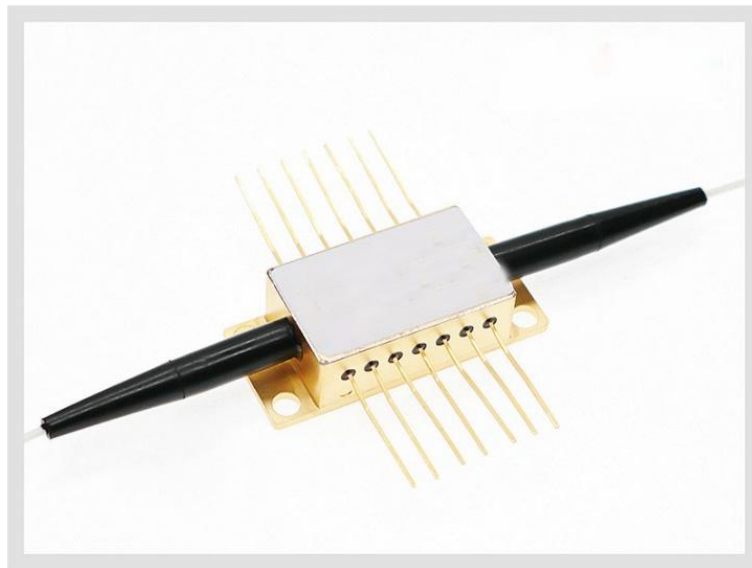


910nm Semiconductor Optical Amplifier(Nonlinear)



● Product Description

This is a polarization-insensitive optical amplifier. It uses advanced epitaxial growth and optoelectronic packaging technologies to achieve high output saturation power, low noise figure, and high gain over a broad spectral bandwidth.

● Product features

Wide optical bandwidth; High output power; Low polarization sensitivity;

Multi-quantum well (MQW) structure

● Part Number

MP-SOA-910-24db-25-SA

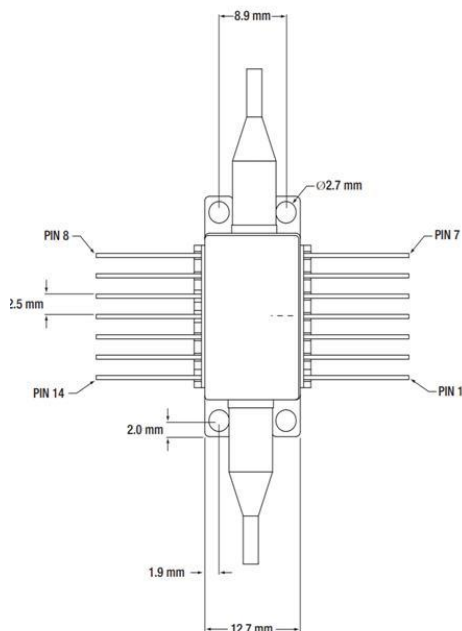
● Application area

Telecom and data communications | All-optical logic and signal processing

● Core parameters

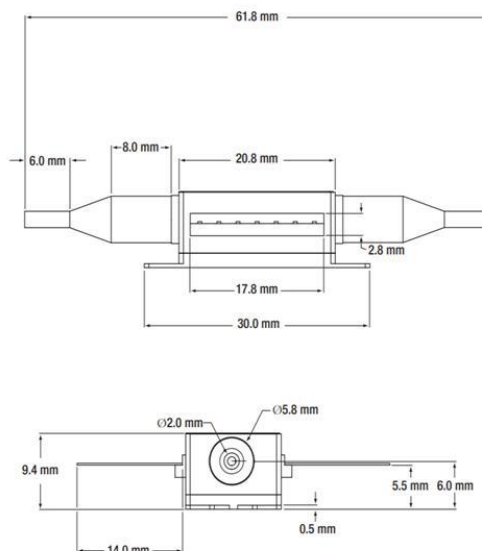
Center Wavelength	Spectral width
900-920nm	20-30nm

● Dimension Drawing



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 -



● General Parameters

Detailed parameters

Laser specifications

Electrical/optical characteristics (Tsub=25°C, CW bias, unless otherwise noted)

Item	symbol	Test conditions	Min. value	Typical values	Max. value	unit
Fiber optic 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-related gain	PDG	CW, IF = 300mA		10		dB
Chiller 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 rated parameters

Item	symbol	Rating	unit
LD forward current	If	400	mA
LD reverse voltage	Vr	1.8	V
Operating temperature	TC	-20 to +70	°C
Storage temperature	Tstg	-20 to +85	°C
Cooling current	IC	1.4	A



Ordering information

MP-SOA-W□□□□-☆-A8▽-XX

□□□□: Wavelength

680:680nm

910: 910nm

* * * * *

1550:1550nm

1650:1650nm

☆ : Output Power

A: 5dbm

B: 10dbm

▽: Spectral Width

1: 60-70nm

2: 30-40nm

XX: Fiber and Connector Type

SASA=(HI780+ FC/APC)+(HI780+ FC/APC)

SPSP=(HI780+ FC/PC)+(HI780+ FC/PC)

PPPP=(PM Fiber+ FC/PC)+(PM Fiber+ FC/PC)

PAPA=(PM Fiber+ FC/APC)+(PM Fiber+ FC/APC)