

910nm Semiconductor Optical Amplifier, Non-linear



Description

The PL-SOA-A-A81-W910-SASA is a polarization-insensitive optical amplifier with advanced epitaxial wafer growth and opto-electronic packaging techniques that enable a high output saturation power, low noise figure, and large gain across a broad spectral bandwidth.

Features

- Wide Optical Bandwidth
- High Output Power
- Low Polarization Sensitivity
- MQW or Bulk Structure

Application

- Booster Amplifier
- Telecom and Datacom
- Loss Compensation

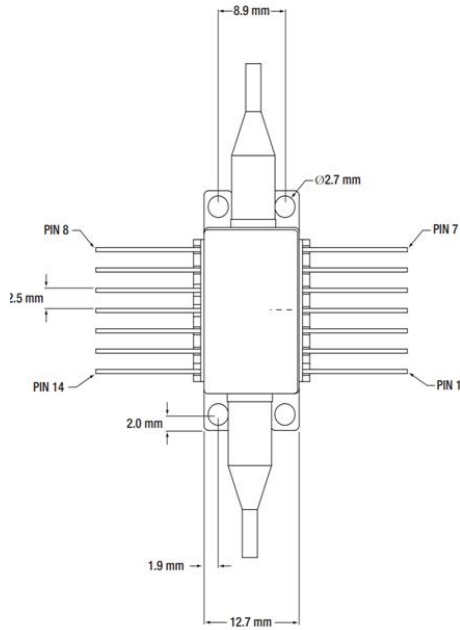
Laser SpecificationsElectrical/Optical Characteristics($T_{sub}=25^{\circ}C$, CW bias unless stated otherwise)

Item	Symbol	Test condition	Min.	Typ.	Max.	Unit
Fiber to fiber Gain	G	CW, IF = 300mA	20	24	28	dB
Forward Current	IF			300	350	mA
Forward Voltage	VF				2.5	V
Center Wavelength	λ_c	CW, IF = 300mA	900	910	920	nm
Spectral Width	$\Delta\lambda$	CW, IF = 300mA	20	25	30	nm
Saturation Power	PS	CW, IF = 300mA	8	9	10	dBm
Noise Figure	NF	CW, IF = 300mA	7	8	9	dB
Gain Ripple	δG	CW, IF = 300mA		1	2	dB
Polarization Dependent Gain	PDG	CW, IF = 300mA		10		dB
Cooler Voltage	VC	IF=EOL, TC=70°C			2.7	V
Cooler Current	IC	IF=EOL, TC=70°C			1.4	A
Thermal Resistance	Ro	TLD=25°C, B=3900±100K	9.5	10.0	10.5	kΩ

Absolute Maximum Ratings

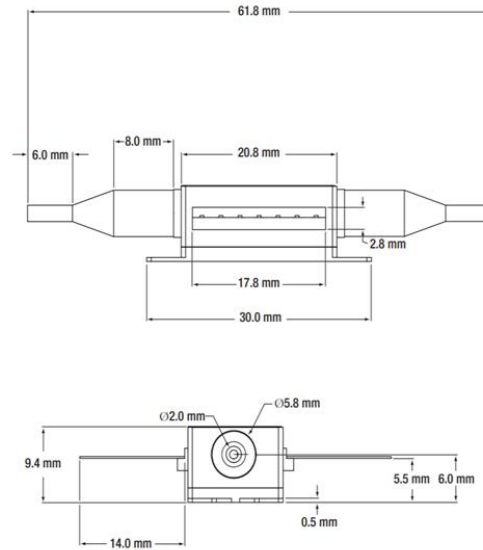
Item	Symbol	Rating	Unit
LD Forward Current	If	400	mA
LD Reverse Voltage	Vr	1.8	V
Operation Case Temperature	TC	-20 to +70	°C
Storage Temperature	Tstg	-20 to +85	°C
Cooler Current	IC	1.4	A

Dimensions and Pin definitions



T. Case

1. TEC +	8. NC
2. Thermistor	9. NC
3. NC	10. Dev Anode
4. NC	11. Dev Cathode
5. Thermistor	12. NC
6. NC	13. Case
7. NC	14. TEC -



Ordering Info

PL-SLD-□□□□-☆-A8▽-XX

□□□□ : Wavelength

680:680nm

910:910nm

1550:1550nm

1650:1650nm

☆ : Output Power

A : 10mW

B : 25mW

▽ : Spectral Width

1 : 60-70nm

2 : 30-40nm

XX: Fiber and Connector Type

SA=SMF-28E+FC/APC

SP=SMF-28E+FC/PC

PP=PMFiber+FC/PC

PA=PMFiber+FC/APC

