

Rof-SOA butterfly semiconductor optical amplifier

Rof-SOA butterfly semiconductor optical amplifier (SOA) is mainly used for 1550nm wavelength optical amplification, using sealed inorganic butterfly device packaging technology, the whole process of domestic autonomous control, with high gain, low power consumption, low polarization related loss, high extinction ratio and other characteristics, support temperature monitoring and TEC thermoelectric control, to ensure the stability of the whole temperature.

Application field

Production and performance testing of optical fiber devices

Small signal power amplification

Laboratory research field

Optical fiber communication system

Feature

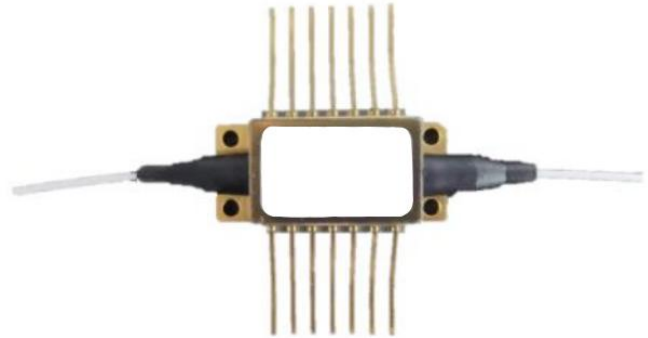
High gain

Low power consumption

Low polarization dependent loss

High extinction ratio

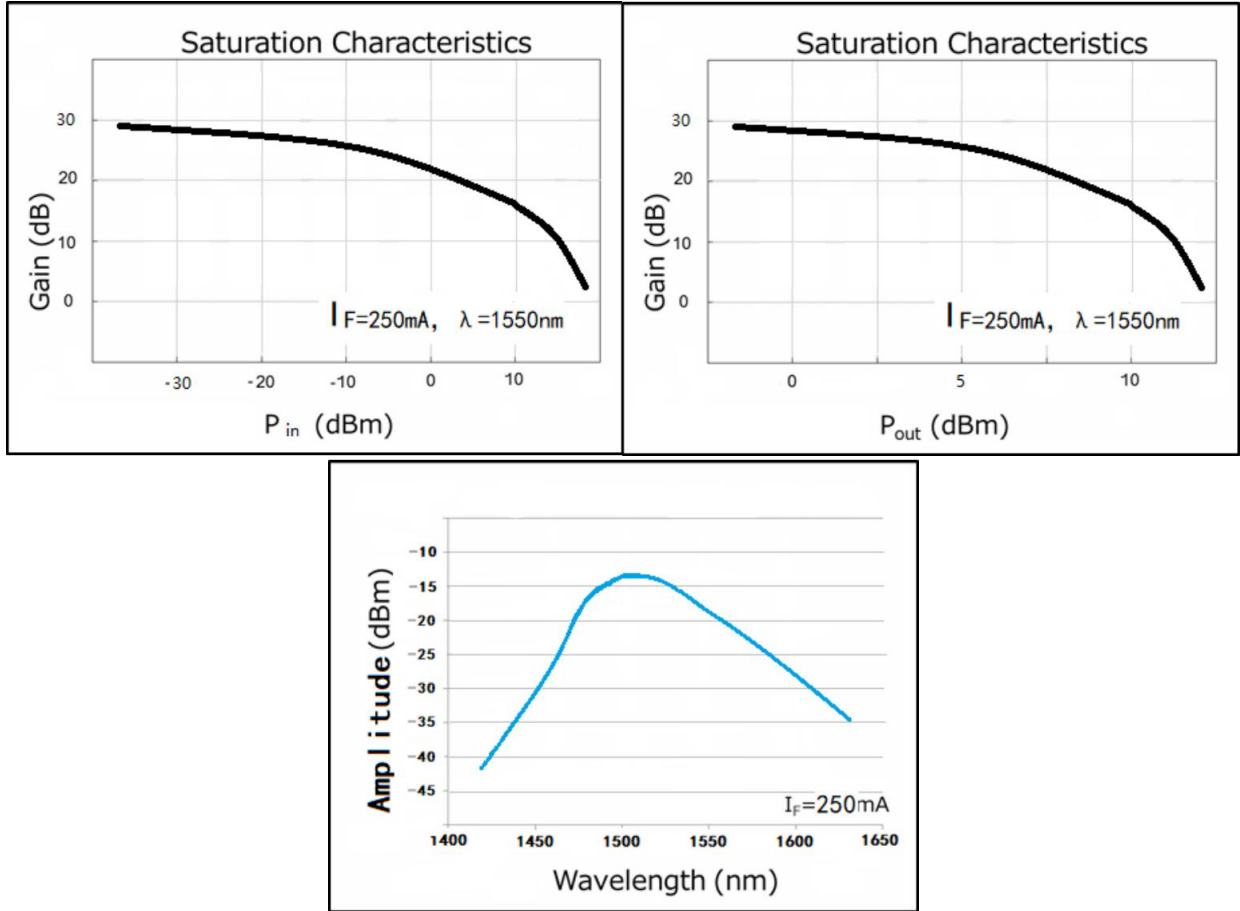
Supports temperature monitoring and TEC thermoelectric control



Parameters

Parameter	Working condition	Unit	Min	Typ	Max
Operating wavelength range		nm	1490		1590
bandwidth	@-3dB	nm	55		60
Saturated optical power	If=250mA	dBm	12		15
Small-signal gain	If=250mA Pin=-25dBm	dB	25		30
Saturation output gain	If=250mA	dB	12		
Working current		mA		250	400
Forward voltage		V			1.8
Extinction ratio	If=250mA/If=-0.4mA Pin=0dBm	dB		50	
TEC current		A			1.8
TEC voltage		V			3.4
Polarization dependent gain		dB		1.5	2
Thermistor resistance	T=25°C	KΩ	9.5	10	10.5
Thermistor current		mA			5
Operating temperature		°C	-10		70
Storage temperature		°C			85

Characteristic curve



Structural dimension

