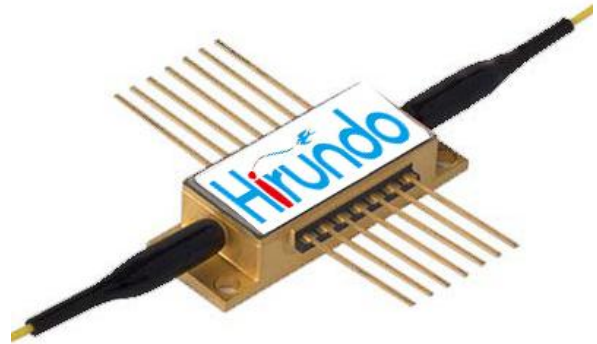


HI-SOA-31 Series

Features

- 14 PIN Butterfly Package
- High gain
- Broad optical bandwidth
- Low ripple on ASE power
- Qualified as per intent of Telcordia GR-468
- RoHS



Description

Hirundo's HI-SOA-31 Series is a semiconductor optical amplifier (SOA). It is designed to have high gain and high output power at 1310nm when operated at stabilized temperature of 25°C. It's high performance, wide spectrum, low ripple make it well available on customer's special request.

Applications

- Long distance transmission system
- Fiber Optic Communications
- Loss compensation
- Optical Test Instrument

Absolute Maximum Ratings

Stresses in excess of the absolute maximum ratings can cause permanent damage to the device.

Parameter	Symbol	Min	Typ	Max	Unit
Storage Temperature	Ts	-40		85	°C
Operating Temperature	Tc	-20		70	°C
Relative Humidity	RH	5		85	%
Forward Voltage	V			2	V
Reverse Voltage	Vr			2	V
Max Operating Current	I			200	mA

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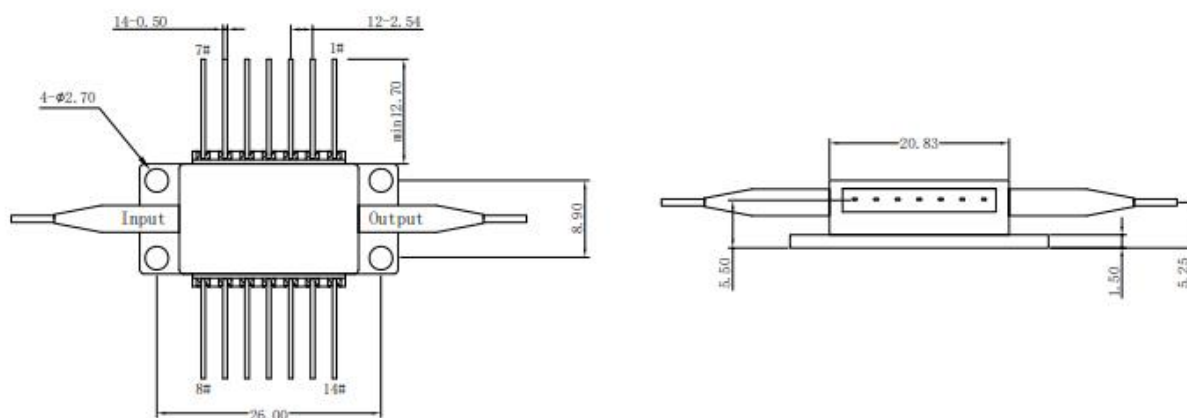
1310nm Semiconductor Optical Amplifier

TEC Current	ITEC			1.2	A
TEC Voltage	VTEC			3.5	V
ESD(HBM)	ESD			500	V

Optical/Electrical Characteristics(Tc=25℃)

Parameter	Symb	Condition	Min	Typ	Max	Unit
Center Wavelength	λ_c	lop		1280		nm
Operating Current	lop	--		120	150	mA
Operating Voltage	Vop	lop		1.2	1.8	V
Gain	G	lop, Pin =-25dBm	16	18		dB
Saturated output power	SOP	lop, Pin =-25dBm	7	9		dBm
ASE bandwidth(3dB)	BW	lop	40			nm
ASE ripple	R	lop		0.1	0.2	dB
Polarization dependent gain	PDG	lop		1.5		dB
Noise figure	NF	lop		7.5		dB
Thermistor Resistance	Rth	25℃	9.5	10	10.5	kOhm
Thermistor Sensitivity Index	β			3892		K

Outline Drawing



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Connection

Pin Assignments			
Pin	Function	Pin	Function
1	TEC (+)	8	NC
2	Thermistor	9	NC
3	NC	10	LD (+)
4	NC	11	LD (-)
5	Thermistor	12	NC
6	NC	13	Case Ground
7	NC	14	TEC (-)

Ordering information

e.g.: HI - SOA - 31 SMF

