

840nm Semiconductor Optical Amplifier, Non-linear



Description:

The PL-SOA-A-A81-W0840-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

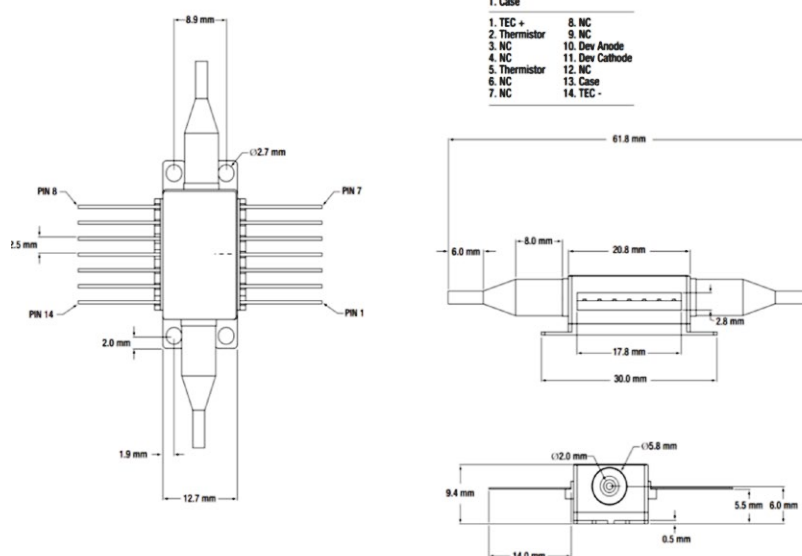
E/O Characteristics:**Electrical/Optical Characteristics(Tsub=25°C, CW bias unless stated otherwise)**

Item	Symbol	Test condition	Min.	Typ.	Max.	Unit
Fiber to fiber Gain	G	CW, IF = 300mA	20	24	28	dB
Forward Current	IF			300	350	mA
Forward Voltage	VF				2.5	V
Center Wavelength	λ_c	CW, IF = 300mA	820	825	830	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

Package Size and pin definition:



1	Thermoelectric Cooler (+)	8	N/C
2	Thermistor	9	N/C
3	NA	10	SOA Anode (+)
4	NA	11	SOA Cathode (-)
5	Thermistor	12	N/C
6	N/C	13	Case Ground
7	N/C	14	Thermoelectric Cooler (-)

Ordering Info:

PL-SOA-☆-A8▽-W□□□□-XX

☆ : Output Power

A: 5dbm

B: 10dbm

▽: Bandwidth

1: 60-70nm

2: 30-40nm

□□□□: Wavelength

680: 680nm

840: 840nm

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)