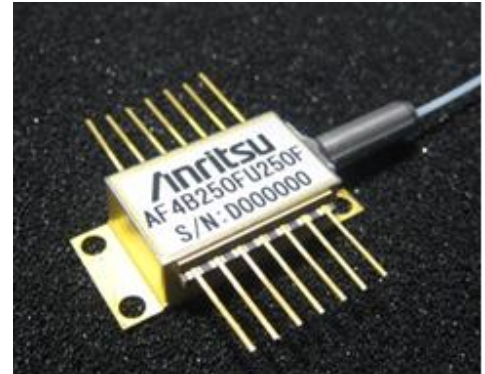


1.4 μ m FBG LD MODULE *AF4B2 SERIES type GB/GC*

The AF4B2 SERIES type GB/GC are 1.4 μ m band FBG-LD module developed for the exciting of Raman amplifier.

FEATURES

- Optical output power : type GB; 310 to 400mW
type GC; 410 to 500mW
- Wavelength range : type GB; $\lambda_T=1420$ to 1499nm
type GC; $\lambda_T=1420$ to 1485nm
- Polarization maintaining fiber (PMF: $\Phi 0.25$ mm UV-coated)
- 14pin-Butterfly package, Monitor-PD,
Built-in TEC (Thermo electric cooler)



APPLICATION

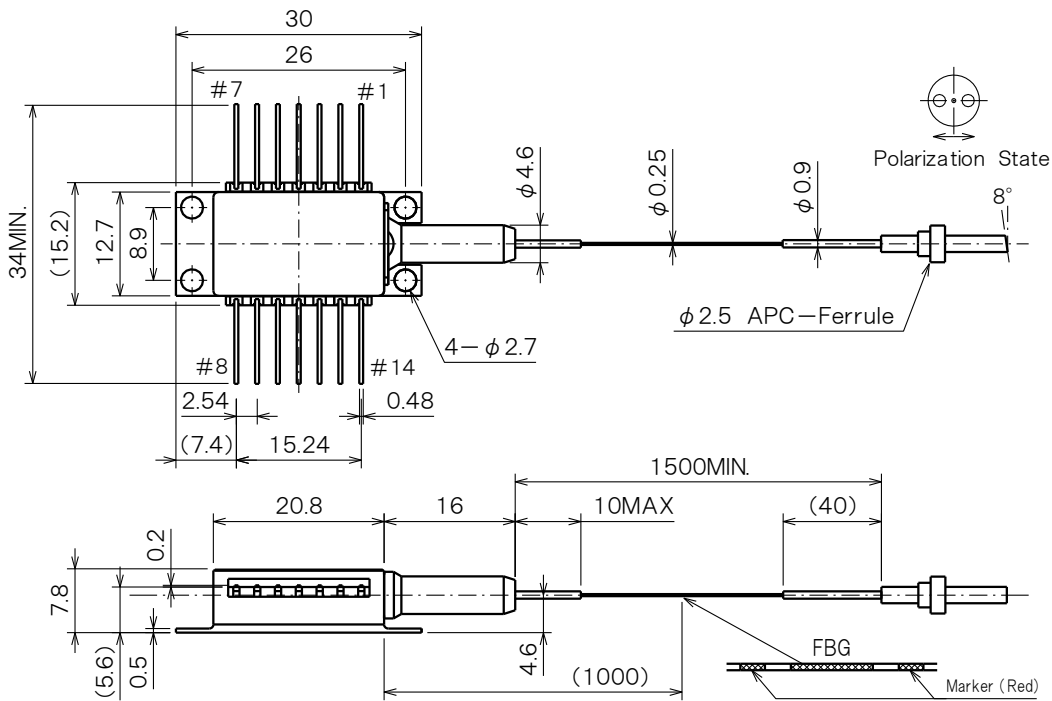
- Raman amplifier

ABSOLUTE MAXIMUM RATING

Item	Symbol	Rating	Unit
LD Forward current	I_F	2200	mA
LD Reverse voltage	V_R	2	V
PD Forward current	I_{FD}	10	μ A
PD Reverse voltage	V_{RD}	20	V
Operation case temperature	T_C	-20 ~ +70	$^{\circ}$ C
Storage temperature	$T_{stg.}$	-40 ~ +85	$^{\circ}$ C
Cooler current	I_C	5.8	A

* Exceeding the absolute maximum ratings may cause a failure.

DIMENSIONS (unit : mm)

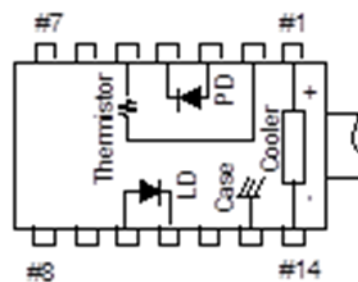


(Note) The polarization direction of the LD is parallel to the slow axis of the PMF.
The connector key does not match the slow axis of the PMF.

PIN CONFIGURATION

No.	FUNCTION	No	FUNCTION
1	Cooler anode	8	NC
2	Thermistor	9	NC
3	PD anode	10	LD anode
4	PD cathode	11	LD cathode
5	Thermistor	12	NC
6	NC	13	Case
7	NC	14	Cooler cathode

TOP VIEW



OPTICAL AND ELECTRICAL CHARACTERISTICS (T_{LD}=25°C, T_C=25°C)

Item	Symbol	Test condition	Min.	Typ.	Max.	Unit
Threshold current	I _{th}				180	mA
Center wavelength	λ _c	at rating output power	λ _T - 1.0	λ _T	λ _T + 1.0	nm
Spectrum width	Δλ	at rating output power, RMS (-20dB)			3.5	nm
Monitor current	I _m	at rating output power, V _{RD} =5V	100		2000	μA
PD dark current	I _d	V _{RD} =5V			0.1	μA
Tracking error	ΔP _f	I _m =const., T _c = -5 to 75°C	-0.5		0.5	dB
Thermistor resistance	R _{th}	T _{LD} =35°C, B=3900±100K	9.5	10	10.5	kΩ
Polarization extinction ration	X _p	at rating output power	17			dB

SPECIFICATION OF PIGTAIL FIBER

Item	Min.	Typ.	Max.	Unit
Cut-off wavelength	1300		1400	nm
Mode field diameter @1550nm	10.0	10.5	11.0	μm
Clad diameter	124	125	126	μm
UV coating diameter	230	245	260	μm
FBG recoating part diameter			350	μm
FBG recoating part length			50	mm
Temperature characteristic of FBG wavelength		0.01	0.02	nm/°C
Bending radius	30			mm

ORDERING INFORMATION

Model number : A F 4 B 2 FU 0 F
(Reference)

◆Center wavelength

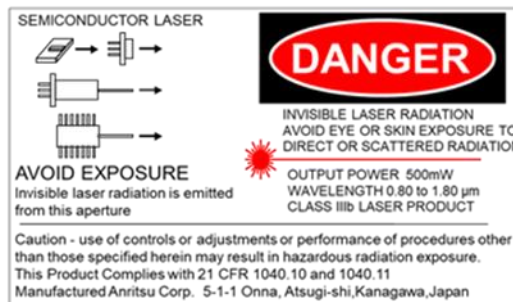
20 : 1420nm
75 : 1475nm

◆Optical output power

32 : 320mW
50 : 500mW



CAUTION : Handle the fiber of the enclosed device(s) with extreme care ; glass fiber is subject to breakage if mishandled and permanent damage to the device may result. Do not pull the device by the fiber or protective sleeve.
Do not coil the fiber into a loop of than 30 mm in radius.



Please contact following local office for the quotation and order.
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