

VARIABLE OPTICAL GAIN ARRAY:

PRELIMINARY SPECIFICATION

Description

This semiconductor based variable optical gain array is intended for use in high bit rate applications (2.5 Gbit/s, 10 Gbit/s and 40 Gbit/s) to provide controllable gain to an array of 8 optical channels. An array of 8 optical amplifiers, a thermistor and thermo-electric cooler are included in a butterfly style package with single mode fiber ribbon pigtails.

Applications

This product is appropriate for both metro and long haul applications as a channel equalisation array providing variable gain to separate wavelength or bands of wavelength channels.

FEATURES

- 8 INDEPENDENTLY CONTROLLABLE GAIN ELEMENTS
- 1550 nm WINDOW
- HIGH OUTPUT POWER PER CHANNEL
- LOW POLARISATION DEPENDENCE
- LOW NOISE FIGURE
- COMPACT PACKAGE

Specifications

PARAMETER	MIN SPECIFICATION	TYPICAL SPECIFICATION	MAX SPECIFICATION
Fiber-to-fiber max gain/channel	10 dB	15 dB	
Noise figure (>5 dB gain)		8 dB	9 dB
Saturation output power/channel	7 dBm	10 dBm	
Polarisation dependence		0.2 dB	0.3 dB
Gain ripple at max gain		0.2 dB	0.3 dB
3dB 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		65 deg C