

1.3 μ m FBG LD MODULE

AF3B250FU400N

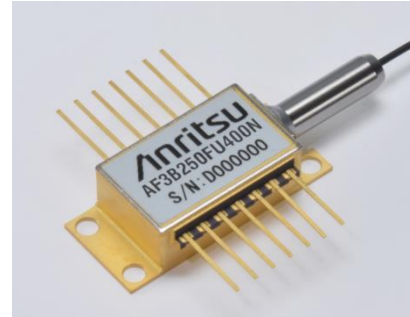
The AF3B250FU400N is 1.3 μ m band laser diode module with fiber Bragg grating designed for high-order Raman fiber amplification. The laser is packaged in a 14-pin butterfly package with monitor photodiode and thermo-electric cooler.

FEATURES

- Optical output: 500 mW
- Center wavelength: 1340.0 nm
- PMF output (UV coating fiber: ϕ 0.25 mm)
- 14-pin butterfly package
- Internal monitor PD and TEC

APPLICATION

- High-order Raman fiber amplification

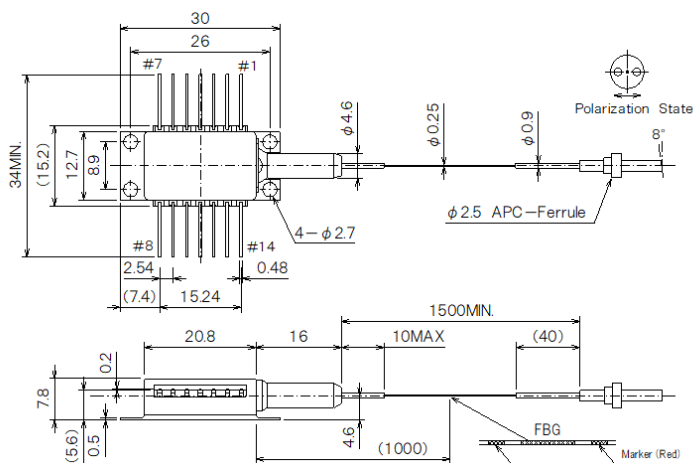


ABSOLUTE MAXIMUM RATING

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 to +70	$^{\circ}$ C
Storage temperature	T_{stg}	-40 to +85	$^{\circ}$ C
Cooler current	I_C	5.8	A

* Exceeding the absolute maximum ratings may cause a failure.

DIMENSIONS



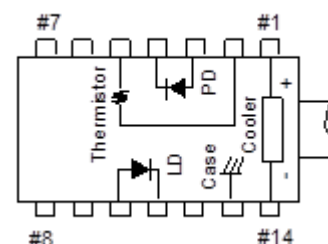
(unit : mm)

(Note) The polarization direction of the LD is parallel to the slow axis of the PMF.

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)

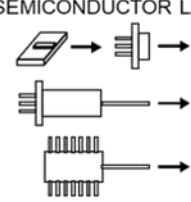
Item	Symbol	Test condition	Min.	Typ.	Max.	Unit
Threshold current	I _{th}	BOL			180	mA
Forward Current	I _F	P _f = 500 mW, BOL			1800	mA
Forward Voltage	V _F	P _f = 500 mW, BOL			2.2	V
Center wavelength	λ _c	P _f = 500 mW, RMS -20 dB	1338.5	1340.0	1341.5	nm
Spectrum width	Δλ	P _f = 500 mW, -10 dB			3.5	nm
Monitor current	I _m	P _f = 500 mW, 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 = -20 to 70°C	-0.5		0.5	dB
Cooler voltage	V _C	I _F =*EOL, T _C =70°C		3.3	4.0	V
Cooler current	I _C	I _F =*EOL, T _C =70°C		2.8	3.5	A
Thermistor resistance	R _{th}	T _{LD} =25°C, B=3900±100K	9.5	10	10.5	kΩ
Polarization extinction ratio	X _p	P _f = 500 mW	17			dB


(Note) * EOL = BOL x 1.2



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.

SEMICONDUCTOR LASER





INVISIBLE LASER RADIATION
AVOID EYE OR SKIN EXPOSURE TO
DIRECT OR SCATTERED RADIATION

OUTPUT POWER 800mW
WAVELENGTH 0.80 to 1.80 μm
CLASS IV LASER PRODUCT

AVOID EXPOSURE
Invisible laser radiation is emitted from this aperture

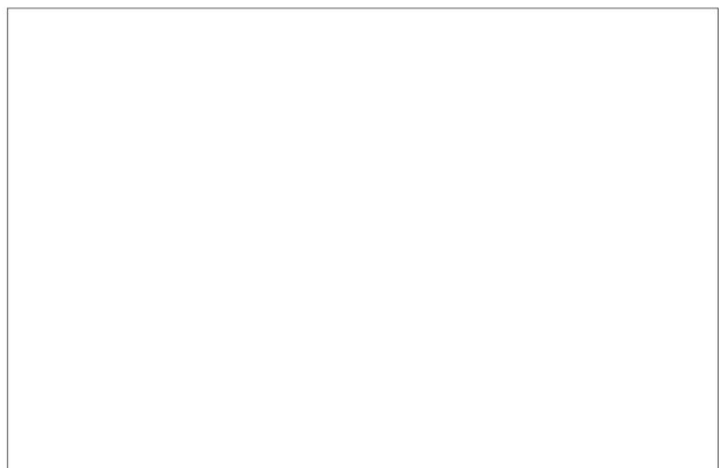
Caution - use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.
This Product Complies with 21 CFR 1040.10 and 1040.11
Manufactured Anritsu Corp. 5-1-1 Onna, Atsugi-shi, Kanagawa, Japan

ANRITSU CORPORATION
SENSING & DEVICES COMPANY
OVERSEAS SALES DEPT

Tel +81 46 296 6783 fax +81 46 225 8390
5-1-1 Onna, Atsugi-shi, Kanagawa
243-8555 Japan

URL: <https://www.anritsu.com/sensing-devices>

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