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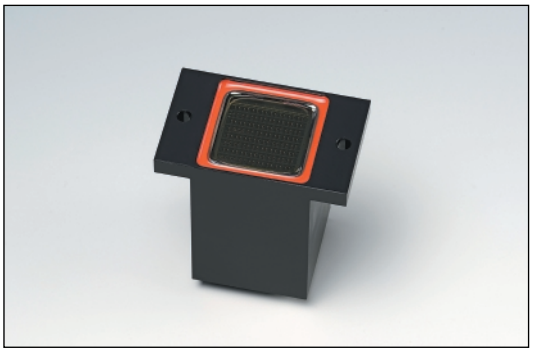
PHOTOMULTIPLIER TUBE ASSEMBLY
H8804

8 × 8 Multianode, High Speed Response, Low Cross-talk, 30 mm Square Bialkali Photocathode, 12-stage, Head-on Type, With Mounting Flange

FEATURES

- **8 × 8 Multianode, Anode Size: 2 mm × 2 mm / Anode**
- **Effective Area: 18.1 mm × 18.1 mm**
- **High Speed Response**
- **Low Cross-talk: 2 % Typ.**
- **With Mounting Flange**



H8804

APPLICATIONS

- **High Energy Physics**

GENERAL

Parameter		Description / Value	Unit
Spectral Response		300 to 650	nm
Wavelength of Maximum Response		420	nm
Photocathode	Material	Bialkali	—
	Minimum Effective Area	18.1 × 18.1	mm
Window Material		Borosilicate glass	—
Dynode	Structure	Metal channel dynode	—
	Number of Stages	12	—
Weight		65	g
Operating Ambient Temperature		0 to +50	°C
Storage Temperature		-15 to +50	°C

MAXIMUM RATINGS (Absolute Maximum Values)

Parameter		Value	Unit
Supply Voltage	Between Anode and Cathode	-1000	V
Average Anode Output Current in Total		0.023	mA

CHARACTERISTICS (at 25 °C) with Standard Voltage Divider

Parameter		Min.	Typ.	Max.	Unit
Cathode Sensitivity	Luminous (2856 K)	60	80	—	μA/lm
	Blue Sensitivity Index (CS 5-58)	7.5	9.5	—	—
Anode Sensitivity	Luminous (2856 K)	10	50	—	A/lm
Gain		—	0.6×10^6	—	—
Anode Dark Current per Channel (after 30 min storage in darkness)		—	0.2	2	nA
Time Response	Anode Pulse Rise Time	—	1.0	—	ns
	Electron Transit Time	—	12.0	—	ns
	Transit Time Spread (T.T.S.)	—	0.38	—	ns
Pulse Linearity per Channel at ±5 % Deviation		—	0.6	—	mA
Uniformity Between Each Anode		—	1: 2	1: 3	—

NOTE: Anode characteristics are measured with the voltage distribution ratio shown below.

STANDARD VOLTAGE DIVIDER AND SUPPLY VOLTAGE

Electrodes	K	Dy1	Dy2	Dy3	Dy4	Dy5	Dy6	Dy7	Dy8	Dy9	Dy10	Dy11	Dy12	P
Ratio	3	2	2	1	1	1	1	1	1	1	1	2	5	

Supply Voltage: -800 V, K: Cathode, Dy: Dynode, P: Anode

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Figure 1: Typical Spectral Response

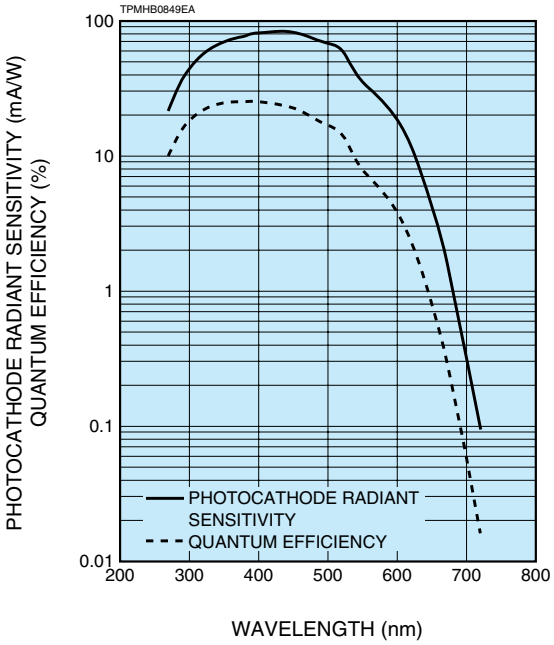


Figure 2: Gain

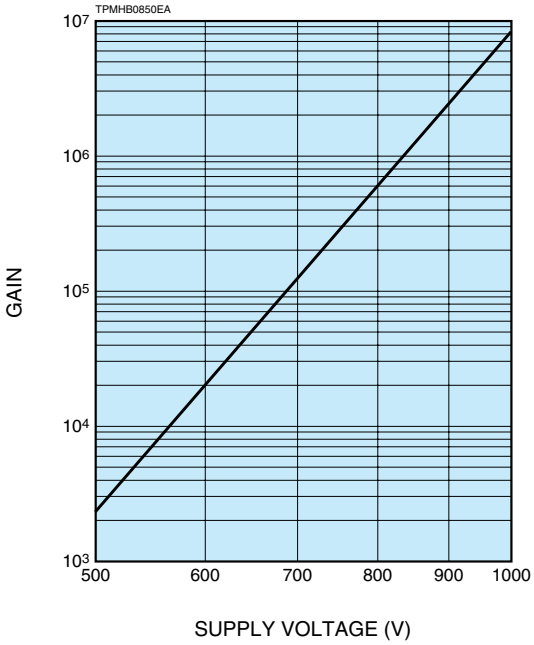
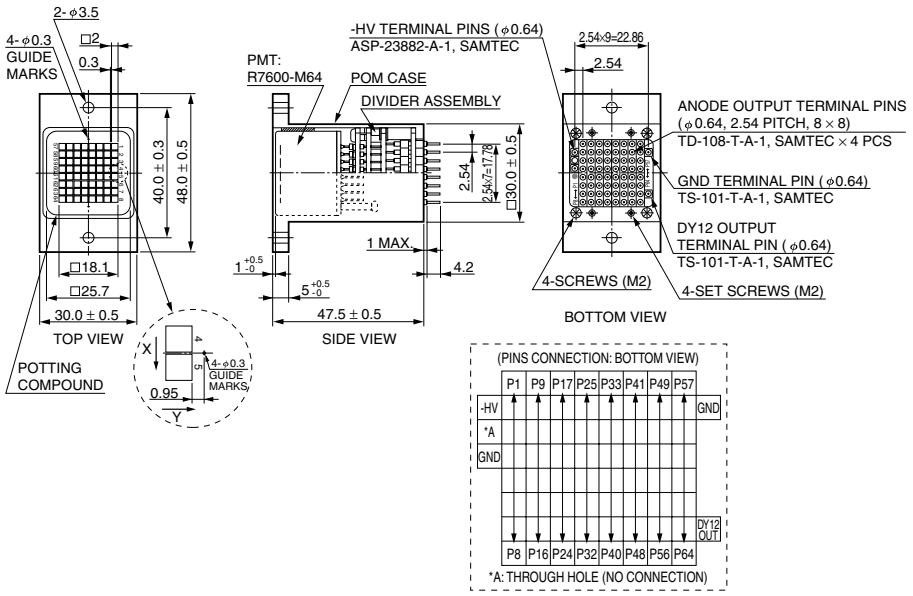
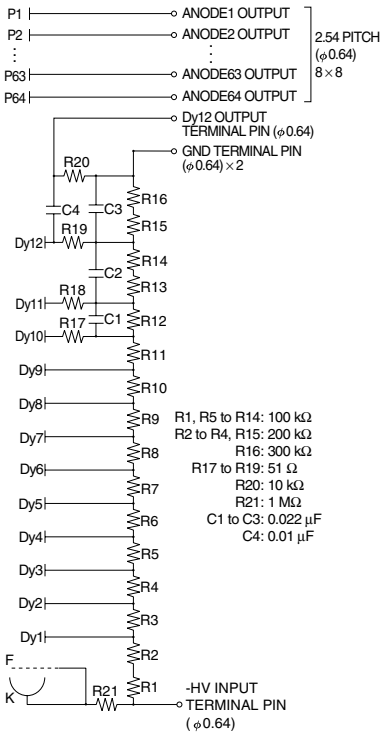


Figure 3: Dimensional Outline (Unit: mm)





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