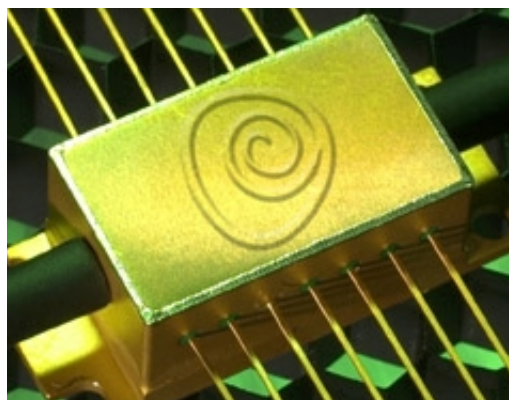


OPTICAL PRE-AMPLIFIER:

PRELIMINARY SPECIFICATION

Description

This high gain semiconductor optical amplifier is primarily intended for use as an optical pre-amplifier in high bit rate applications (10 Gbit/s and 40 Gbit/s). Its high gain and low noise figure provide a high performance, compact and price competitive alternative to single channel EDFAs in receiver sub-systems. The optical pre-amplifier package includes a thermistor and thermo-electric cooler in a 14-pin butterfly package with single mode fiber pigtails.



Applications

This product is appropriate for both metro and long haul applications where the use of an optical pre-amplifier increases the sensitivity of the receiver system, particularly where high data rates are used. The same device is also appropriate for use as an in-line single channel amplifier for metro/access applications.

FEATURES

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

Specifications

PARAMETER	MIN SPECIFICATION	TYPICAL SPECIFICATION	MAX SPECIFICATION
Fiber-to-fiber max gain	20dB	25 dB	
Noise figure		7dB	9dB
Saturation output power	5 dBm	6 dBm	
Gain ripple at max gain		0.2 dB	0.3 dB
Polarisation dependence		0.2 dB	0.3 dB
3dB optical bandwidth	40 nm	50 nm	
Gain centre wavelength	1540 nm	1550 nm	1560 nm
Bias current		150 mA	200 mA
Operating temp	-5 deg C		65 deg C
TEC drive max			1.5A/4V