

1.31 μm SLD Module **AS3B119GM10M**

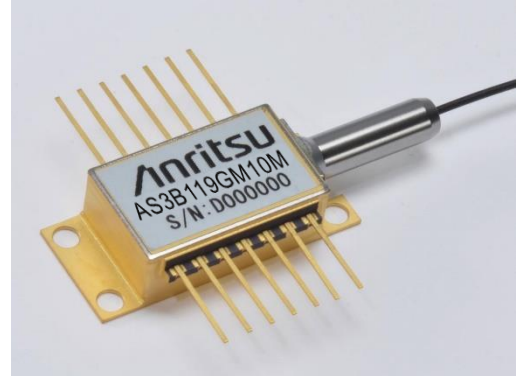
AS3B119GM10M is 1.31 μm SLD (Super Luminescent Diode) modules developed as incoherent light sources for various optical measurements. The device emits incoherent light having wide spectral bandwidth and high output power from PMF (Polarization Maintaining Fiber).

FEATURES

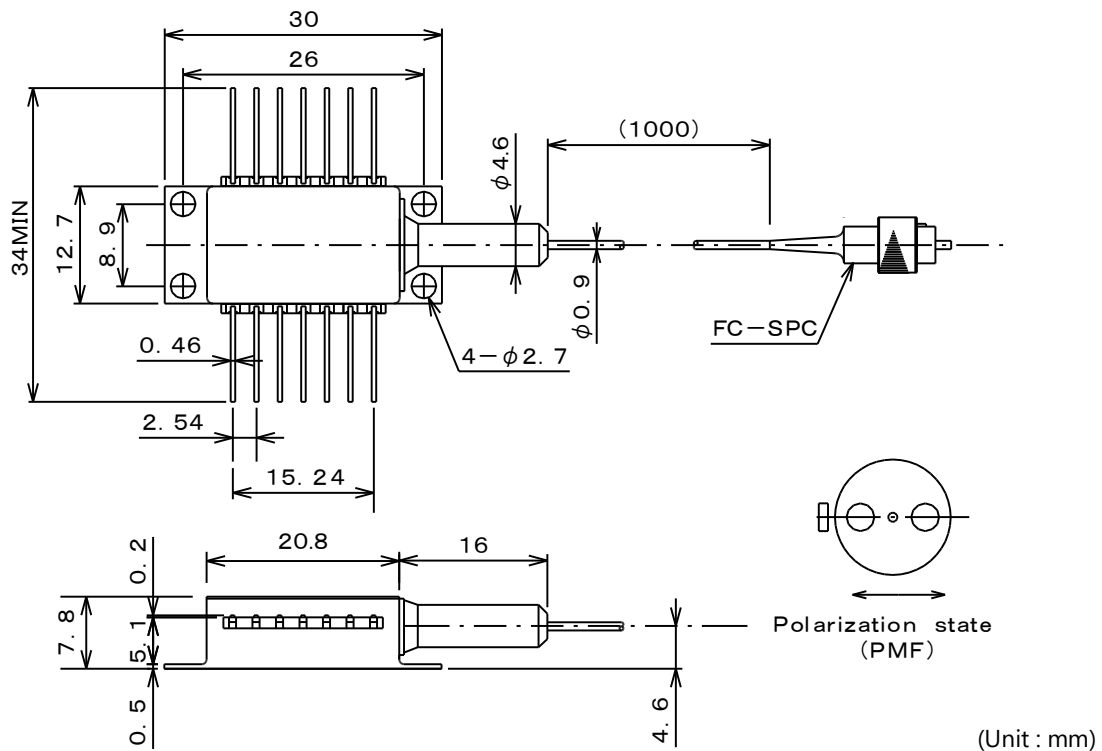
- Optical Output Power : 15 mW ($I_F \leq 400$ mA)
- Spectral Bandwidth : 55 nm typ.
- Built-in optical isolator
- Internal monitor PD and TEC

APPLICATIONS

- Optical Coherent Tomography (OCT)
- Light source of optical sensing system



DIMENSIONS

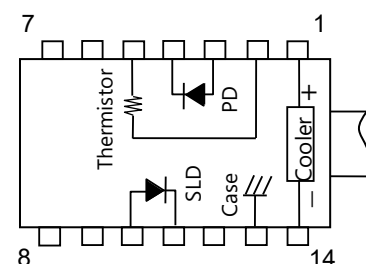


(Note) Polarization state of LD is aligned parallel to the slow axis.

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
7	NC	14	Cooler Cathode

TOP VIEW



ABSOLUTE MAXIMUM RATINGS

Item	Symbol	Ratings	Unit
SLD Forward Current	I_F	480	mA
SLD Reverse Voltage	V_R	2	V
PD Forward Current	I_{FD}	10	mA
PD Reverse Voltage	V_{RD}	10	V
Operating Case Temperature	T_C	-20 to +75	°C
Storage Temperature	T_{stg}	-40 to +85	°C
Cooler Current	I_C	2	A

*Excess over the absolute maximum ratings may cause device failure.

OPTICAL AND ELECTRICAL CHARACTERISTICS ($T_{SLD} = 25^{\circ}\text{C}$, $T_C = 25^{\circ}\text{C}$)

Item	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	$P_f = 15 \text{ mW}$	—	—	2.5	V
Forward Current (BOL)	I_F	$P_f = 15 \text{ mW}$	—	—	400	mA
Center Wavelength	λ_C	$P_f = 15 \text{ mW}$, -3 dB	1290	1310	1330	nm
Spectral Bandwidth	$\Delta\lambda$	$P_f = 15 \text{ mW}$, -3 dB	50	55	—	nm
Spectral Ripple	M	$P_f = 15 \text{ mW}$, res = 0.1 nm	—	—	0.6	dB
Monitor Current	I_m	$P_f = 15 \text{ mW}$, $V_{RD} = 5 \text{ V}$	100	—	2000	μA
PD Dark Current	I_d	$V_{RD} = 5 \text{ V}$	—	—	0.1	μA
Tracking Error	ΔP_f	$I_m = \text{const.}$, $T_C = -20 \text{ to } 75^{\circ}\text{C}$	-0.5	—	0.5	dB
Cooler Voltage	V_C	$I_F = \text{EOL}^{*1}$, $T_C = 75^{\circ}\text{C}$	—	—	3.5	V
Cooler Current	I_C	$I_F = \text{EOL}^{*1}$, $T_C = 75^{\circ}\text{C}$	—	—	1.2	A
Thermistor Resistance	R_{th}	$T_{SLD} = 25^{\circ}\text{C}$, $B = 3900 \pm 100 \text{ K}$	9.5	10	10.5	k Ω
Isolation	R_O	$\lambda = 1310 \text{ nm}$, $T_{SLD} = 25^{\circ}\text{C}$	—	30	—	dB

*1 EOL = BOL $\times$ 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

AVOID EXPOSURE
Invisible laser radiation is emitted from this aperture

DANGER

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

OUTPUT POWER 500mW
WAVELENGTH 0.80 to 1.80 μ m
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

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Please read "Notes on Handling Optical Devices" before use.

<https://www.anritsu.com/sensing-devices/guide/optdevices-handling>



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