Long Period Fiber Grating (LPFG)

Long Period Fiber Grating (LPFG) is formed by the periodic refractive index modulation in the fiber axis, and its period is generally larger than 100µm. Its coupling mechanism is: the fundamental mode of the fiber core transmitted forward is coupled into the cladding mode of the forward transmission of several specific wavelengths, and the cladding mode is quickly lost, so the LPFG basically has no retroreflection, and in its transmission there are several absorption peaks at specific wavelengths in the spectrum.

Key Features

- No reflection type
- Low insertion loss

Applications

- Notch band filter
- GFF for EDFA
- Optical fiber sensing



Specifications

Parameter	Unit	Value
Center Wavelength	nm	C+L
Transmission Loss	%	>90
Bandwidth (FWHM)	nm	1~3
Period	μm	550
LPFG Length	mm	20~30
Tensile Strength	kpsi	>100
Fiber Type		Single-Mode
Fiber Coating		Acrylate
Pigtail Length	m	Standard 1m both ends, or custom
Optical Connector		Bare Fiber, FC/APC, SC/APC, or custom

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