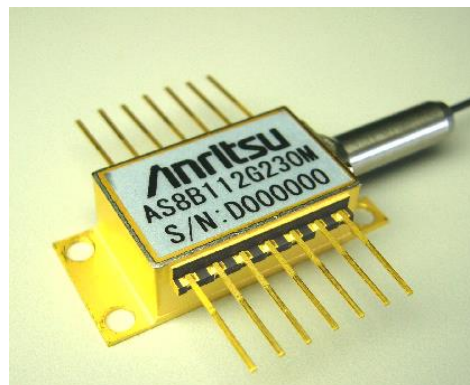


0.8 μ m SLD MODULES AS8B SERIES

AS8B series is Super Luminescent Diode (SLD) modules which is developed for the light source of Optical Coherent Tomography (OCT) and the incoherent optical measurement equipment.

■ FEATURES

- ◇ High fiber output power
- ◇ 2mW ($I_F \leq 120\text{mA}$) AS8B112G230M
- ◇ 5mW ($I_F \leq 150\text{mA}$) AS8B115G230M (FWHM :14 nm)
- ◇ 5mW ($I_F \leq 180\text{mA}$) AS8B115L240M (FWHM :50 nm)
- ◇ Pigtail fiber : SMF ($\phi 0.9\text{mm}$: Nylon coating)
- ◇ FC-APC connector
- ◇ 14pins butterfly package
- ◇ Monitor PD and TEC (Thermo-electric cooler) are built in package
- ◇ Low power consumption



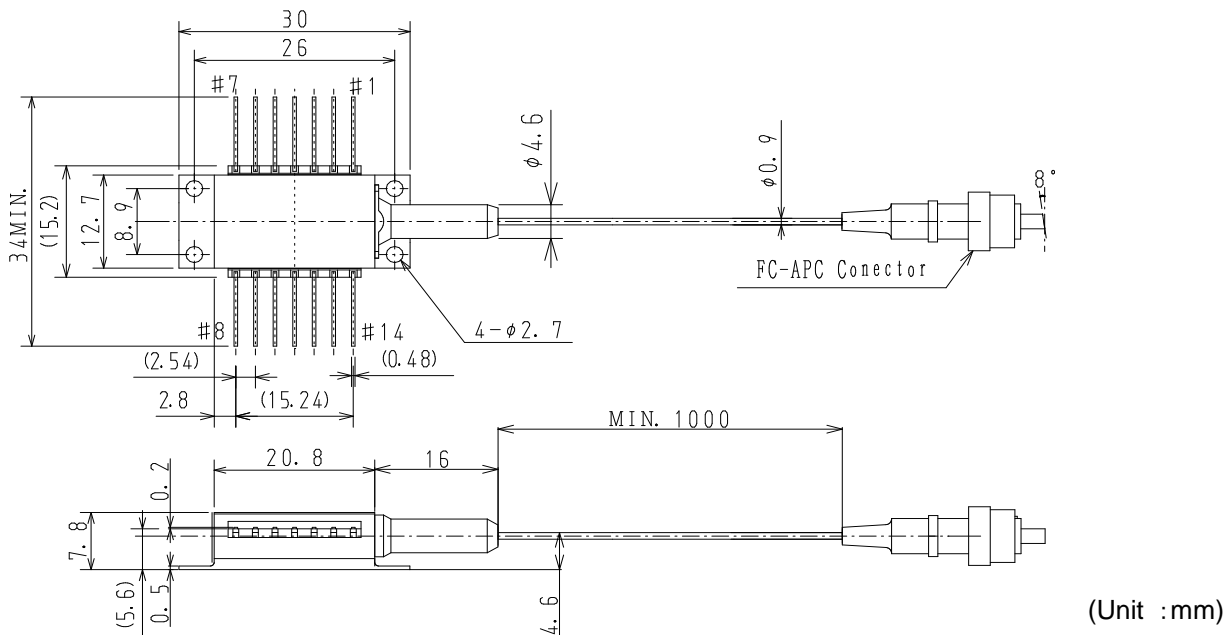
■ APPLICATIONS

- ◇ Optical coherent tomography (OCT)
- ◇ Optical fiber gyroscope (FOG)
- ◇ Light source of optical sensing system

■ ABSOLUTE MAXIMUM RATINGS

Item	Sym.	Rating			unit
		AS8B112G230M	AS8B115G230M	AS8B115L240M	
Optical output power	P_f	2.5	6.0	7.0	mW
SLD Forward current	I_F	180	220	220	mA
SLD Reverse voltage	V_R	2.0			V
PD Reverse voltage	V_{RD}	20			V
Operation case temperature	T_C	-20 ~ +70			$^{\circ}\text{C}$
Storage temperature	T_{stg}	-40 ~ +85			$^{\circ}\text{C}$
TEC current	I_C	2.0			A

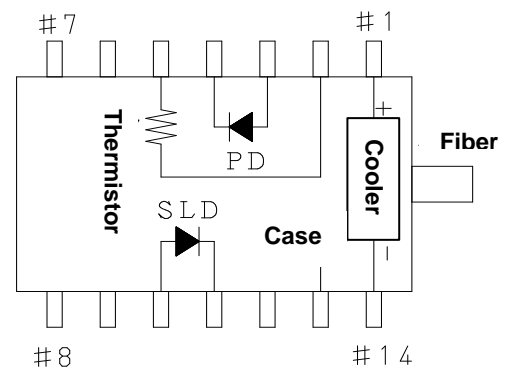
■ DIMENSIONS



■ PIN CONFIGURATION

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

■ TOP VIEW



■ FIBER CHARACTERISTICS

Item	Min.	Typ.	Max.	unit
Cut-off wavelength	700	730	760	nm
Mode field diameter @850nm	4.5	5.0	5.5	μm
Clad diameter	123.5	125	126.5	μm
Coating diameter	850	-	950	μm
Fiber bending radius	13	-	-	mm

■ OPTICAL CHARACTERISTICS (T_{SLD} = 25°C、T_c = 25°C)

Item	Sym.	AS8B112G230M			AS8B115G230M			AS8B115L240M			unit
		Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	
Output power	P _f	2.0	-	-	5.0	-	-	5.0	-	-	mW
Forward voltage	V _F	-	2.0	2.5	-	2.0	2.5	-	2.0	2.5	V
Forward current (BOL)	I _F	-	-	120	-	-	150	-	150	180	mA
Center wavelength	λ _c	810	830	850	810	830	850	820	840	860	nm
FWHM	Δλ	10	14	-	10	14	-	45	50	-	nm
Monitor current	I _m	0.2	-	-	0.2	-	-	0.05	-	2.0	mA

Note 1: Each values are specified at the rating output power.

Note 2: Condition of monitor current measuring condition (V_R=5V).

■ ELECTRIC CHARACTERISTICS

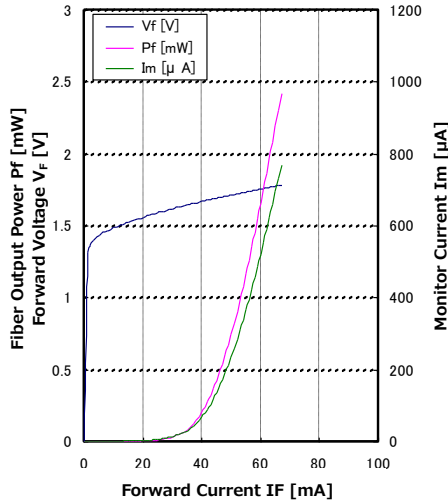
Item	Sym.	Condition	Min.	Typ.	Max.	unit
PD dark current	I _d	V _R =5V	-	-	0.1	μA
Tracking error	ΔP _f	I _m =const, T _c =-20~70°C	-1.0	-	1.0	dB
Cooler voltage	V _C	I _F =*EOL, T _c =70°C	-	-	2.5	V
Cooler current	I _C	I _F =*EOL, T _c =70°C	-	-	1.0	A
Thermistor resistance	R _{th}	T _{LD} =25°C, B=3900±100K	9.5	10.0	10.5	kΩ

Note : BOL : Begin of Life / EOL : End of Life *EOL=BOL×1.2

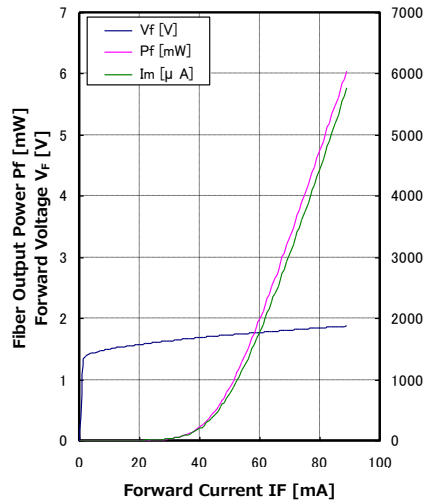
STANDARD PERFORMANCE

Output power (Pf) / Forward voltage (Vf) / Monitor current (Im)

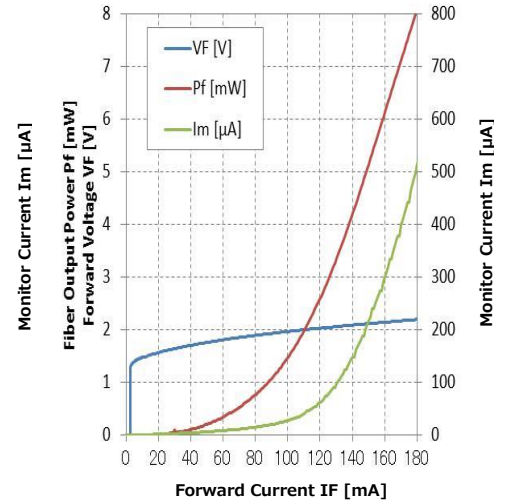
【AS8B112G230M】



【AS8B115G230M】

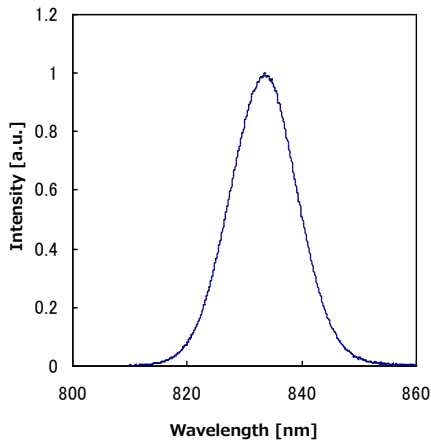


【AS8B115L240M】

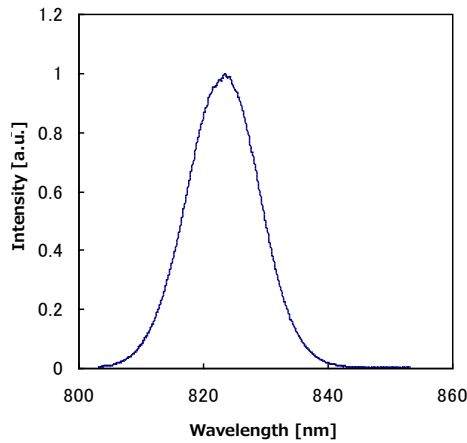


Spectrum

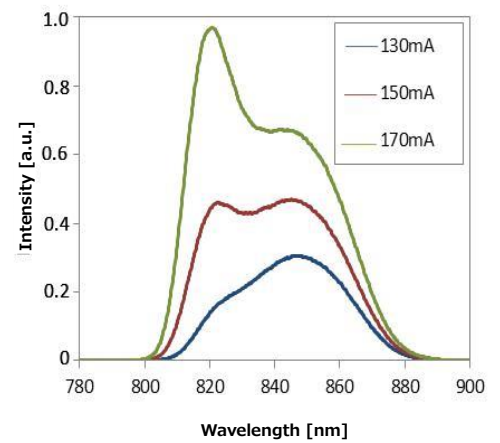
【AS8B112G230M】



【AS8B115G230M】



【AS8B115L240M】





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

DANGER

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

AVOID EXPOSURE
Invisible laser radiation is emitted
from this aperture

OUTPUT POWER 500mW
WAVELENGTH 0.80 to 1.80 μm
CLASS IIIb LASER PRODUCT

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

Please contact following local office for the quotation and order.
Anritsu Corporation reserves the right to change the content of the catalog at any time without notice.

**ANRITSU CORPORATION
DEVICES SALES DEPARTMENT**

**ANRITSU DEVICES CO., LTD.
OVERSEAS MARKETING DEPT.**

Tel +81 46 296 6783 fax +81 46 225 8390
5-1-1 Onna, Atsugi-shi, Kanagawa
243-0032 Japan

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

This product and its manuals may require an Export License / Approval by the Government of the product's country of origin for re-export from your country. Before re-exporting the product or manuals, please contact us to confirm whether they are export-controlled items or not. When you dispose of export-controlled items, the products / manuals need to be broken / shredded so as not to be unlawfully used for military purpose.

