DRA5228/F

C-Band Separate Dispersion Compensation Raman Fiber Amplifier

PRODUCT DESCRIPTION

Erbium-doped optical fiber amplifier (EDFA), because of the ASE and the accumulation of spontaneous radiation noise caused by many cascade connections, will reduce the Signal Noise Ratio (SNR) greatly in system receiving end and thus limit the transmission volume and the non-transceiver distance.

Raman Fiber Amplifier (RFA) utilizes the optic gain in the Stimulated Raman Scattering (SRS) in the optical fiber and realizes the amplification of the signal optic. FRA, with very low equivalent noise and a wide gain scope, can further widen the gain bandwidth by adopting multi-wavelength optical bump, which represents the development direction of the new optical fiber amplifier.

DRA5228/F is a separated optical fiber Raman Amplifier. It adopts built-in negative dispersion DCF as gain medium. In the system, it can realize the concentration amplification of the optical signal. It's especially suitable for over-long trunk that needs high dispersion compensation.

PRODUCT FEATURES

▶Low noise figure and flat gain.
▶High negative-dispersion figure
▶High dispersion compensation
▶High switch gain.
▶Perfect laser APC, AGC, ATC closed-looped circuit ensuring long life and stable operation of the pump laser.
▶Adopts famous Fitel Raman pump laser.
▶Different gain suits for different network.

MAIN APPLICATION

▶Extra-long trunk that needs high dispersion compensation.
▶Fiber CATV system , extra-long trunk that is inconvenient for building relay station.
Relay distance > 60Km.
Single span distance > 80Km.
▶DWDM, CATV extra-long trunk optical transmission system.
▶Submarine optical transmission system.

TECHNICAL INDEX

Performance			Index			Supplement
			Min.	Typ.	Max.	
Optic feature	Wavelength	(nm)	1528		1563	
	Pump optic transmission power	(mW)	400			
	Raman switch gain	(dB)	8			F100
			10			F120
			12			F140
			15			F160
			18			F180
	Gain flatness	(dB)		1.0		
	Noise figure	(dB)			0	
	Polarization mode dispersion	(ps)			0.2	
	Polarization dependence gain	(dB)			0.5	
	Dispersion cost	(ps/nm)	-1700			F100
			-2040			F120
			-2380			F140
			-2720			F160
			-3060			F180
General feature	Work voltage	(V)	90		250	-48VDC optional
	Power Consume	(W)		30		
	Work temp	(℃)	0		60	
	Storage temp	(℃)	-40		+85	
	Relative humidity	(%)	5		95	
	Size (W)×(D)×(H)	(mm)	483×381×89			2U
			483×381×178			4U

Notes: work wavelength and pumping optical power can be tailored according to the customer's request.