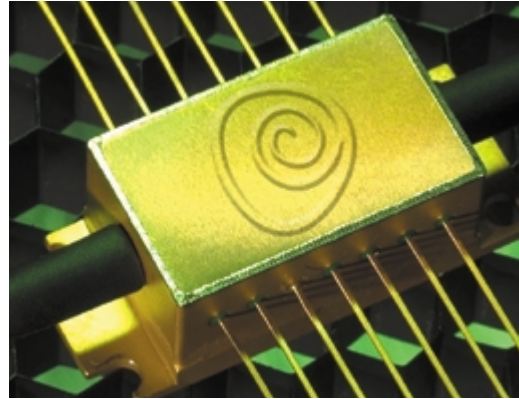


OPTICAL POWER BOOSTER:

PRELIMINARY SPECIFICATION

Description

This semiconductor optical amplifier is primarily intended for use as an optical power booster in high bit rate transmitter modules. Its high output saturation power level provides a compact and low cost alternative to competing approaches. The SOA booster amplifier package includes a thermistor and thermo-electronic cooler in a 14-pin butterfly package with singlemode fibre pigtails.



Applications

This product is appropriate for both metro and long haul applications where the booster increases the transmitter signal power for moderate power laser and modulator tandems. The product is also appropriate for use in an in-line channel amplifier for metro/access applications.

FEATURES

- 1550nm WINDOW
- HIGH OUTPUT POWER
- LOW POLARISATION DEPENDENCE
- LOW NOISE FIGURE
- COMPACT PACKAGE

Specifications

PARAMETER	MIN SPECIFICATION	TYPICAL SPECIFICATION	MAX SPECIFICATION
Fiber-to-fiber max gain	10 dB	15 dB	
Noise figure (>5 dB gain)		8 dB	9 dB
Saturation output power	10 dBm		
Polarisation dependence			0.5 dB
Gain ripple at max gain		0.2 dB	0.3 dB
3 dB optical bandwidth	40 nm	50 nm	
Gain centre wavelength	1540 nm	1550 nm	1560 nm
Bias current/channel		150 mA	200 mA
Operating temp	-5 deg C		70 deg C
TEC drive max			1.5A/4V