Erbium Doped Fibre (EDF)

YOFC offers full series of erbium doped fibres, which could meet the most stringent amplifier requirements both for C-band and L-band. Through 1480nm or 980nm pump technology, YOFC erbium doped fibre can realize 35nm amplification bandwidth, and maintain flat gain as well as ideal power conversion efficiency. YOFC erbium doped fibres is specially designed for high performance, low noise requirements amplifier, for example, optical preamplifier, booster and in-line amplifier in the WDM communication system. YOFC erbium doped fibre has been optimized through erbium and aluminum codoping technology to ensure the high performance.

Characteristics

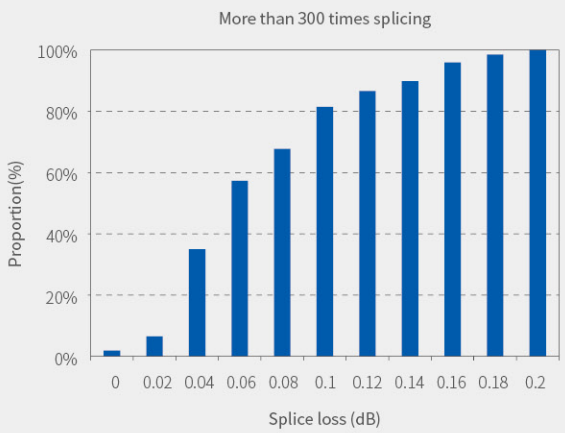
- Excellent spectral uniformity
- High power conversion efficiency and low noise design
- Industry leading fibre geometry
- Low PMD
- DLPC9 dual-layer coating to ensure excellent mechanical properties
- Excellent performance of hydrogen resistance
- Lower splice loss

Applications

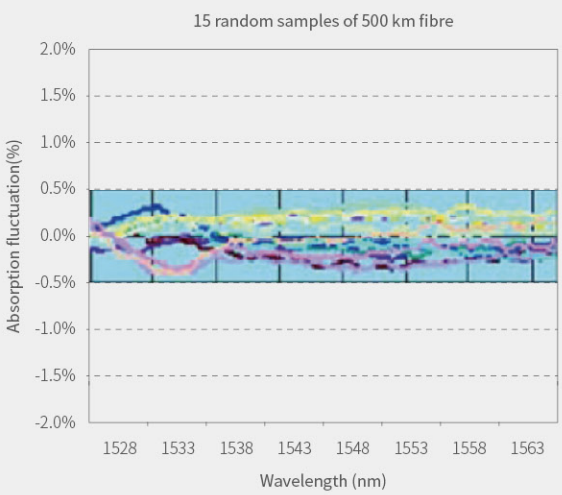
For the Telecommunication Industry

- DWDM amplifiers
- CATV amplifiers
- 980nm or 1480nm pump
- Terrestrial and submarine telecommunications
- Aerospace

Excellent Splicing Performance



Absorption Reproducibility (+/- 0.3% in the C Band)



Specifications

Fibre Type	EDF3/6/125-23	EDF7/6/125-23	EDF13/6/125-23	EDF22/6/125-23	EDF36/6/125-23
Part No.	ED1011-A	ED1012-A	ED1013-A	ED1015-A	ED1016-A
Application	C Band	C Band	C & L Band	C & L Band	C & L Band
Optical Properties					
Absorption Peak 1529nm (Max.[1528 - 1532nm]) Specified Value (dB/m)*①	3.0 - 4.0	6.0 - 9.0	10.0 - 15.0	20.0 - 24.0	33.0 - 39.0
Absorption Peak 1529nm (Max.[1528 - 1532nm]) Typical (dB/m)*①	3.5	7.0	13.0	20.0	36.0
Absorption Reproducibility (%)(250m)	⩽ 2.5	⩽ 2.5	⩽ 3.0	⩽ 3.0	⩽ 3.0
Background Attenuation (Min.[1100 - 1300 nm])(dB/km)	⩽ 10	⩽ 10	⩽ 10	⩽ 10	⩽ 10
Macro-bend Induced Attenuation (dB) (2 m, 15 mm diameter, λ< 1625 nm)(dB)	⩽ 0.1	⩽ 0.1	⩽ 0.1	⩽ 0.1	⩽ 0.1
Cutoff Wavelength (nm)*②	⩽ 980	⩽ 1300	⩽ 1300	⩽ 1300	⩽ 1300
MFD 1550 nm (μm)*③	5.4 - 6.0	4.7 - 6.1	5.2 - 6.0	5.1 - 5.9	5.1 - 5.9
NA	0.21 - 0.25	0.21 - 0.25	0.21 - 0.25	0.21 - 0.25	0.21 - 0.25
Splicing Loss (with G.652 at 1300 & 1700 nm)(dB)	⩽ 0.2	⩽ 0.2	⩽ 0.2	⩽ 0.2	⩽ 0.2
PMD (fs/m)	⩽ 15	⩽ 15	⩽ 15	⩽ 15	⩽ 15
Geometrical Properties					
Cladding Diameter (μm)	125.0 ± 2.0	125.0 ± 2.0	125.0 ± 2.0	125.0 ± 2.0	125.0 ± 2.0
Coating Diameter (μm)	250.0 ± 15.0	250.0 ± 15.0	250.0 ± 15.0	250.0 ± 15.0	250.0 ± 15.0
Core/Cladding Concentricity (μm)	⩽ 0.6	⩽ 0.6	⩽ 0.6	⩽ 0.6	⩽ 0.6
Cladding/Coating Concentricity (μm)	⩽ 12.5	⩽ 12.5	⩽ 12.5	⩽ 12.5	⩽ 12.5
Mechanical Properties					
Proof Test (kpsi)	150	150	150	150	150
Delivery Length (± 5 m)(m)	250, 500, 1000	250, 500, 1000	250, 500, 1000	250, 500, 1000	250, 500, 1000
Environmental Properties					
Storage Temperature (°C)	-40 to +85	-40 to +85	-40 to +85	-40 to +85	-40 to +85
Operating Temperature Range (°C)	-5 to +75	-5 to +75	-5 to +75	-5 to +75	-5 to +75
Storage Humidity (Non Condensing)(%)	5 - 95	5 - 95	5 - 95	5 - 95	5 - 95
Operating Humidity (Non Condensing)(%)	5 - 95	5 - 95	5 - 95	5 - 95	5 - 95

①Other values available on request
②Cutoff wavelength below 980 nm on request
③Larger MFD about ED1012-A on request

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