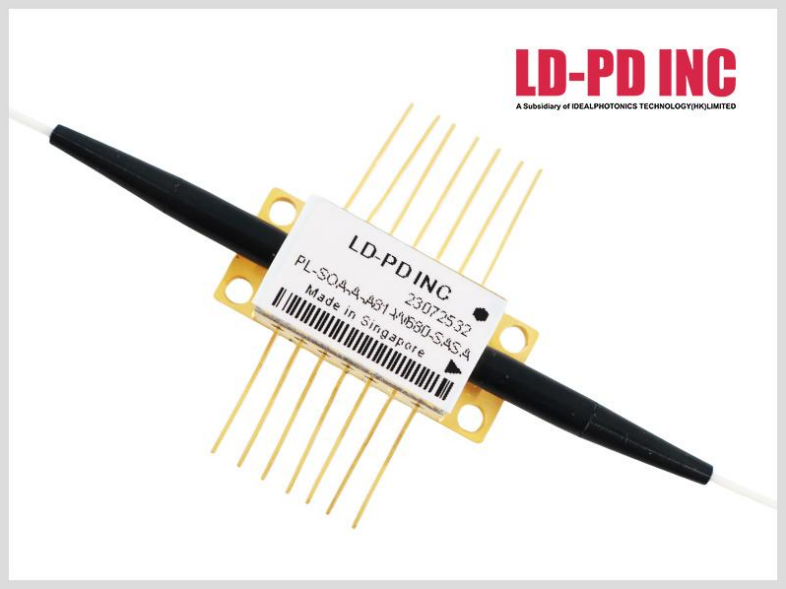
680nm Semiconductor Optical Amplifier, Non-linear



Description:

The PL-SOA-A-A81-W680-SASA is a polarization-insensitive optical amplifier with advanced epitaxial wafer growth and opto-electronic packaging techniques that enable a high output saturation power, lownoise 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

Limit parameter

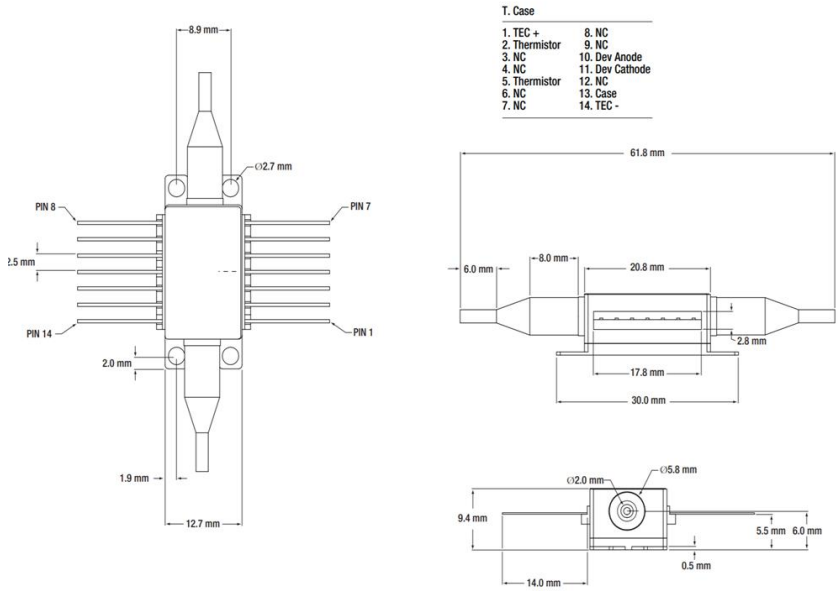
Electrical/Optical Characteristics(Tsub=25°C, CW bias unless stated otherwise)

Item	Symbol	Test condition	Min.	Typ.	Max.	Unit
Fiber to fiber Gain	G	CW, IF = 200mA	20	24	28	dB
Forward Current	IF			200	500	mA
Forward Voltage	VF				2.5	V
Center Wavelength	λc	CW, IF = 200mA	670	680	690	nm
Spectral Width	Δλ	CW, IF = 200mA	6	8		nm
Saturation Power	PS	CW, IF = 200mA	7	8	9	dBm
Noise Figure	NF	CW, IF = 200mA	7	8	9	dB
Gain Ripple	δG	CW, IF = 200mA		1	2	dB
Polarization Dependent Gain	PDG	CW, IF = 200mA		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	200	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



NO.	Function	NO.	Function
1	Thermoelectric Cooler (+)	8	N/C
2	Thermistor	9	N/C
3	NC	10	SOA Anode (+)
4	NC	11	SOA Cathode (–)
5	Thermistor	12	N/C
6	N/C	13	Case
7	N/C	14	Thermoelectric Cooler (-)

Ordering Info

PL-SOA-☆-A8▽-W□□□□-XX

B: 10dbm

▽：Bandwidth

1: 10-20nm

2: 20-40nm

□□□□：Wavelength

680: 680nm

680: 680nm

1060: 1060nm

*****

1550: 1550nm

1600: 1600nm

XX: Fiber and Connector Type

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

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

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

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

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