

0.8 μ m SLD MODULE

AS8A1123M30M

The AS8A1123M30M is an AlGaAs/GaAs SLD (Super-Luminescent Diode) module developed as incoherent light sources for various optical measurements. The device emits incoherent light having wide spectral half width and high output power from PMF (polarization-maintaining fiber).

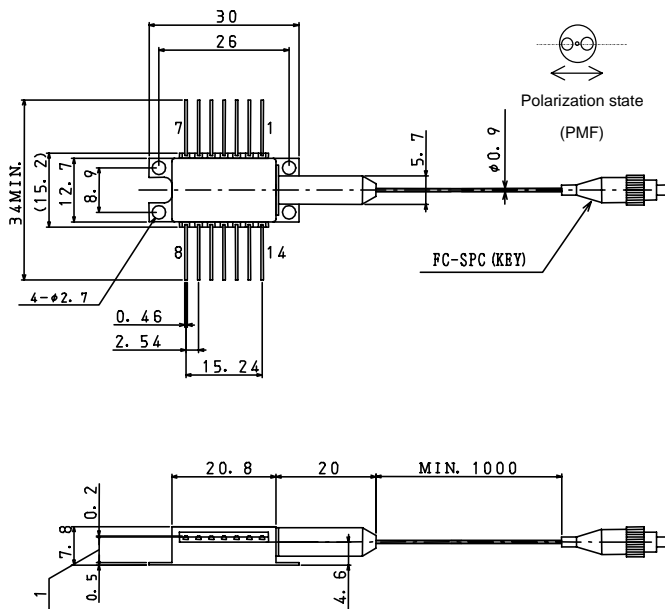
◆ FEATURES

- High optical output $P_f=2\text{mW}$
- Wide spectral half width $\Delta\lambda=17\text{nm}$ (typ.)
- Built-in photo diode
- Internal thermoelectric cooler and thermistor

◆ APPLICATIONS

- Optical sensor/Optical encoder
- Displacement measurement
- Medical imaging

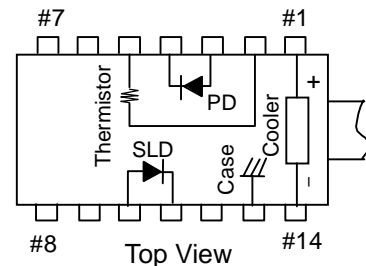
◆ DIMENSIONS



Package outline(Unit:mm) Type:AS8A1123M30M

◆ ABSOLUTE MAXIMUM RATINGS ($T_{\text{SLD}}=25^\circ\text{C}$)

Item	Symbol	Rating	Unit
Optical Output Power	P_f	2.4	mW
SLD Forward Current	I_F	220	mA
SLD Reverse Voltage	V_R	2.0	V
PD Reverse Voltage	V_{RD}	15	V
Operating Case Temperature	T_C	-20 to +70	$^\circ\text{C}$
Storage Temperature	T_{stg}	-40 to +85	$^\circ\text{C}$
Cooler Current	I_c	1.6	A



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

Pin Configuration

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

Item	Symbol	Test condition	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	$P_f=2\text{mW}$		2.0	2.5	V
Forward Current	I_F	$P_f=2\text{mW}$		120	180	mA
Center Wavelength	λ_c	$P_f=2\text{mW}$	810	830	850	nm
Spectral Half Width	$\Delta\lambda$	$P_f=2\text{mW}$	10	17		nm
Spectral Modulation	M_d	$P_f=2\text{mW}$		2	10	%
Monitor Current	I_m	$P_f=2\text{mW}$, $V_{RD}=5\text{V}$	0.2	2.3		mA
Tracking Error	ΔP_f	$I_m=\text{const}$, $T_C=-20$ to $+70^\circ\text{C}$	-1.0		1.0	dB
Cooler Voltage	V_c	$P_f=2\text{mW}$, $T_C=+70^\circ\text{C}$			2.5	V
Cooler Current	I_c	$P_f=2\text{mW}$, $T_C=+70^\circ\text{C}$			1.0	A
Thermistor Resistance	R_{th}	$B=3900\pm 100\text{K}$	9.5	10	10.5	k Ω

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

Anritsu Corporation reserves the right to change the design or specification of the product at any time without notice.