Hybrid Raman/EDFA optical amplifier

Product Introduction

Hybrid Raman/EDFA optical amplifier series are mainly used in ultra-long span, large capacity and high rate system to improve the OSNR of the system. Compared with the conventional EDFA systems, the OSNR can be improved 6~7dB; and they can effectively reduce the design cost of system compared with separate Raman systems.

Features

- Respective AGC control for Raman and EDFA
- Rapid transient control
- Apply to different types of fiber: SSMF/G.652,Leaf/G.655,Truewave/G.655
- Large dynamic adjustable range of gain and gain Tilt, dynamical adjustment of gain and gain Tilt for both Raman and EDFA

Applications

- Long-distance optical transmission system，extend relay distance
- upgrade existing systems to 100Gb/s or higher rate

Standards

- Telcordia GR-1312-CORE
- RoHS

Specifications

Parameter	Unit	Min.	Typ.	Max.	Remark
Operation Wavelength	nm	1528		1568	
Input Optical Power	dBm	-35		0	@ pump off
Saturated Output Optical Power	dBm			24	
Gain	dB	13		42	
Noise Figure	dB	0		3.2	The minimum gain of 13dB, the largest noise figure； With the gain becomes larger, noise figure reduces gradually, , noise figure is 0dB in the case of the maximum gain

Transient	Overshoot& undershoot	dB	-1		1	For 20dB Add/drop,
	setting time	us			800	100us signal Fall/Raise time
	gain error	dB			±0.5	
Gain Fluctuation		dB			±0.5	
Size		mm	220×130×20			Without radiator fan
		mm	220×130×30			With radiator fan
Operation Temperature		℃	-10		55	
Power Consumption		W			50	

Ordering Information

HYFA - R-□- E-□-□-□-□-□-□

- Connector：FC SC,LC,MU/UPC,APC
- Fiber length：1:1m、customer specify
- Fiber Dia.：09: φ0.9mm、customer specify
- Output Power: 17:17dBm、customer specify
- EDFA Gain: 25:25dB、15/25: 15~25 adjustable gain range、customer specify
- Operating Wavelength: 40:1528~1562nm、48: 1528~1568nm、customer specify
- Raman Gain: 10:10dB、customer specify