

EDFA For CATV System

With Controlled Circuit

Description

EDFA for 1550nm CATV system can greatly improve optical signal to increase transmission span. Cascaded EDFA can be used in long distance transmission. Parameters is displayed on LCD, and setting via PC and remote monitoring are also available. EDFA for CATV is compliant with Bellcore GR-1312-CORE requirements. Modules and rack mount type are available.

Optical Characteristics

Parameter	Symbol	Min	Typ	Max	Unit
Operating Wavelength	λ	1530	-	1560	nm
Input Power	P_{in}	0	6	10	dBm
Output Power	P_{out}	13	-	23	dBm
Output Power Stability	-	-	-	0.1	dB
Noise Figure	NF	-	5.5	6.0	dB
Pump Leakage	-	-	-	-30	dBm
Isolation (Input/Output)	-	30	-	-	dB
Return Loss (Input/Output)	ORL	55	-	-	dB
Polarization Dependent Gain	PDG	-	-	0.5	dB
Polarization Mode Dispersion	PMD	-	-	0.5	ps



Features

- High output power
- Single or multi pumped
- Low noise figure
- Flexible monitoring interface
- Microprocessor -based alarm & control

Electrical Characteristics

Module

Parameter	Min	Typ	Max	Unit
Power Supply	+4.75	+5	+5.25	V
Power Consumption	-	15	-	W
Electrical Interface	RS232 protocol			-

1U rack mounted

Parameter	Min	Typ	Max	Unit
Power Supply	-	220	-	V(AC)
Power Consumption	-	20	-	W
Electrical Interface	RS485 protocol			-

Absolute Maximum Ratings

Parameter	Min	Typ	Max	Unit
Operating Temperature	-5	25	60	°C
Storage Temperature	-25	25	85	°C
Operating Humidity	0	-	90%	-

Applications

- Long distance CATV system
- CATV head-end and line repeat
- Optical distance network

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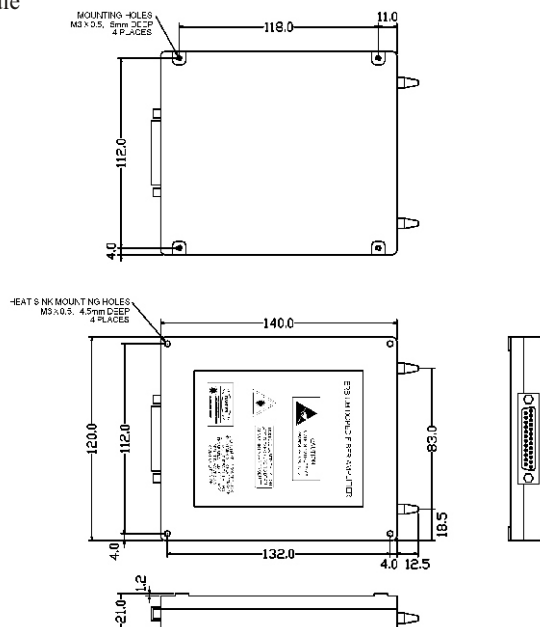
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Pin Descriptions (Module)

Pin #	Name	Function	Other
1	V _{cc}	+5VDC	-
2	V _{cc}	+5VDC	-
3	V _{cc}	+5VDC	-
4	V _{cc}	+5VDC	-
5	NC	Not connect	-
6	NC	Not connect	-
7	EDFA Temp A	EDFA temperature alarm	Option
8	LOP A	Out power low alarm	Normal: 0
9	Pumps Bias A	Pumps bias low alarm	Normal: 0
10	Pumps Temp A	Pumps temperature low alarm	Normal: 0
11	EDFA Shutdown	Close pumps at TTL	1: Off, 0: On
12	V _{cc}	+5VDC	-
13	GND	Ground	-
14	GND	Ground	-
15	GND	Ground	-
16	GND	Ground	-
17	GND	Ground	-
18	RS232 OUT	RS-232 Out at TTL levels	Normal: 0
19	LIP A	In power low alarm	-
20	NC	Not connect	-
21	AMP Disable	Eye safe input at TTL	0: Disable, 1: Enable
22	RS232 IN	RS-232 in at TTL level	-
23	NC	Not connect	-
24	V _{cc}	+5VDC	-
25	GND	Ground	-

Mechanical Outline

Module



1U rack mounted

