

L-Band Erbium Doped Fibre

YOFC's L-band erbium doped fibre (EDF) is designed to meet the major demand for DWDM optical amplification in L-extended band communication system trunk lines. It provides a high tail-wave gain at 1,627 nm, along with low noise and high reliability in its gain spectrum. Through precise flow and temperature control technology, advanced material composition, and coating design and processing techniques, we have enhanced the stability of the gain spectrum under high phosphorus doping. This results in industry-leading gain spectrum stability within groups of products, between groups of products, and under long-term fibre operating conditions, ensuring consistent performance and reliability for our customers' products.

Features

- Strong consistency; options for high, medium, and low absorption levels
- High long-wavelength gain, high efficiency, low noise, and high reliability in the gain spectrum
- Exceptional resistance to hydrogen damage, with customizable selections based on specific application needs
- Available for L120 band amplification

Applications

- L-band single/multi-channel fibre amplifier
- ASE light source

Specifications

Fibre type	EDFL SC 26/6.1/125	EDFL SC 65/6.1/125	EDFL SC 120/6.1/125
Optical specifications			
Operating wavelength (nm)	1575.0~1617.5	1575.0~1627.0	1575.0~1627.0
Core NA	0.20±0.01	0.20±0.01	0.21±0.01
Absorption @1535nm (dB/m)	26±3	65±8	120±10
Gain difference (%)	≤2	≤2	≤2
Background loss @1200nm (dB/km)	≤35	≤50	≤50
Cutoff (nm)	<1400	<1550	<1550
Mode field diameter@1550nm (μm)	6.1±0.5	6.1±0.5	6.1±0.5
Splice loss (OFS980-16) (dB/joint)	≤0.1	≤0.1	≤0.1
Geometrical and mechanical specifications			
Core diameter (μm)	~4.8	~5.5	~5.5
Cladding diameter (μm)	124.8±0.7	125.0±0.7	124.8±0.7
Cladding noncircularity (%)	≤0.7	≤0.7	≤0.7
Core/Cladding offset (μm)	≤0.3	≤0.3	≤0.3
Coating diameter (μm)	200.0±7.0	200.0±7.0	200.0±7.0
Cladding/Coating offset (μm)	≤6	≤6	≤6
Proof test level (kpsi)	≥100	≥100	≥100
Coating material	High Index Acrylate	High Index Acrylate	High Index Acrylate
Color	Transparent/Black	Transparent/Black	Transparent/Black
Length (m/reel)	≥200	≥200	≥200
Environmental specifications			
Operation temperature (°C)	-5~75	-5~75	-5~75
Standards compliance	ROHS2.0, REACH	ROHS2.0, REACH	ROHS2.0, REACH

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