

Erbium Doped Fibre and Passive Matching Fibre

C-Band Erbium Doped Fibre

YOFC's C-band erbium doped fibre (EDF) is designed for single-channel and multi-channel fibre amplifiers, ASE light sources, optical communication DWDM transmission networks, and CATV networks with optimized EDFA modules. Our C-band EDF features excellent consistency and stability. We offer a range of EDF products with different absorption coefficients and cladding diameters. Through mature process control and rigorous testing methods, we guarantee exceptional performance, including high conversion efficiency, precise shape of the erbium gain spectrum, and excellent lot-to-lot consistency between groups of products. Thus, the EDF products can meet the strict demands of EDFA applications.

Features

- A wide range of doping concentration, various cladding diameter options
- Excellent ion doping uniformity, excellent lot-to-lot consistency between groups of products
- Stable spectrum with minimal deviation to ensure high performance and low noise
- Available for C120 band amplification

Applications

- Single/multi-channel fibre amplifier
- ASE light source

Specifications

Fibre type	EDFC SC 06/6.5/125	EDFC extend SC 07/5.5/125	EDFC SC 09/6.2/125	EDFC SC 18/6.1/125	EDFC SC 30/4.9/125	EDFC SC 30/4.9/80
Optical specifications						
Operating wavelength (nm)	1525~1565	1524~1572	1525~1565	1525~1565	1525~1565	1525~1565
Core NA	0.21±0.02	0.26±0.02	0.21±0.02	0.22±0.01	0.26±0.02	0.26±0.02
Absorption @1530nm (dB/m)	6.5±1.0	7.0±1.0	9.0±1.0	18.0±2.0	30.0±3.0	30.0±3.0
Background loss @1200nm (dB/km)	≤10	≤15	≤10	≤15	≤15	≤15
Cutoff (nm)	800~1000	1000~1350	800~1000	900~970	1200~1320	1200~1320
Mode field diameter@1550nm (μm)	6.2±0.7	5.5±1.0	6.2±0.7	6.1±0.5	4.9±0.7	4.9±0.7
PMD (ps/m)	≤0.002	≤0.002	≤0.002	/	≤0.002	≤0.002
Splice loss (OFS980-16) (dB/joint)	≤0.1	≤0.1	≤0.1	≤0.1	≤0.1	≤0.1
Geometrical and mechanical specifications						
Core diameter (μm)	~5.5	~4.0	~5.5	~3.2	~4.0	~4.0
Cladding diameter (μm)	124.8±0.7	124.8±0.7	124.8±0.7	124.8±0.7	124.8±0.7	80.0±0.7
Cladding noncircularity (%)	≤0.7	≤0.7	≤0.7	≤0.7	≤0.7	≤0.7
Core/Cladding offset (μm)	≤0.3	≤0.3	≤0.3	≤0.3	≤0.3	≤0.3
Coating diameter (μm)	245.0±10.0	245.0±10.0	245.0±10.0	245.0±10.0	245.0±10.0	165.0±5.0
Cladding/Coating offset (μm)	≤6	≤6	≤6	≤6	≤6	≤6
Proof test level (kpsi)	≥100	≥100	≥100	≥100	≥100	≥100
Coating material	High Index Acrylate	High Index Acrylate	High Index Acrylate	High Index Acrylate	High Index Acrylate	High Index Acrylate
Color	Transparent	Transparent	Transparent	Transparent	Transparent	Transparent
Length (m/reel)	≥200	≥200	≥200	≥200	≥200	≥200
Environmental specifications						
Operation temperature (°C)	-5~75	-5~75	-5~75	-5~75	-5~75	-5~75
Standards compliance	ROHS2.0, REACH	ROHS2.0, REACH	ROHS2.0, REACH	ROHS2.0, REACH	ROHS2.0, REACH	ROHS2.0, REACH

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