substances being inserted into mating part from the wiring side. However it has no function of holding the wire securely.



# 5

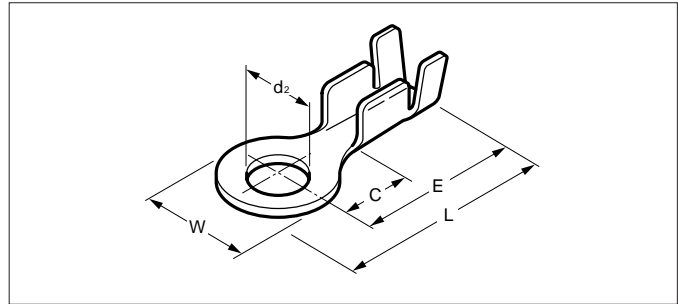
## Chain Terminals and Splices

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# RING TONGUE TERMINAL

With insulation grip



UL LISTED E42024

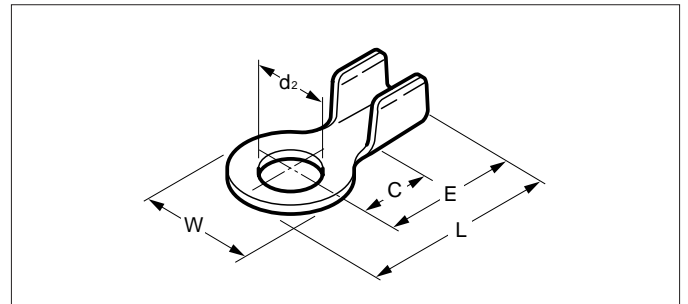
SF Certified LR20812

Model No.	Standard	Applicable wire			Material	Finish	Dimensions(mm)					Q'ty / reel	
		mm <sup>2</sup>	AWG #	Insulation O.D. (mm)			d <sub>2</sub> (dia.)	E	L	C	W		Material thickness
SRA-01T-3.2	UL SF	0.2 to 0.5	24 to 20	1.5 to 2.7	Brass	Tin-plated	3.2	13.4	16.9	7.2	7.0	0.32	10,000
SRA-21-3	UL SF	0.3 to 0.75	22 to 18	1.5 to 2.8	Brass	—	3.2	13.0	16.8	5.8	7.5	0.5	7,500
SRA-21T-3						Tin-plated							
SRA-21-3.7						—							
SRA-21T-3.7						Tin-plated							
SRA-21-4						—							
SRA-21T-4	Tin-plated												
SRA-21-H5	—	0.5 to 2.0	20 to 14	2.6 to 3.8	Brass	—	3.2	13.0	16.8	5.8	7.5	0.5	7,500
SRA-21T-H5	Tin-plated												
SRA-51-3	—												
SRA-51T-3	Tin-plated												
SRA-51-3.7	—												
SRA-51T-3.7	Tin-plated												
SRA-51-4	—	0.5 to 2.0	20 to 14	2.6 to 3.8	Brass	—	3.2	13.0	16.8	5.8	7.5	0.5	7,500
SRA-51T-4	Tin-plated												
SRA-51-H5	—												
SRA-51T-H5	Tin-plated												
SRA-51-5	—												
SRA-51T-5	Tin-plated												
SRB-51-3	UL SF	0.5 to 2.0	20 to 14	2.6 to 3.8	Brass	—	3.2	15.0	19.3	7.8	8.5	0.5	5,000
SRB-51T-3						Tin-plated							
SRB-51-3.7						—							
SRB-51T-3.7						Tin-plated							
SRB-51-4						—							
SRB-51T-4	Tin-plated												
SRB-51-H5	—	0.2 to 0.3	24 to 22	1.3 to 1.7	Brass	—	2.5	7.0	9.3	2.9	4.6	0.32	15,000
SRB-51T-H5	Tin-plated												
SRB-51-5	—												
SRB-51T-5	Tin-plated												
SRB-51-5	—												
SRB-51T-5	Tin-plated												
SRC-01-2.5	UL SF	0.5 to 2.0	20 to 14	2.6 to 3.8	Brass	—	3.2	13.5	16.8	6.7	6.5	0.5	7,500
SRC-01T-2.5						Tin-plated							
SRC-51-M3						—							
SRC-51T-M3						Tin-plated							
SRC-51-M3.5						—							
SRC-51T-M3.5	Tin-plated												
SRC-51-M4	—	0.5 to 2.0	20 to 14	2.6 to 3.8	Brass	—	3.2	11.5	15.3	4.8	7.5	0.5	7,500
SRC-51T-M4	Tin-plated												
SRF-51-3	—												
SRF-51T-3	Tin-plated												
SRF-51-3.7	—												
SRF-51T-3.7	Tin-plated												
SRF-51-4	—	0.5 to 2.0	20 to 14	2.6 to 3.8	Brass	—	3.2	11.5	15.3	4.8	7.5	0.5	7,500
SRF-51T-4	Tin-plated												
SRF-51-H5	—												
SRF-51T-H5	Tin-plated												
SRF-51-5	—												
SRF-51T-5	Tin-plated												

RoHS compliance

# RING TONGUE TERMINAL

Without insulation grip



UL LISTED E42024

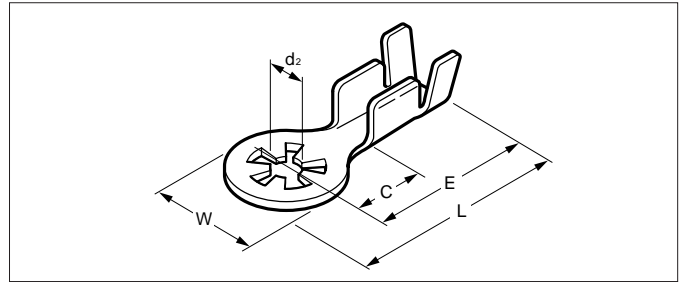
SF Certified LR20812

Model No.	Standard	Applicable wire		Material	Finish	Dimensions(mm)					Q'ty / reel	
		mm <sup>2</sup>	AWG #			d <sub>2</sub> (dia.)	E	L	C	W		Material thickness
SRA-20-2.5	UL LISTED SF	0.3 to 0.75	22 to 18	Brass	—	2.5	7.5	9.8	4.2	4.6	0.4	15,000
SRA-20T-2.5					Tin-plated							
SRA-20-3.2					—	3.2						
SRA-20T-3.2	—	—	—	—	—	—	—	—	—	—	—	—
SRA-50-3	UL LISTED SF	0.5 to 2.0	20 to 14	Brass	—	3.2	8.7	12.5	4.7	7.5	0.5	10,000
SRA-50T-3					Tin-plated							
SRA-50-3.7					—	3.7						
SRA-50T-3.7					Tin-plated							
SRA-50-4					—	4.3						
SRA-50T-4	Tin-plated	—	—	—	—	—	—	—	—	—	—	—
SRA-50-H5	—	—	—	—	—	—	—	—	—	—	—	—
SRA-50T-H5	Tin-plated	5.1	—	—	—	—	—	—	—	—	—	—
SRB-50-3	UL LISTED SF	0.5 to 2.0	20 to 14	Brass	—	3.2	12.7	17.0	7.7	8.5	0.5	7,500
SRB-50T-3					Tin-plated							
SRB-50-3.7					—	3.7						
SRB-50T-3.7					Tin-plated							
SRB-50-4					—	4.3						
SRB-50T-4					Tin-plated							
SRB-50-H5					—	5.1						
SRB-50T-H5	Tin-plated	5.3	—	—	—	—	—	—	—	—	—	—
SRB-50-5	—	—	—	—	—	—	—	—	—	—	—	—
SRB-50T-5	Tin-plated	—	—	—	—	—	—	—	—	—	—	—
SRC-50-M3	UL LISTED SF	0.5 to 2.0	20 to 14	Brass	—	3.2	10.0	13.3	6.7	6.5	0.5	15,000
SRC-50T-M3					Tin-plated							
SRC-50-M3.5					—	3.7						
SRC-50T-M3.5					Tin-plated							
SRC-50-M4	—	4.3	—	—	—	—	—	—	—	—	—	—
SRC-50T-M4	Tin-plated	—	—	—	—	—	—	—	—	—	—	—
SRD-20-3.7	UL LISTED SF	0.3 to 0.75	22 to 18	Brass	—	3.7	8.7	12.5	4.7	7.5	0.5	15,000
SRD-20T-3.7					Tin-plated							
SRD-20-4					—	4.3						
SRD-20T-4	Tin-plated	—	—	—	—	—	—	—	—	—	—	—

RoHS compliance

# RING TONGUE TERMINAL

With toothed lock



Recognized E42024

Certified LR20812

Model No.	Standard	Applicable wire			Material	Finish	Dimensions(mm)					Q'ty / reel	
		mm <sup>2</sup>	AWG #	Insulation O.D. (mm)			d <sub>2</sub> (dia.)	E	L	C	W		Material thickness
SRT-51T-3(FE)		0.5 to 1.25	20 to 16	1.7 to 3.4	Iron	Tin-plated	3.1	12.2	16.8	6.1	9.2	0.5	5,000
SRT-51T-4(FE)							4.1						

RoHS compliance

## Crimping machine, Applicator

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SRA-01(T)**	AP-K2N	MK-L	MK/SRA-01	APLMK SRA01
		-	-	-
SRA-20(T)**		MK-L	MK/SRA-20	APLMK SRA20
		-	-	-
SRA-21(T)**		MK-L	MK/SRA-21	APLMK SRA21
		-	-	-
SRA-50(T)**		MK-L	MK/SRA-50	APLMK SRA50
		-	-	-
SRA-51(T)**		MK-L	MK/SRA-51	APLMK SRA51
		-	-	-
SRB-50(T)**		MK-L	MK/SRB-50	APLMK SRB50
		-	-	-
SRB-51(T)**		MK-L	MK/SRB-51	APLMK SRB51
		-	-	-

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SRC-01(T)**	AP-K2N	MK-L	MK/SRC-01	APLMK SRC01
		-	-	-
SRC-50(T)**		MK-L	MK/SRC-50	APLMK SRC50
		-	-	-
SRC-51(T)**		MK-L	MK/SRC-51	APLMK SRC51
		-	-	-
SRD-20(T)**		MK-L	MK/SRD-20	APLMK SRD20
		-	-	-
SRF-51(T)**		MK-L	MK/SRF-51	APLMK SRF51
		-	-	-
SRT-51T**		MK-L	MK/SRT-51	APLMK SRT51
		-	-	-

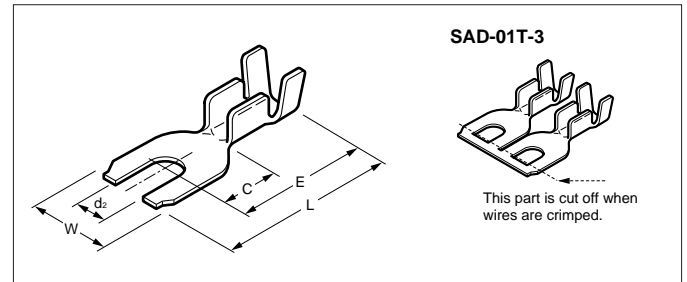
\* RoHS compliant products are published.

\* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.

\* Contact JST for details.

# FORK TONGUE TERMINAL

## With insulation grip



UL LISTED E42024

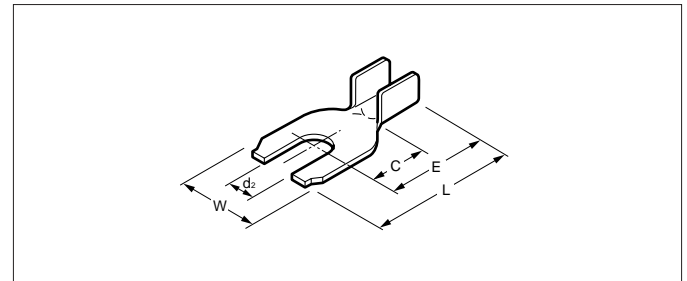
CS Certified LR20812

Model No.	Standard	Applicable wire			Material	Finish	Dimensions(mm)						Q'ty / reel
		mm <sup>2</sup>	AWG #	Insulation O.D. (mm)			d <sub>2</sub> (dia.)	E	L	C	W	Material thickness	
SAA-51-3	UL LISTED CS	0.5 to 2.0	20 to 14	2.6 to 3.8	Brass	—	3.2	13.0	16.8	5.8	7.2	0.5	7,500
SAA-51T-3						Tin-plated							
SAA-51-3.7						—							
SAA-51T-3.7						Tin-plated							
SAA-51-4						—							
SAA-51T-4						Tin-plated							
SAB-51-5						—							
SAB-51T-5						Tin-plated							
*SAD-01T-3	UL LISTED CS	0.2 to 0.5	24 to 20	Approx 2.0	—	3.2	11.0	14.7	5.2	6.3	—	5,000	

**RoHS compliance** SAD-01T-3 displays (SN) on a label.

Note: The terminal denoted by \* is a twin lead fork terminal and is used for crimping 2 piece terminals simultaneously onto 2 parallel wires like the TV feeder wires.

## Without insulation grip



UL LISTED E42024

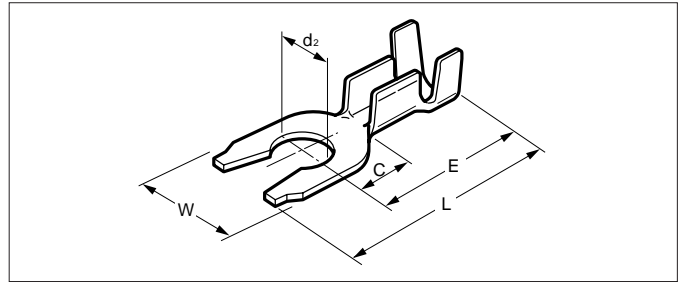
CS Certified LR20812

Model No.	Standard	Applicable wire		Material	Finish	Dimensions(mm)						Q'ty / reel
		mm <sup>2</sup>	AWG #			d <sub>2</sub> (dia.)	E	L	C	W	Material thickness	
SAA-50-3	UL LISTED CS	0.5 to 2.0	20 to 14	Brass	—	3.2	10.0	13.8	6.0	7.2	0.5	10,000
SAA-50T-3					Tin-plated							
SAA-50-3.7					—							
SAA-50T-3.7					Tin-plated							
SAA-50-4					—							
SAA-50T-4					Tin-plated							

**RoHS compliance**

# FORK TONGUE TERMINAL

## Locking type (With insulation grip)



UL Listed E42024

SF Certified LR20812

Model No.	Standard	Applicable wire			Material	Finish	Dimensions(mm)					Q'ty / reel	
		mm <sup>2</sup>	AWG #	Insulation O.D. (mm)			d <sub>2</sub> (dia.)	E	L	C	W		Material thickness
SAA-21-3L	UL SF	0.3 to 0.75	22 to 18	1.5 to 2.8	Brass	—	3.2	13.0	16.8	5.8	7.2	0.5	7,500
SAA-21T-3L						Tin-plated							
SAA-21-3.5L						—	3.7						
SAA-21T-3.5L						Tin-plated							
SAA-21-4L						—	4.3						
SAA-21T-4L						Tin-plated							

RoHS compliance

## Crimping machine, Applicator

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SAA-21(T)**	AP-K2N	MK-L	MK/SAA-21	APLMK SAA21
		—	—	—
SAA-50(T)**		MK-L	MK/SAA-50	APLMK SAA50
		—	—	—
SAA-51(T)**		MK-L	MK/SAA-51	APLMK SAA51
		—	—	—

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SAB-51(T)**	AP-K2N	MK-L	MK/SAB-51	APLMK SAB51
		—	—	—
SAD-01(T)**		MK-L	MK/SAD-01	APLMK SAD01
		—	—	—

\* RoHS compliant products are published.

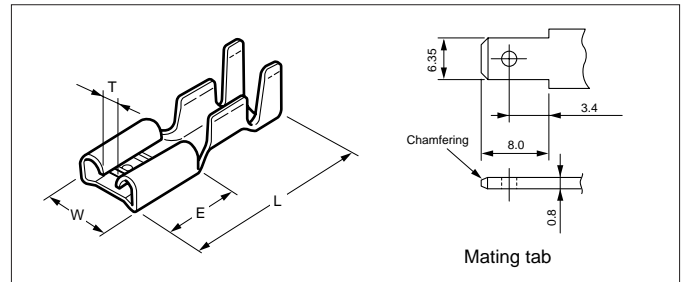
\* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.

\* Contact JST for details.



# TAB-ON TERMINAL

## 250 Tab-on type



UL Listed E70188

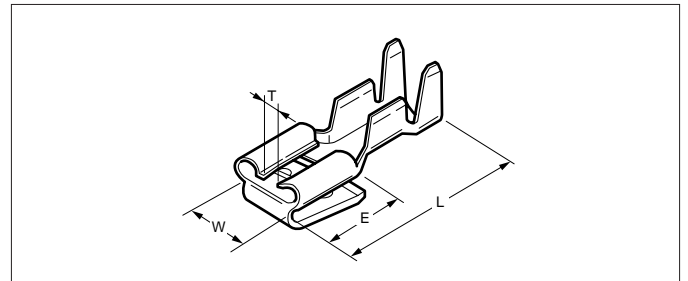
SP Certified LR20812

Model No.	Standard	Applicable wire			Material	Finish	Dimensions(mm)						Q'ty / reel	
		mm <sup>2</sup>	AWG #	Insulation O.D. (mm)			W	L	E	T approx.	Material thickness	Mating tab thickness		
STO-21-250N	UL SP	0.3 to 0.75	22 to 18	2.3 to 3.0	Brass	—	7.7	19.0	7.8	2.4	0.4	0.8	5,000	
STO-21T-250N	UL SP					Tin-plated								
STO-61-250N	UL SP	—												
STO-61T-250N	UL SP	0.75 to 2.0	18 to 14	2.8 to 3.8		Tin-plated	7.6	19.6	8.0	1.6	0.45	0.8		4,000
STO-81-250N	UL SP	2.0 to 3.5	14 to 12	3.8 to 5.0		—								
*STO-62T-250N	UL SP	UL1015#20 + UL1015#20 UL1015#18 + UL1015#20 UL1015#18 + UL1015#18				Tin-plated	7.6	19.0	8.0	1.6	0.45	0.8		5,000

RoHS compliance

Note: Terminal denoted by \* is used only for two wires. If using wires in other combinations than the ones shown above, contact JST.

## 250 Tab-on piggyback type



UL Listed E70188

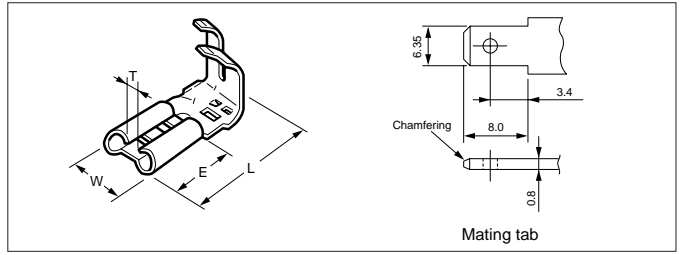
SP Certified LR20812

Model No.	Standard	Applicable wire			Material	Finish	Dimensions(mm)						Q'ty / reel
		mm <sup>2</sup>	AWG #	Insulation O.D. (mm)			W	L	E	T approx.	Material thickness	Mating tab thickness	
SFT-61T-250N	UL SP	0.75 to 2.0	18 to 14	2.8 to 3.9	Brass	Tin-plated	7.6	19.6	8.3	2.9	0.39	0.8	3,000

RoHS compliance

# TAB-ON TERMINAL

## 250 Tab-on flag type



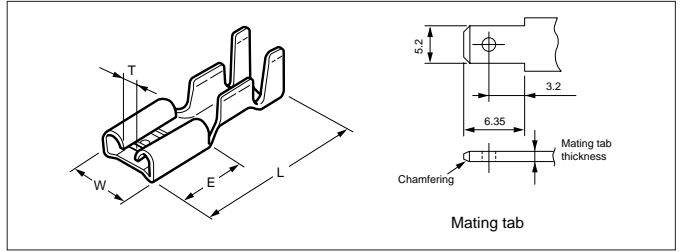
UL Listed E70188

SF Certified LR20812

Model No.	Standard	Applicable wire			Material	Finish	Dimensions(mm)					Q'ty / reel	
		mm <sup>2</sup>	AWG #	Insulation O.D. (mm)			W	L	E	T approx.	Material thickness		Mating tab thickness
SFO-61-250A	UL SF	0.75 to 2.0	18 to 14	2.8 to 3.8	Brass	—	8.0	16.1	7.8	3.0	0.45	0.8	3,000
SFO-61T-250A						Tin-plated							

RoHS compliance

## 205 Tab-on type



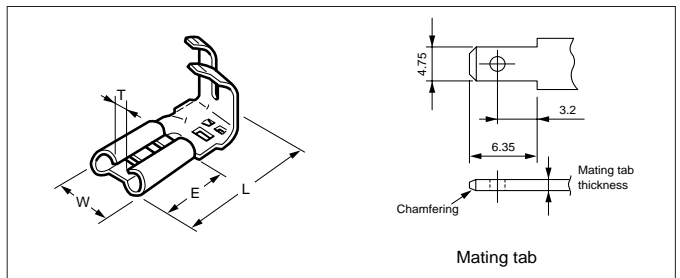
UL Listed E70188

SF Certified LR20812

Model No.	Standard	Applicable wire			Material	Finish	Dimensions(mm)					Q'ty / reel	
		mm <sup>2</sup>	AWG #	Insulation O.D. (mm)			W	L	E	T approx.	Material thickness		Mating tab thickness
STO-21-205N	UL SF	0.3 to 0.75	22 to 18	2.3 to 3.0	Brass	—	6.4	15.9	6.4	0.7	0.4	0.8	7,500
STO-21T-205N						Tin-plated						0.5	
STO-21-205N-5						—						0.5	
STO-21T-205N-5						Tin-plated						0.5	

RoHS compliance

## 187 Tab-on flag type



UL Listed E70188

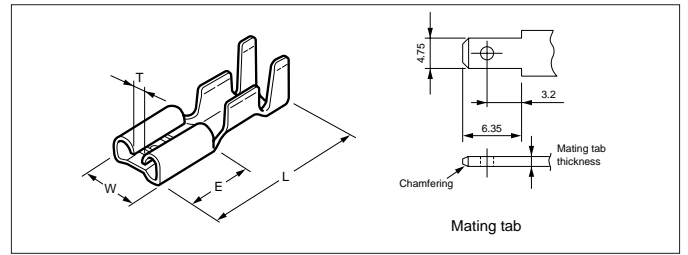
SF Certified LR20812

Model No.	Standard	Applicable wire			Material	Finish	Dimensions(mm)					Q'ty / reel	
		mm <sup>2</sup>	AWG #	Insulation O.D. (mm)			W	L	E	T approx.	Material thickness		Mating tab thickness
SFO-41-187N	UL SF	0.5 to 1.25	20 to 16	2.6 to 3.5	Brass	—	5.6	12.3	6.4	1.0	0.32	0.5	5,000
SFO-41T-187N						Tin-plated						0.8	
SFO-41-187N-8						—						0.8	
SFO-41T-187N-8						Tin-plated						0.8	

RoHS compliance

# TAB-ON TERMINAL

## 187 Tab-on type



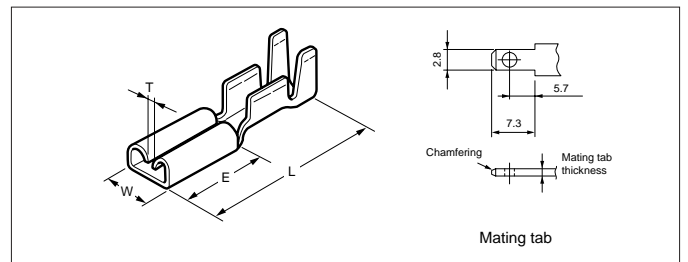
Listed E70188    
 Recognized E70188 (AWG#24)    
 Certified LR20812

Model No.	Standard	Applicable wire			Material	Finish	Dimensions(mm)					Q'ty / reel	
		mm <sup>2</sup>	AWG #	Insulation O.D. (mm)			W	L	E	T approx.	Material thickness		Mating tab thickness
STO-01-187N		0.2 to 0.5	24 to 20	1.5 to 2.6	Brass	—	5.6	15.0	6.3	1.5	0.32	0.5	10,000
STO-01T-187N	Tin-plated												
STO-01-187N-8	—												
STO-01T-187N-8	Tin-plated												
STO-41-187N		0.5 to 1.25	20 to 16	2.6 to 3.5	Brass	—	5.6	15.0	6.3	1.5	0.32	0.5	10,000
STO-41T-187N	Tin-plated												
STO-41-187N-8	—												
STO-41T-187N-8	Tin-plated												
*STO-62T-187N		UL1015#20 + UL1015#20 UL1015#18 + UL1015#20 UL1015#18 + UL1015#18			Brass	Tin-plated	5.6	19.6	6.4	1.5	0.32	0.5	4,000
*STO-82T-187N		UL1015#18 + UL1015#18 UL1015#18 + UL1015#16 UL1015#16 + UL1015#16			Brass	Tin-plated	5.6	19.6	6.4	1.5	0.32	0.5	4,000

### RoHS compliance

Note: Terminal denoted by \* is used only for two wires. If using wires in other combinations than the ones shown above, contact JST.

## 110 Tab-on type



Listed E70188    
 Certified LR20812

Model No.	Standard	Applicable wire			Material	Finish	Dimensions(mm)					Q'ty / reel	
		mm <sup>2</sup>	AWG #	Insulation O.D. (mm)			W	L	E	T approx.	Material thickness		Mating tab thickness
STO-01-110N		0.2 to 0.5	24 to 20	2.1 to 2.8	Brass	—	3.7	15.4	6.3	0.6	0.25	0.5	10,000
STO-01T-110N	Tin-plated												
STO-01-110N-8	—												
STO-01T-110N-8	Tin-plated												
STO-41-110N		0.5 to 1.25	20 to 16	2.6 to 3.5	Brass	—	3.7	15.4	6.3	0.6	0.25	0.5	10,000
STO-41T-110N	Tin-plated												
STO-41-110N-8	—												
STO-41T-110N-8	Tin-plated												

### RoHS compliance

# TAB-ON TERMINAL

## Crimping machine, Applicator

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
STO-21(T)-250N	AP-K2N	MK-L	MK/STO-21-250N	APLMK STO21-250N
		-	-	-
STO-61(T)-250N		MK-L	MK/STO-61-250N	APLMK STO61-250N
		-	-	-
STO-81(T)-250N		MK-L	MK/STO-81-250N	APLMK STO81-250N
		-	-	-
STO-62(T)-250N		MK-L	MK/STO-62-250N	APLMK STO62-250N
		-	-	-
SFT-61(T)-250N		MKS-L	MK/SFT-61-250N	APL SFT61-250N
		-	-	-
SFO-61(T)-250A		MKF-L-250	MK/SFO-61-250A	APL SFO61-250A
		-	-	-
STO-21(T)-205N(-5)		MK-L	MK/STO-21-205N	APL STO21-205N
		-	-	-
SFO-41(T)-187N(-8)		MKF-L-187	MK/SFO-41-187N	APL SFO41-187N
		-	-	-

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
STO-01(T)-187N(-8)	AP-K2N	MK-L	MK/STO-01-187N	APLMK STO01-187N
		-	-	-
STO-41(T)-187N(-8)		MK-L	MK/STO-41-187N	APLMK STO41-187N
		-	-	-
STO-62T-187N		MK-L-187	MK/STO-62-187N	APLMK STO62-187N
		-	-	-
STO-82(T)-187N		MK-L-187	MK/STO-82-187N	APLMK STO82-187N
		-	-	-
STO-01(T)-110N(-8)		MK-L	MK/STO-01-110N	APLMK STO01-110N
		-	-	-
STO-41(T)-110N(-8)		MK-L	MK/STO-41-110N	APLMK STO41-110N
		-	-	-

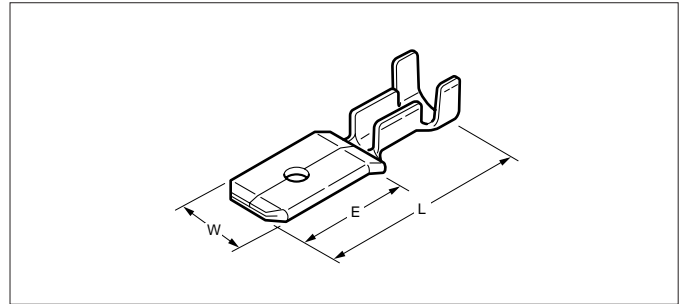
\* RoHS compliant products are published.


\* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.


\* Contact JST for details.

# TAB-ON-TAB TERMINAL

## 250 Tab-on tab type

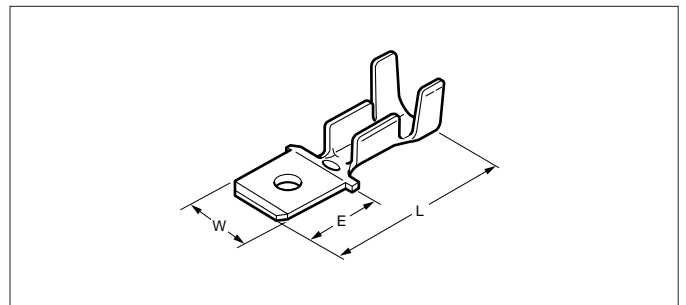


 Listed E70188


Model No.	Standard	Applicable wire			Material	Finish	Dimensions(mm)					Q'ty / reel
		mm <sup>2</sup>	AWG #	Insulation O.D. (mm)			W	L	E	Material thickness	Tab thickness	
<b>SOM-51-250</b>		0.5 to 2.0	20 to 14	2.6 to 3.8	Brass	—	6.4	20.8	11.6	0.4	0.8	5,000
<b>SOM-51T-250</b>						Tin-plated						

RoHS compliance

## 187 Tab-on tab type



 Listed E70188

Model No.	Standard	Applicable wire			Material	Finish	Dimensions(mm)					Q'ty / reel
		mm <sup>2</sup>	AWG #	Insulation O.D. (mm)			W	L	E	Material thickness	Tab thickness	
<b>SOM-21-187</b>		0.3 to 0.75	22 to 18	2.3 to 3.0	Brass	—	4.8	17.2	6.4	0.5	0.5	10,000
<b>SOM-21T-187</b>						Tin-plated						

RoHS compliance

## Crimping machine, Applicator

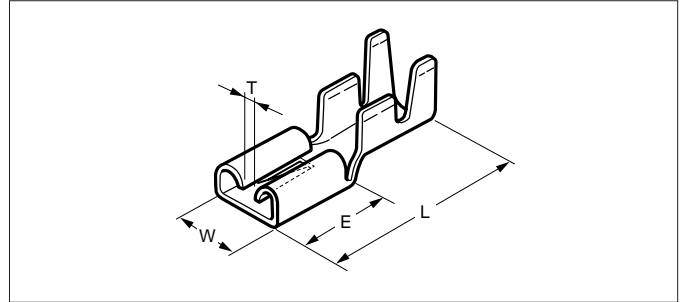
Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SOM-51(T)-250</b>	AP-K2N	MK-L	MK/SOM-51-250	APLMK SOM51-250
		—	—	—

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SOM-21(T)-187</b>	AP-K2N	MK-L	MK/SOM-21-187	APLMK SOM21-187
		—	—	—

- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

# TAB-IN/TAB-IN-TAB TERMINAL

## 250 Tab-in type

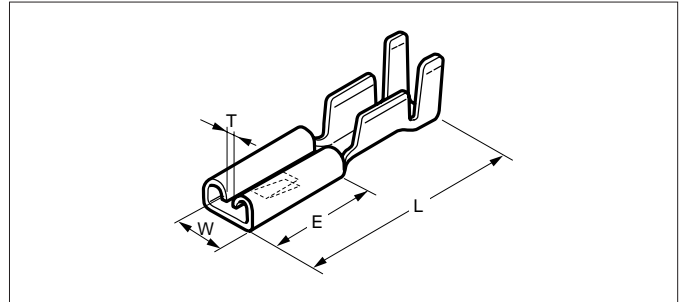


Model No.	Standard	Applicable wire			Material	Finish	Dimensions(mm)					Q'ty / reel	
		mm <sup>2</sup>	AWG #	Insulation O.D. (mm)			W	L	E	T approx.	Material thickness		Mating tab
STI-51-250N		0.5 to 2.0	20 to 14	2.6 to 3.8	Brass	—	7.5	19.2	7.7	0.9	0.32	SIM-51 (T)-250N	5,000
STI-51T-250N	Tin-plated												

### RoHS compliance

- Note: 1. Combine a plated tab-in terminal with a plated tab and a non-plated tab-in terminal with a non-plated tab.  
 2. This terminal must be built into the model 250 tab-in housing which has numerous circuits, and it cannot be used independently. Model 250 tab-on terminals, however, can be used independently.  
 3. The above case does not apply when we confirm the condition of application and judge that there is no problem.

## 110 Tab-in type



Model No.	Standard	Applicable wire			Material	Finish	Dimensions(mm)					Q'ty / reel	
		mm <sup>2</sup>	AWG #	Insulation O.D. (mm)			W	L	E	T approx.	Material thickness		Mating tab
STI-01-110N		0.3 to 0.5	22 to 20	2.1 to 2.8	Brass	—	3.7	15.3	6.3	0.7	0.25	SIM-01 (T)-110A	10,000
STI-01T-110N	Tin-plated												
STI-41-110N		0.5 to 1.25	20 to 16	2.6 to 3.5	Brass	—	3.7	15.3	6.3	0.7	0.25	SIM-41 (T)-110B	
STI-41T-110N	Tin-plated												

### RoHS compliance

- Note: 1. Combine a plated tab-in terminal with a plated tab and a non-plated tab-in terminal with a non-plated tab.  
 2. This terminal must be built into the model 110 tab-in housing which has numerous circuits, and it cannot be used independently. Model 110 tab-on terminals, however, can be used independently.

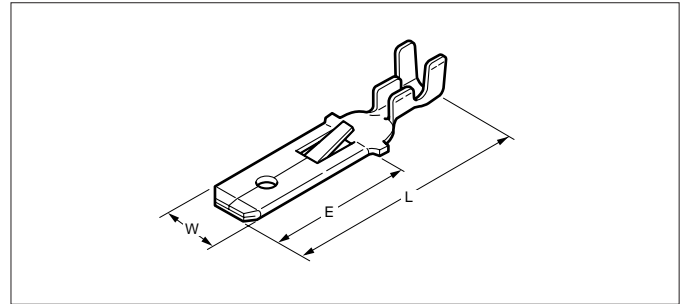
## Crimping machine, Applicator

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
STI-51(T)-250N	AP-K2N	MK-L	MK/STI-51-250N	APLMK STI51-250N
		—	—	—
MK-L		MK/STI-01-110N	APLMK STI01-110N	
—		—	—	
STI-01(T)-110N				

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
STI-41(T)-110N	AP-K2N	MK-L	MK/STI-41-110N	APLMK STI41-110N
		—	—	—

# TAB-IN/TAB-IN-TAB TERMINAL

## 250 Tab-in tab type

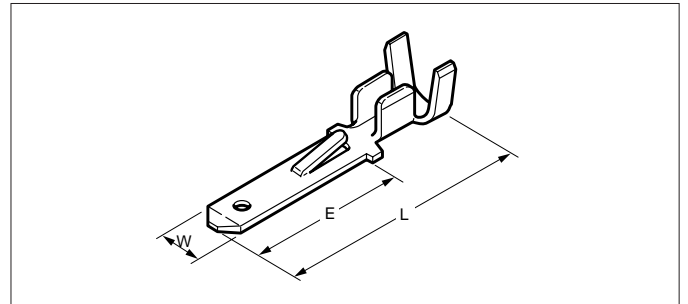


Model No.	Standard	Applicable wire			Material	Finish	Dimensions(mm)					Q'ty / reel
		mm <sup>2</sup>	AWG #	Insulation O.D. (mm)			W	L	E	Material thickness	Tab thickness	
<b>SIM-21-250</b>		0.3 to 0.75	22 to 18	2.2 to 3.2	Brass	—	6.0	28.0	15.8	0.4	0.84	5,000
<b>SIM-21T-250</b>						Tin-plated						
<b>SIM-51-250N</b>		0.5 to 2.0	20 to 14	2.6 to 3.8		—	6.0	24.5	13.0	0.4		
<b>SIM-51T-250N</b>						Tin-plated						



RoHS compliance

Note: SIM-21 differs from SIM-51 in terminal size.

## 110 Tab-in tab type



 Listed E70188

Model No.	Standard	Applicable wire			Material	Finish	Dimensions(mm)					Q'ty / reel
		mm <sup>2</sup>	AWG #	Insulation O.D. (mm)			W	L	E	Material thickness	Tab thickness	
<b>SIM-01-110A</b>		0.3 to 0.5	22 to 20	2.1 to 2.8	Brass	—	2.8	20.6	12.0	0.5	0.5	7,500
<b>SIM-01T-110A</b>						Tin-plated						
<b>SIM-41-110B</b>		0.5 to 1.25	20 to 16	2.6 to 3.5		—	2.8	20.6	12.0	0.5		
<b>SIM-41T-110B</b>						Tin-plated						

RoHS compliance

## Crimping machine, Applicator

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SIM-21(T)-250</b>	AP-K2N	MK-L	MK/SIM-21-250	APLMK SIM21-250
		—	—	—
<b>SIM-51(T)-250N</b>		MK-L	MK/SIM-51-250N	APLMK SIM51-250N
		—	—	—

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SIM-01(T)-110A</b>	AP-K2N	MK-L	MK/SIM-01-110A	APLMK SIM01-110A
		—	—	—
<b>SIM-41(T)-110B</b>		MK-L	MK/SIM-41-110B	APLMK SIM41-110B
		—	—	—

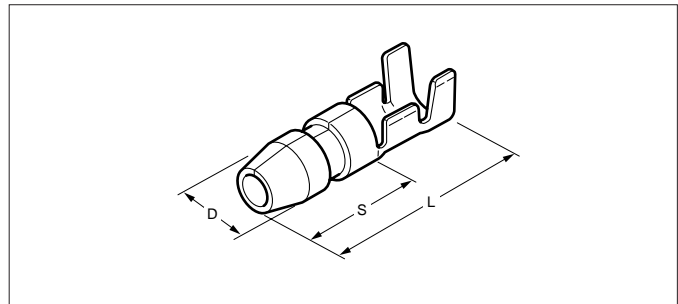
\* RoHS compliant products are published.

\* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.

\* Contact JST for details.

# BULLET TERMINAL

## Nominal 4.0mm dia. bullet male



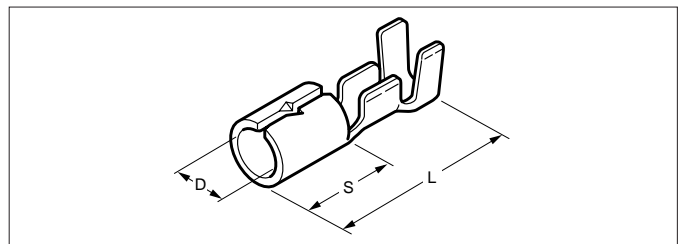
Recognized E60389

Certified LR20812

Model No.	Standard	Applicable wire			Material	Finish	Dimensions(mm)				Q'ty / reel
		mm <sup>2</sup>	AWG #	Insulation O.D. (mm)			D (dia.)	L	S	Material thickness	
SGM-51-4		0.5 to 2.0	20 to 14	2.6 to 3.8	Brass	—	3.55	15.9	7.3	0.5	5,000
SGM-51T-4						Tin-plated					

RoHS compliance

## Nominal 4.0mm dia. bullet female



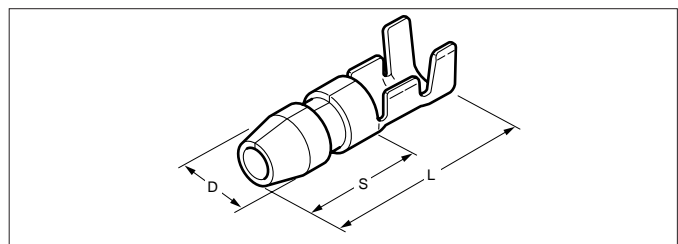
Recognized E60389

Certified LR20812

Model No.	Standard	Applicable wire			Material	Finish	Dimensions(mm)				Q'ty / reel
		mm <sup>2</sup>	AWG #	Insulation O.D. (mm)			D (dia.)	L	S	Material thickness	
SGF-41-4		0.5 to 1.25	20 to 16	2.6 to 3.5	Brass	—	3.5	17.5	6.4	0.32	7,500
SGF-41T-4						Tin-plated					

RoHS compliance

## Nominal 5.0mm dia. bullet male



Recognized E60389

Certified LR20812

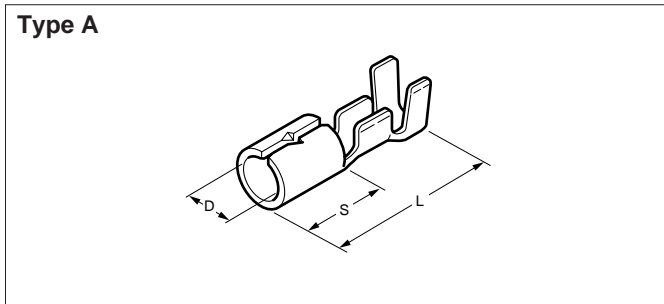
Model No.	Standard	Applicable wire			Material	Finish	Dimensions(mm)				Q'ty / reel
		mm <sup>2</sup>	AWG #	Insulation O.D. (mm)			D (dia.)	L	S	Material thickness	
SGM-21-5		0.3 to 0.75	22 to 18	1.7 to 2.9	Brass	—	3.96	17.5	8.9	0.5	5,000
SGM-21T-5						Tin-plated					
SGM-51-5		0.5 to 2.0	20 to 14	2.6 to 3.8	Brass	—	3.96	17.5	8.9	0.5	5,000
SGM-51T-5						Tin-plated					

RoHS compliance



# BULLET TERMINAL

## Nominal 5.0mm dia. bullet female



**RU** Recognized E60389

**SP** Certified LR20812

Model No.	Standard	Applicable wire			Material	Type	Finish	Dimensions(mm)				Q'ty / reel
		mm <sup>2</sup>	AWG #	Insulation O.D. (mm)				D (dia.)	L	S	Material thickness	
SGF-21-5	<b>RU</b> <b>SP</b>	0.3 to 0.75	22 to 18	1.7 to 2.9	Brass	A	—	3.96	17.5	6.4	0.4	5,000
SGF-21T-5							Tin-plated					
SGF-51-5	<b>RU</b> <b>SP</b>	0.5 to 2.0	20 to 14	2.6 to 3.8			—					
SGF-51T-5							Tin-plated					

## Crimping machine, Applicator

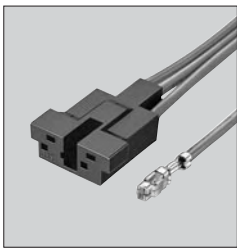
Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SGM-51(T)-4</b>	AP-K2N	MK-L	MK/SGM-51-4	APLMK SGM51-4
		—	—	—
<b>SGF-41(T)-4</b>		MK-L	MK/SGF-41-4	APLMK SGF41-4
		—	—	—
<b>SGM-21(T)-5</b>		MK-L	MK/SGM-21-5	APLMK SGM21-5
		—	—	—

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SGM-51(T)-5</b>	AP-K2N	MK-L	MK/SGM-51-5	APLMK SGM51-5
		—	—	—
<b>SGF-21(T)-5</b>		MK-L	MK/SGF-21-5	APLMK SGF21-5
		—	—	—
<b>SGF-51(T)-5</b>		MK-L	MK/SGF-51-5	APLMK SGF51-5
		—	—	—

\* RoHS compliant products are published.

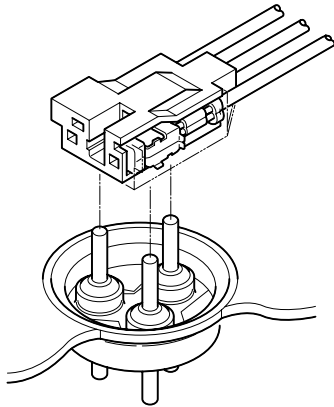
\* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.

\* Contact JST for details.



# CLUSTER SOCKET

Three-pole socket for connecting cluster pins



This three circuit connector is used to connect cluster pins (2.3mm in diameter) to the leads of a motor hermetically sealed in a compressor of a refrigerator or a freezer. The contacts and housing are especially designed and made of high-quality materials for high heat resistance and superior durability.

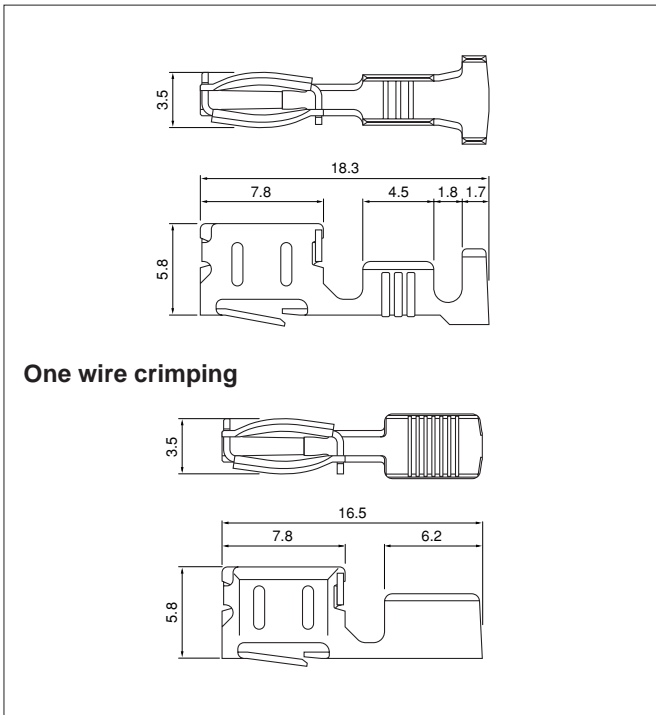
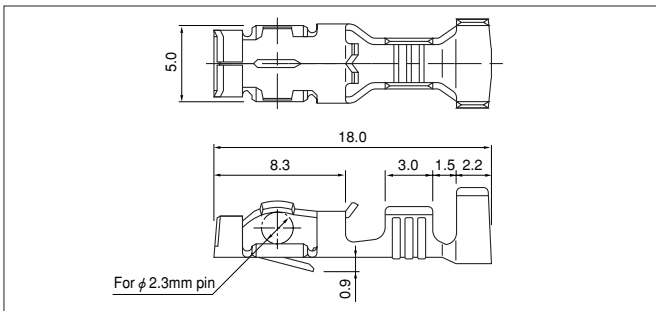
## Standards

Recognized E60389

Certified LR20812

- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Contact



## One wire crimping

Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty / reel
	mm <sup>2</sup>	AWG #		
<b>SCS-41T-2.3</b>	0.5~1.25	20~16	1.9~3.4	5,000

### Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

### RoHS compliance

Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty / reel
	mm <sup>2</sup>	AWG #		
<b>SCSN-41T-P2.3</b>	0.5~1.25	20~16	1.9~3.2	3,000
<b>SCSN-60T-P2.3</b>	0.7mm+0.7mm ~ 1.05mm+1.05mm			3,000

### Material and Finish

Phosphor bronze, tin-plated

### RoHS compliance

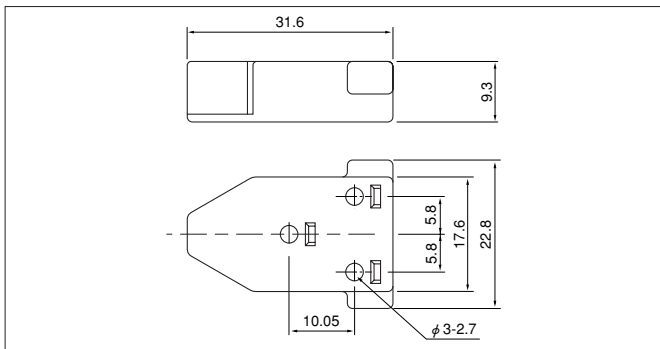
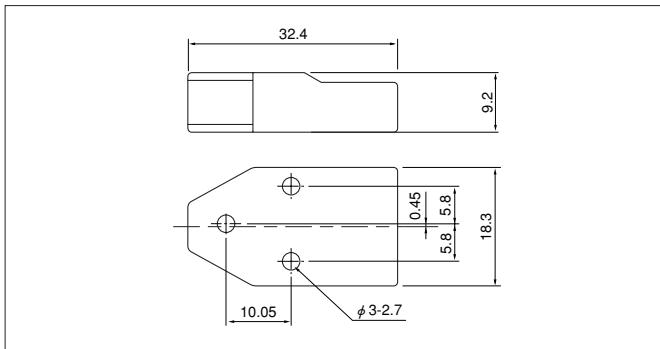
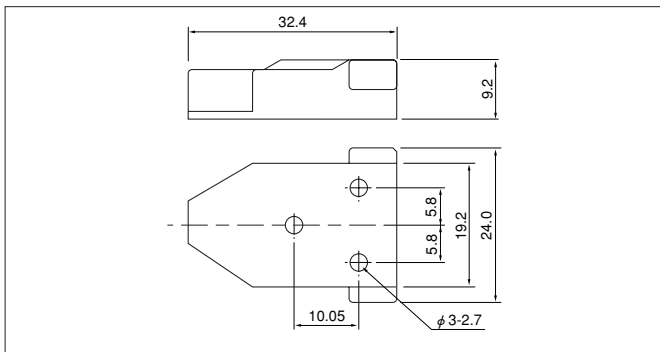
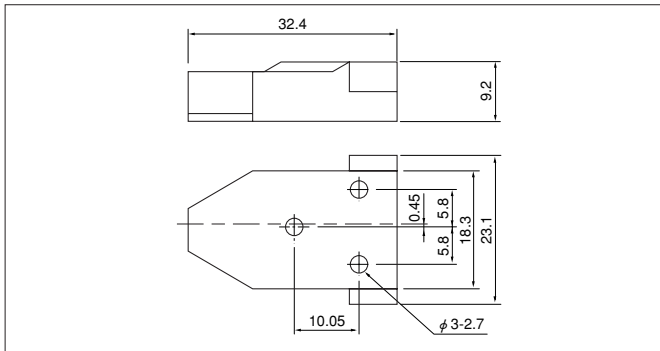
Note: 1. SCSN-60T-P2.3 is for the use of one wire crimping. Contact JST for details of regarding applicable wires.

2. Before use, the performance of this socket must be tested with the wire that is to be used.

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SCS-41T-2.3</b>	AP-K2N	MK-L	MK/SCS-41-23	APLMK SCS41-23
		—	—	—
<b>SCSN-41T-P2.3</b>		MKS-L	MK/SCSN-41-23	APLMK SCSN41-23
		—	—	—
<b>SCSN-60T-P2.3</b>	MKS-L	MK/SCSN-60-23	APLMK SCSN60-23	
	—	—	—	

# CLUSTER SOCKET

## Housing



Model No.	Material	Q'ty / bag	Applicable contact
<b>3P-SCS</b>	Phenol, UL94V-1, black	500	SCS-41T-2.3
<b>3P-SCS PBT</b>	PBT, UL94HB, natural (white)		

*RoHS compliance*

Model No.	Material	Q'ty / bag	Applicable contact
<b>3P-SCS-SP</b>	PBT, UL94HB, natural (white)	500	SCS-41T-2.3

*RoHS compliance*

Model No.	Material	Q'ty / bag	Applicable contact
<b>3P-SCS-R PBT</b>	PBT, UL94HB, natural (white)	500	SCS-41T-2.3

*RoHS compliance*

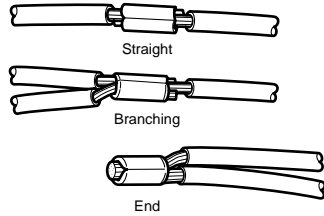
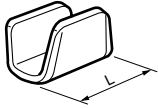
Model No.	Material	Q'ty / bag	Applicable contact
<b>3P-CSN PBT</b>	PBT, UL94HB, natural (white)	500	SCSN-41T-P2.3
<b>3P-CSN MMC</b>	Phenol, UL94V-0, black		SCSN-60T-P2.3

*RoHS compliance*



# SPC SPLICE

## Wire-to-wire splices



This wire-to-wire splice is used extensively for straight, branching, and end connections.

Model No.	Applicable wire(reference)	Finish	Dimension L (mm)	Thickness (mm)	Q'ty / reel
	Total cross sectional area(mm <sup>2</sup> )				
SPC-01	0.2 ~ 0.5	—	4.2	0.25	12,000
SPC-01T		Tin-plated			
SPC-20	0.4 ~ 1.4	—	5.5	0.5	10,000
SPC-20T		Tin-plated			
SPC-40	0.5 ~ 1.7	—	5.7	0.5	10,000
SPC-40T		Tin-plated			

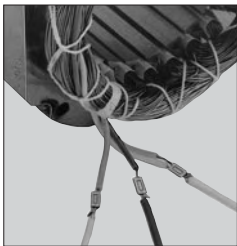
### Material

Brass

### RoHS compliance

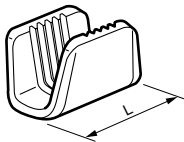
Note: The "Applicable wire" shown above is for reference only. Contact JST for the evaluation test on the wire to be used, especially when using special wires such as solid wires, tin-plated wires, or those of non-annealed copper material.

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SPC-01(T)	AP-K2N	MKS-L	MK/SPC-01	APLMK SPC01
		—	—	—
SPC-20(T)		MKS-L	MK/SPC-20	APLMK SPC20
		—	—	—
SPC-40(T)		MKS-L	MK/SPC-40	APLMK SPC40
		—	—	—



# PIERCING SPLICE

## Wire-to-wire splices



This splice, like the SPC terminal, has special channels inside its crimp areas so that insulation-coated windings (magnet wire like enamel-coated wire, etc.) can be electrically connected without removing the insulation coating. It is suited for connections between the windings of motors, relays and other rotating devices, and the connections between the windings and the leads of such devices.

Model No.	Applicable wire(reference)	Finish	Dimension L (mm)	Thickness (mm)	Q'ty / reel
	Total cross sectional area(mm <sup>2</sup> )				
PSL-40	0.6 ~ 1.0	—	5.5	0.5	10,000
PSL-40T		Tin-plated			
PSL-60	0.7 ~ 1.8	—	5.7	0.5	10,000
PSL-60T		Tin-plated			
PSL-80	1.5 ~ 3.5	—	5.5	0.5	10,000
PSL-80T		Tin-plated			

### Material

Brass

### RoHS compliance

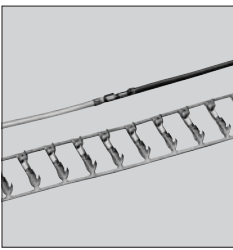
Note: 1. The applicable wire size (total sectional area) above serves as a basic guideline. Before use, the performance of this connector must be tested with the wire that is to be used.  
2. Do not use this connector to connect more than two magnet wires (enamel-coated wires, etc.).

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
PSL-40(T)	AP-K2N	MKS-L	MK/PSL-40	APLMK PSL40
		—	—	—
PSL-60(T)		MKS-L	MK/PSL-60	APLMK PSL60
		—	—	—
PSL-80(T)		MKS-L	MK/PSL-80	APLMK PSL80
		—	—	—

\* RoHS compliant products are published.

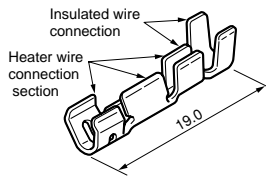
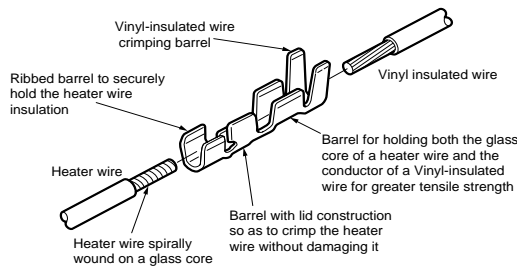
\* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.

\* Contact JST for details.



# SPLICE FOR HEATER WIRES

**Splices for vinyl-insulated wires and heater wires**



***This splice is used to connect a vinyl-insulated wire to a defrosting heater wire of a refrigerator or a freezer. The barrel of the splice has a lid feature that prevents the heater wire from being damaged or broken during crimping. This ensures a reliable and stable connection. Various heater connectors are also available.***

Model No.	Applicable wire(reference)	Finish	Q'ty / reel
SHC-21-001	Heater wire + Vinyl-insulated wire (Thin insulation) (0.3~0.75mm <sup>2</sup> )	—	5,000
SHC-21T-001		Tin-plated	
SHC-21-002	Heater wire + Vinyl-insulated wire (Thick insulation) (0.3~0.75mm <sup>2</sup> )	—	
SHC-21T-002		Tin-plated	

Material	
Brass	

**RoHS compliance**

*Note: Before use, the performance of this splice must be tested with the wire that is to be used.*

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SHC-21(T)-001	AP-K2N	MKS-L-HC	MK/SHC-21-001/002	APLMK SHC21-001/002
SHC-21(T)-002		—	—	—

- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.



# PS CONNECTOR

## Connectors for tabs

- **Secure locking, easy insertion**
- **Stable contact performance**
- **Mis-insertion prevention mechanism and housing lance**

### Standards

Recognized E60389

Certified LR20812

R9850196

### Specifications

- Current rating: 25A AC, DC(#250 + AWG #10)
- Voltage rating: 250V AC, DC
- Temperature range: -40°C to +105°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/ 3m Ω max.  
After environmental testing/ 6m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 2,000V AC/ minute
- Applicable wire: #110...AWG #24 to #16  
#187...AWG #26 to #14  
#205...AWG #22 to #14  
#250...AWG #22 to #10
- Applicable Tab: #110 Tab 0.5mm thick  
#187 Tab 0.5mm/0.8mm thick  
#205 Tab 0.5mm/0.8mm thick  
#250 Tab 0.8mm thick

\* RoHS compliant products are published.

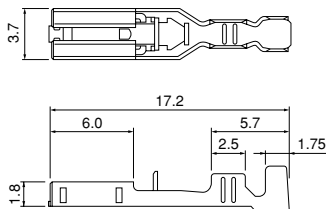
\* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.

\* Contact JST for details.

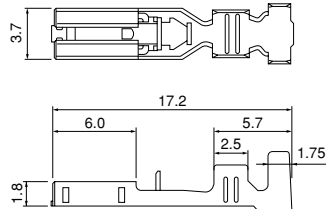
### Contact

#### #110 Series

##### SPS-01T-110



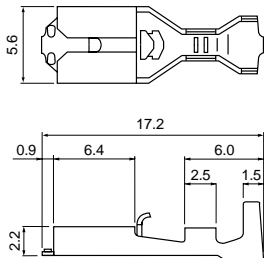
##### SPS-41T-110



#### #187 Series

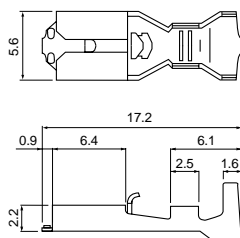
##### SPS-01T-187

(for 0.5mm thick tabs)



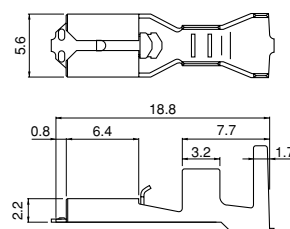
##### SPS-51T-187

(for 0.5mm thick tabs)



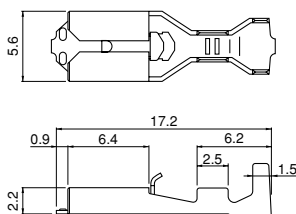
##### SPS-82T-187

(for 0.5mm thick tabs)



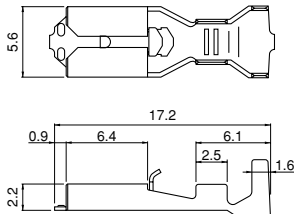
##### SPS-01T-187-8

(for 0.8mm thick tabs)



##### SPS-51T-187-8

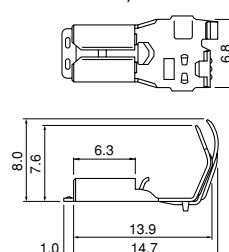
(for 0.8mm thick tabs)



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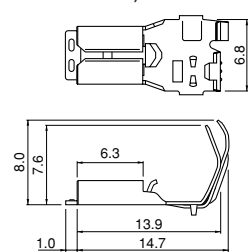
##### SFPS-41T-187

(for 0.5mm thick tabs)



##### SFPS-41T-187-8

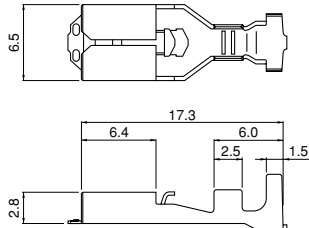
(for 0.8mm thick tabs)



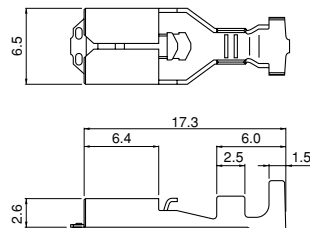
## Contact

### #205 Series

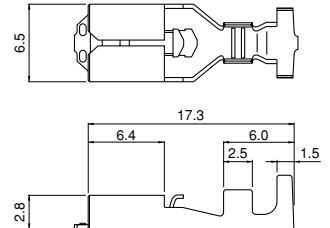
**SPS-21T-205**  
(for 0.8mm thick tabs)



**SPS-21T-205-5**  
(for 0.5mm thick tabs)

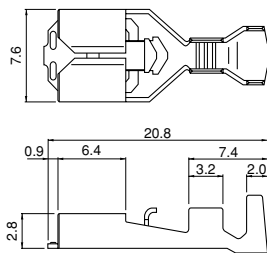


**SPS-51T-205**  
(for 0.8mm thick tabs)

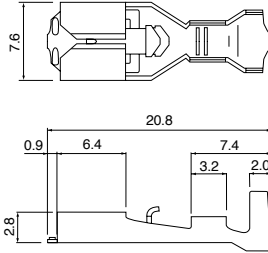


### #250 Series

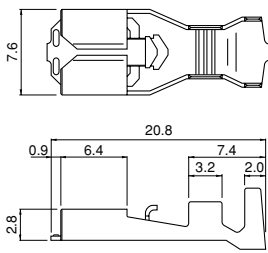
**SPS-21T-250**



**SPS-61T-250**

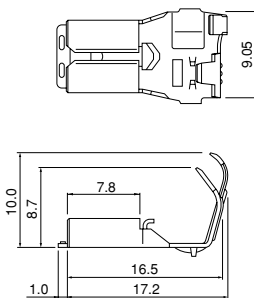


**SPS-91T-250**

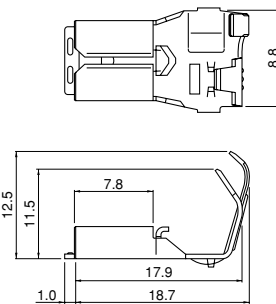


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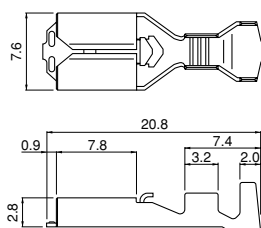


**SFPS-91T-250**

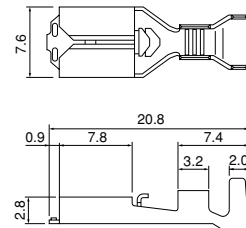


### #250S Series

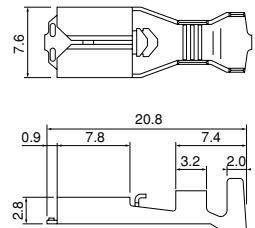
**SPS-21T-250S**



**SPS-61T-250S**



**SPS-91T-250S**



# PS CONNECTOR

## Contact

Series	Model No.	Applicable wire		Insulation O.D.(mm)	Q'ty / reel	
		mm <sup>2</sup>	AWG #			
#110	SPS-01T-110	0.21~0.5	24~20	1.0~2.5	10,000	
	SPS-41T-110	0.5 ~ 1.31	20~16	1.9~3.4	10,000	
#187	for 0.5mm thick tabs	SPS-01T-187	0.13~0.5	26~20	1.3~3.4	10,000
		SPS-51T-187	0.5 ~ 2.0	20~14	1.9~3.6	7,500
		SPS-82T-187	0.75+0.75~1.25+1.25	18+18~16+16	2.1+2.1~2.9+2.9	3,500
	for 0.8mm thick tabs	SPS-01T-187-8	0.13~0.5	26~20	1.3~3.4	10,000
		SPS-51T-187-8	0.5 ~ 2.0	20~14	1.9~3.6	7,500
		SFPS-41T-187	0.3 ~ 1.25	22~16	1.7~3.4	5,000
#187 flag	for 0.5mm thick tabs for 0.8mm thick tabs	SFPS-41T-187-8	0.3 ~ 1.31	22~16	1.7~3.4	5,000
		SPS-21T-205	0.3 ~ 0.75	22~18	1.5~3.1	5,000
#205	for 0.8mm thick tabs for 0.5mm thick tabs for 0.8mm thick tabs	SPS-21T-205-5	0.3 ~ 0.75	22~18	1.5~3.1	5,000
		SPS-51T-205	0.5 ~ 2.0	20~14	1.9~3.6	5,000
		SPS-21T-250	0.3 ~ 0.75	22~18	1.5~3.1	5,000
#250		SPS-61T-250	0.75~2.0	18~14	2.1~3.9	5,000
		SPS-91T-250	2.0 ~ 5.5	14~10	3.0~4.7	4,000
		SFPS-61T-250	0.75~2.0	18~14	2.1~3.9	3,000
#250 flag		SFPS-91T-250	3.5 ~ 5.5	12~10	4.0~5.2	2,000
		SPS-21T-250S	0.3 ~ 0.75	22~18	1.5~3.1	5,000
#250S		SPS-61T-250S	0.75~2.0	18~14	2.1~3.9	5,000
		SPS-91T-250S	2.0 ~ 5.5	14~10	3.0~4.7	4,000

## Material and Finish

Brass, tin-plated (reflow treatment)

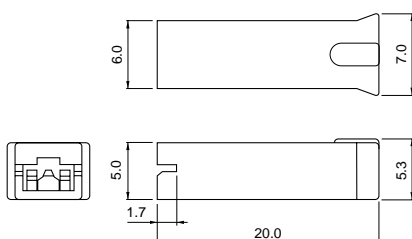
## RoHS compliance

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SPS-01T-110	AP-K2N	MK-L-SPS	MK/SPS-01-110	APLMK SPS01-110
		—	—	—
SPS-41T-110		MK-L-SPS	MK/SPS-41-110	APLMK SPS41-110
—		—	—	
SPS-01T-187 (-8)		MK-L-SPS	MK/SPS-01-187	APLMK SPS01-187
—		—	—	
SPS-51T-187 (-8)		MK-L-SPS	MK/SPS-51-187	APLMK SPS51-187
—		—	—	
SPS-82T-187		MK-L-SPS	MK/SPS-82-187	APLMK SPS82-187
—		—	—	
SFPS-41T-187 (-8)		MKF-L-PS187	MK/SFPS-41-187	APL SFPS41-187
—		—	—	
SPS-21T-205 (-5)	MK-L-SPS	MK/SPS-21-205	APLMK SPS21-205	
—	—	—		

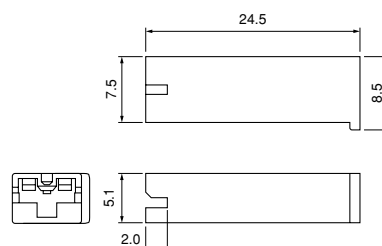
Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SPS-51T-205	AP-K2N	MK-L-SPS	MK/SPS-51-205	APLMK SPS51-205
		—	—	—
SPS-21T-250 (S)		MK-L-SPS	MK/SPS-21-250	APLMK SPS21-250
—		—	—	
SPS-61T-250 (S)		MK-L-SPS	MK/SPS-61-250	APLMK SPS61-250
—		—	—	
SPS-91T-250 (S)		MK-L-SPS	MK/SPS-91-250	APLMK SPS91-250
—		—	—	
SFPS-61T-250		MKF-L-PS250	MK/SFPS-61-250	APL SFPS61-250
—		—	—	
SFPS-91T-250		MKF-L-PS9250	MK/SFPS-91-250	APL SFPS91-250
—		—	—	

## Housing

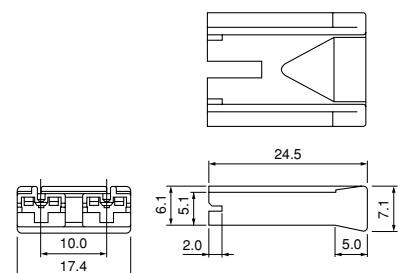
### #110 Series PS-110



### #187 Series PS-187



### PS-187-2A-10

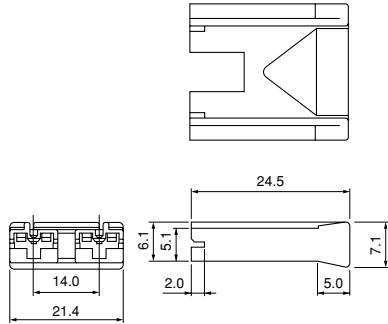




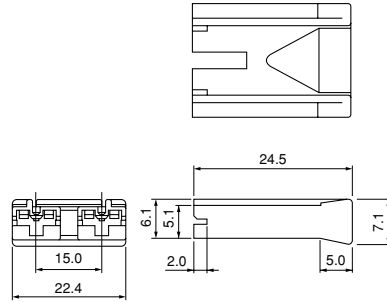
## Housing

### #187 Series

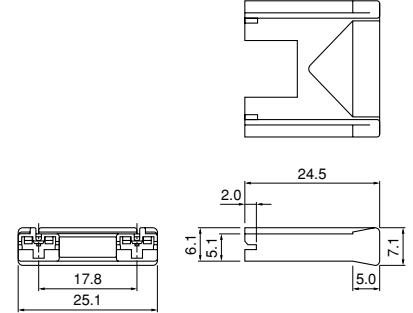
PS-187-2A-14



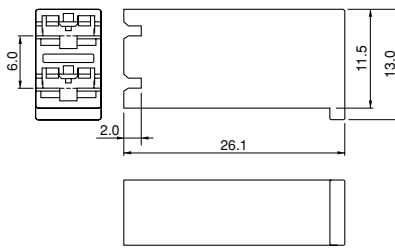
PS-187-2A-15



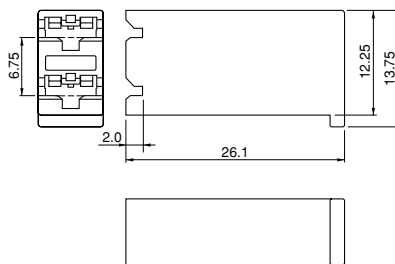
PS-187-2A-17.8



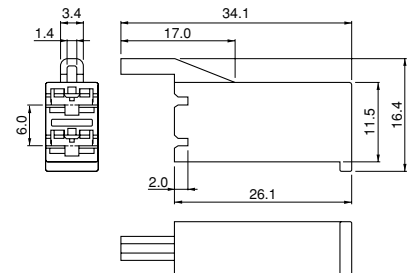
PS-187-2B



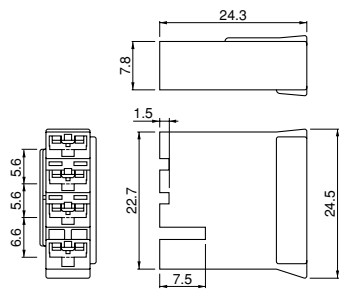
PS-187-2B-6.75



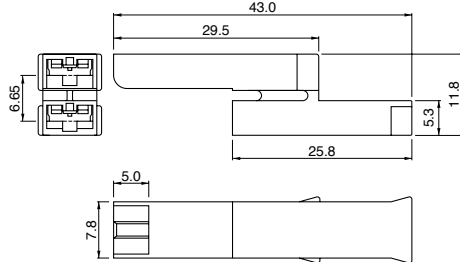
PS-187-2B1



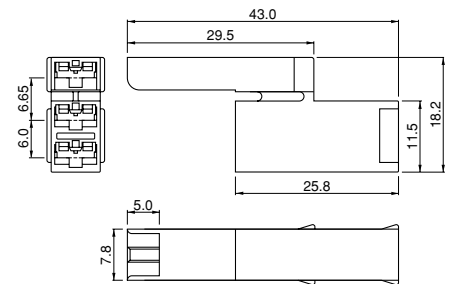
PS-187-4B



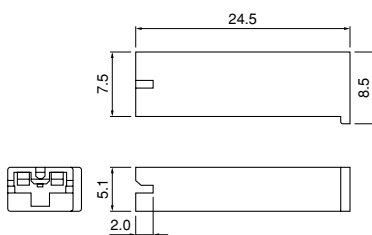
PS-187-2V



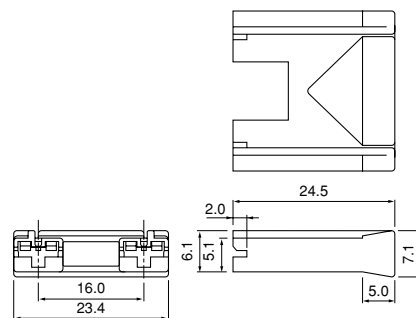
PS-187-3V



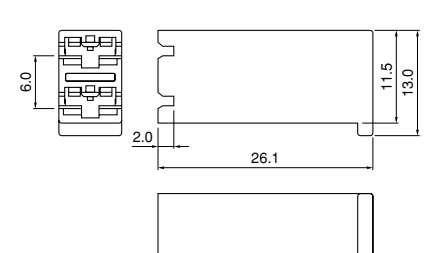
PS-187-8-T-H



PS-187-2A-16-8-T-H



PS-187-2B-8-T-H

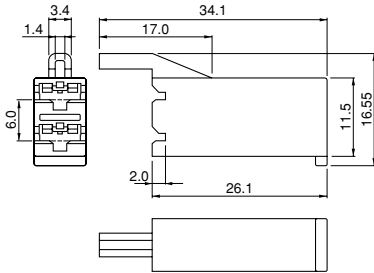


# PS CONNECTOR

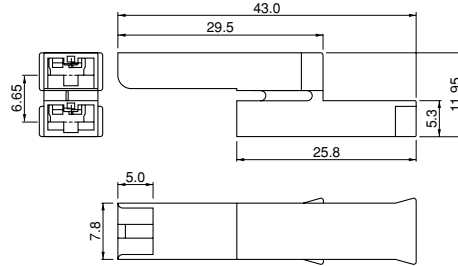
## Housing

### #187 Series

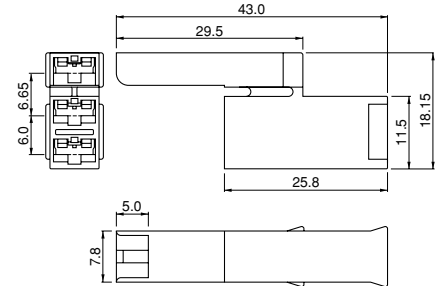
PS-187-2B1-8-T-H



PS-187-2V-8-T-H

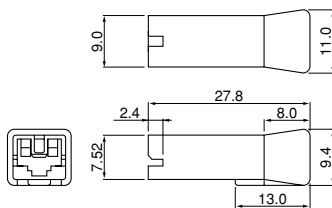


PS-187-3V-8-T-H



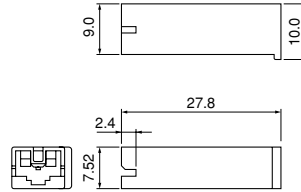
### #250S Series

NPS-250-A

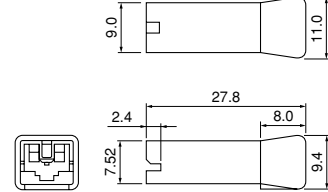


### #250 Series

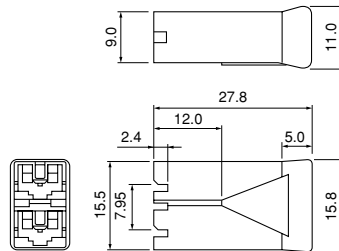
PS-250



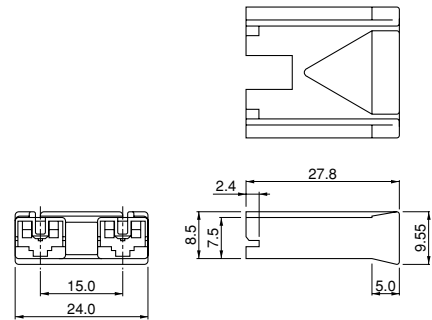
PS-250-A



PS-250-2B

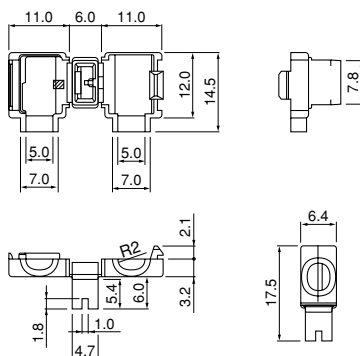


PS-250-2A-15

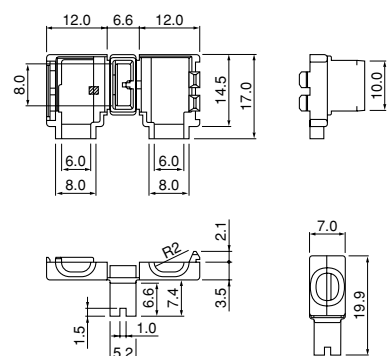


### One-touch sleeve

FPS-187



FPS-250



## Housing

Series	Model No.	Q'ty / bag	Applicable terminal	
#110	PS-110	1,000	SPS-01T-110, SPS-41T-110	
	PS-187	1,000		
#187	PS-187-2A-10	500	SPS-01T-187 SPS-51T-187 SPS-82T-187	
	PS-187-2A-14	500		
	PS-187-2A-15	500		
	PS-187-2A-17.8	500		
	PS-187-2B	500		
	PS-187-2B-6.75	500		
	PS-187-2B1	500		
	PS-187-4B	500		
	PS-187-2V	500		
	PS-187-3V	500		
	*PS-187-8-T-H	1,000		SPS-01T-187-8 SPS-51T-187-8
	*PS-187-2A-16-8-T-H	500		
	*PS-187-2B-8-T-H	500		
	*PS-187-2B1-8-T-H	500		
*PS-187-2V-8-T-H	500			
*PS-187-3V-8-T-H	500			
#250S	NPS-250-A	1,000	SPS-21T-250S SPS-61T-250S SPS-91T-250S	
#250	PS-250	1,000	SPS-21T-250 SPS-61T-250 SPS-91T-250	
	PS-250-A	500		
	PS-250-2B	500		
	PS-250-2A-15	500		
One-touch sleeve	FPS-187	500	SFPS-41T-187	
	FPS-250	500	SFPS-61T-250	

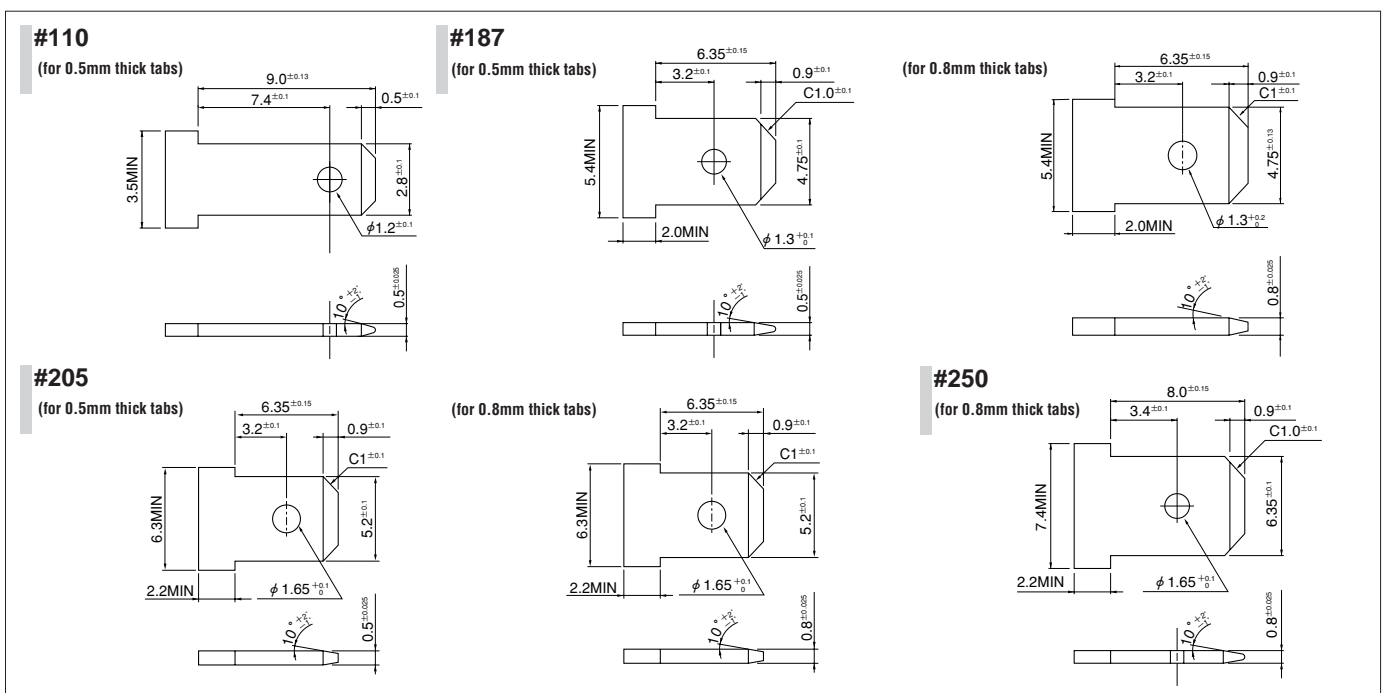
### Material and Finish

PA 66, UL94V-0, natural (white)  
UL94V-2, gray <\*-marked housing... for 0.8mm thick tabs>

### RoHS compliance

Note: FPS-187 and FPS-250 are UL recognized with File No. E55167, but not CSA certified.

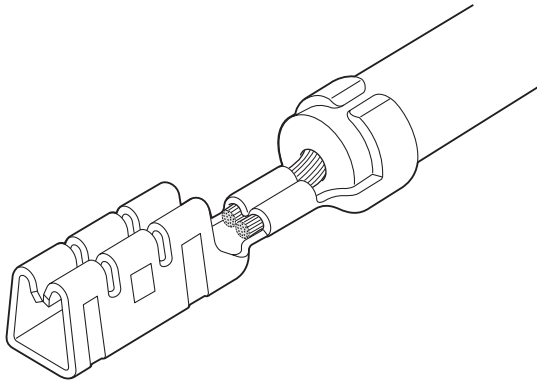
## Applicable tab



- Note: 1. Contact JST when using PS connector for Micro-switch.  
2. Make sure there are no unneeded ribs or other protuberances on tab surfaces.  
3. Contact JST when using PS-187-4B.



# IG CONNECTOR



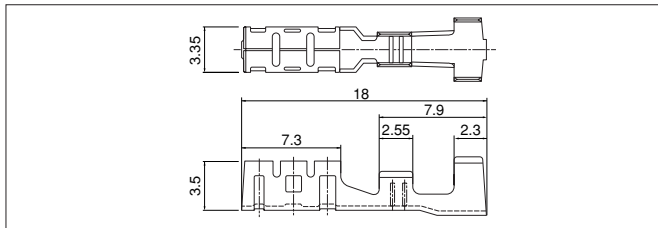
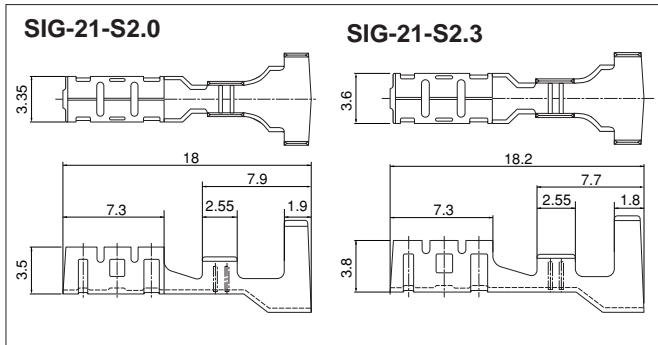
**This is to connect ignition plug (size 2.0mm dia.) of the Hot Water Supply and Heater.**

- **Easy connection**
- **Reliable contact resistance**
- **Excellent durability**

## Specifications

- Current rating: 320mA AC, DC (Stainless steel)  
5A AC, DC (Copper alloy)
- Voltage rating: 23KV AC, DC (Stainless steel)  
200V AC, DC (Copper alloy)
- Temperature range: -20°C to +200°C (including temperature rise in applying electrical current) (Stainless steel)  
-20°C to +150°C (including temperature rise in applying electrical current) (Copper alloy)
- Contact resistance: Initial value/100m Ω max.  
After environmental testing/150m Ω max.
- Applicable wire: AWG #22 to #18
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## Contact



Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty / reel
	Applicable wire	AWG#		
<b>SIG-21-S2.0</b>	0.3~0.89	22~18	3.5~5.5	4,000
<b>SIG-21-S2.3</b>	0.3~0.89	22~18	3.5~5.5	4,000

**Material**  
Stainless steel

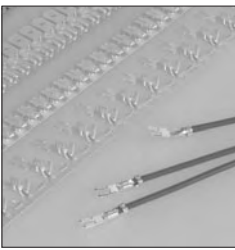
**RoHS compliance**

Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty / reel
	mm <sup>2</sup>	AWG#		
<b>SIG-21T-M2.0T</b>	0.3~0.89	22~18	1.2~3.5	4,000

**Material and Finish**  
Copper alloy, tin-plated (reflow treatment)

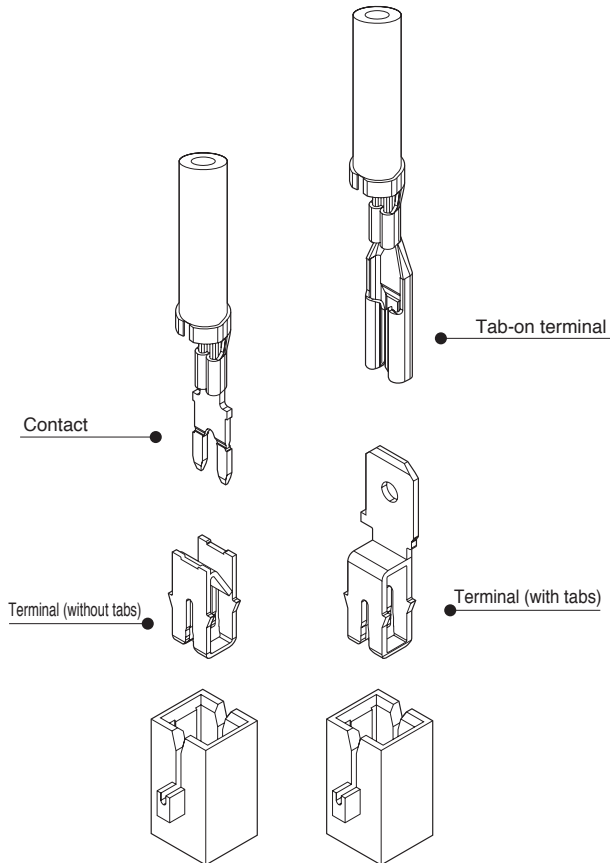
**RoHS compliance**

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SIG-21-S2.0</b>	AP-K2N	MK-L-SPS	MK/SIG-21-S20	APLMK SIG21-S20
		—	—	—
<b>SIG-21-S2.3</b>		MK-L-SPS	MK/SIG-21-S20	APLMK SIG21-S20
		—	—	—
<b>SIG-21T-M2.0T</b>		MK-L-SPS	MK/SIG-21-20T	APLMK SIG21-20T
		—	—	—



# MG CONNECTOR

## *MG connector typical connection method and kind*



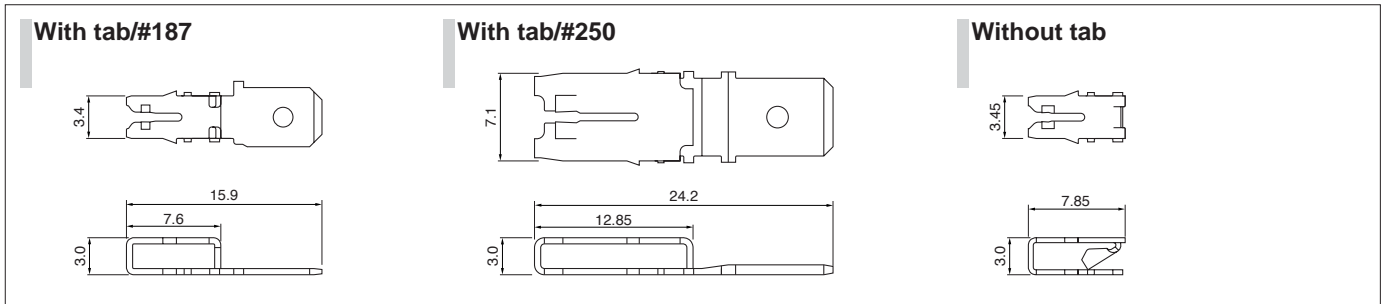
***MG connector is designed for connecting copper magnetic wire and used in various insulation coating. Insertion of various magnetic wires is easy and efficient, and MG connector provides excellent electrical connection.***

- ***No coating removing treatment in advance***
- ***Stable connection***
- ***Reliable electrical performance***

- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

# MG CONNECTOR

## Terminal



Type	Model No.	Applicable wire (Reference)		Q'ty /reel	
		Tin-plated	Conductor O.D. (mm)		AWG #
With tabs	#187...for 0.5mm thick tabs	<b>MGT-10T-187</b>	0.36~0.57	27~23	10,000
		<b>MGT-15T-187</b>	0.64~0.81	22~20	10,000
		<b>MGT-24T-187</b>	0.91~1.29	19~16	10,000
Without tabs	—	<b>MGT-24T-250</b>	0.91~1.29	19~16	5,000
		<b>MGT-6TN</b>	0.25~0.36	30~27	10,000
		<b>MGT-10TN</b>	0.36~0.57	27~23	10,000
		<b>MGT-15TN</b>	0.64~0.81	22~20	10,000
		<b>MGT-24TN</b>	0.91~1.15	19~17	10,000

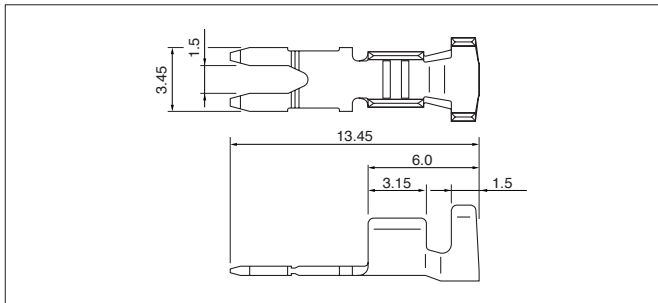
### Material and Finish

Copper alloy, copper-undercoated, tin-plated

**RoHS compliance** MGT-( )T-187 displays (SN) on a label.

Note: The applicable wire size above serves as a basic guideline. Before use, performance of this connector must be tested with the wire and housing that is to be used.

## Contact



Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty /reel
	mm <sup>2</sup>	AWG #		
<b>SMG-21T</b>	0.33~0.83	22~18	1.5 ~2.9	6,000

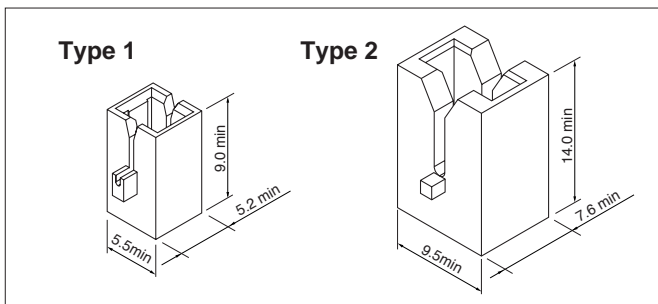
### Material and Finish

Copper alloy, copper-undercoated, tin-plated

### RoHS compliance

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SMG-21T</b>	AP-K2N	MKS-L	MK/SMG-21	APLMK SMG21
			MK/SMG-21-B	APLMK SMG21-B

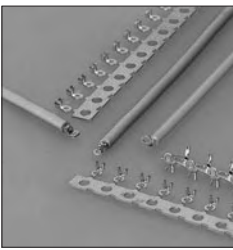
## Recommended housing



Name	Applicable terminal	Material
Type 1	<b>MGT-10T-187</b>	Glass filled engineering plastics
	<b>MGT-15T-187</b>	
	<b>MGT-24T-187</b>	
	<b>MGT-6TN</b>	
	<b>MGT-10TN</b>	
	<b>MGT-15TN</b>	
Type 2	<b>MGT-24TN</b>	

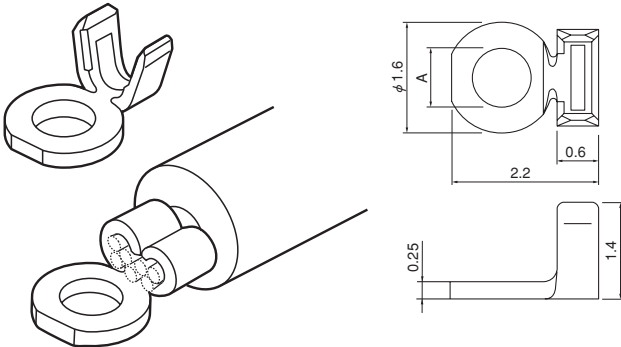
### RoHS compliance

Note: Contact JST for details.

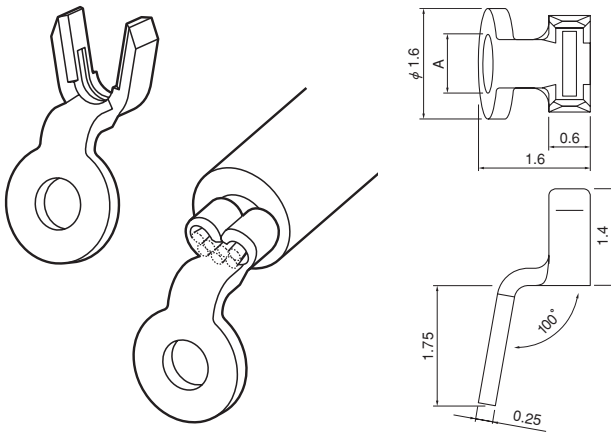


# LCD BACK-LIGHT TERMINAL

## Straight type



## Bent type



- Provides soldering connection between the Dumet wire and lead wire of the LCD Back-light CCFT.
- Improves quality and shortens lead-time by crimping both ends and there is no need for the rounding process of the lead wire.
- Also applicable to other connections between the pin and lead wire of the Solenoid or Coil inside small equipment such as Digital Cameras.
- Post plating feature provides tin/lead plating inside the ring and ensures reliable solder ability.
- Five types are available for different sizes of Dumet wire.

	Straight type	Dimension A	Bent type	Dimension A
Model No.	<b>SRI-00T-0.5</b>	φ 0.5□	<b>SRI-00T-0.5L</b>	φ 0.5□
	<b>SRI-00T-0.6</b>	φ 0.6□	<b>SRI-00T-0.6L</b>	φ 0.6□
	<b>SRI-00T-0.7</b>	φ 0.7□	<b>SRI-00T-0.7L</b>	φ 0.7□
	<b>SRI-00T-0.9</b>	φ 0.85□	<b>SRI-00T-0.9L</b>	φ 0.85□
	<b>SRI-00T-1.0</b>	φ 0.95	<b>SRI-00T-1.0L</b>	φ 0.95
Material□ and Finish	Copper alloy, nickel-undercoated, tin/copper alloy-plated			
Q'ty / reel	30,000		16,000	
Applicable□ wire	AWG#28~#24 (0.08mm <sup>2</sup> ~0.22mm <sup>2</sup> ) □			
Crimping□ tool	Crimping machine/ AP-K2□ Applicator/ MKS-L□ Dies/ SRI-00 (Straight type), SRI-00-L (Bent type)□ Crimp applicator with dies/ APLMK SRI-00, APLMK SRI-00-L			

**RoHS compliance** This product displays (LF) on a label.

- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.