

Erbium Doped Fiber Amplifier, C-band, Pre-Amplifier OEM Module

Model no.: EDFA-C-PA



Description

The Erbium-Doped Fiber Amplifier (EDFA) is a general-purpose optical amplifier for the C-band. This pre-amplifier features over +17dBm of saturated optical output power, together with a high small-signal gain and low noise figure. This amplifier has internal input and output isolators and includes drive and control electronics. Upon request, it allows for external Enable/Disable and external control of the pump laser diode current.

Optical parameters (at 25°C)

Parameter	Specification ¹	Unit
Operating wavelength band	1525 – 1565	nm
Saturated output power (+5dBm input)	> +17	dBm
Small-signal gain (-30dBm input)	> 38	dB
Noise Figure (-10dBm input)	< 5	dB
Input and Output Isolation	> 35	dB
Polarization dependent gain	< 0.2	dB

¹ Test wavelength of 1550nm

Optical connections

Fiber type – input and output signal	SMF-28 or equivalent
Connector type – input and output signal	FC/APC

Electrical parameters (at 25°C)

Parameter	Specification	Unit
DC Power supply	5	V
Power consumption	< 10	W

Mechanical and environmental specifications

Parameter	Specification	Unit
Operating case temperature	5 - 55	C
Storage temperature	-10 - 75	C
Humidity	0 - 95, Non-condensing	%
Dimensions (WxDxH)	120 x 90 x 25	mm

Typical Amplifier Gain and Noise Figure

