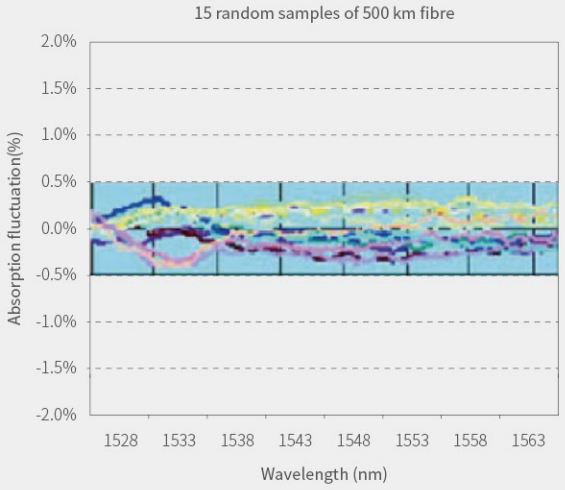
Erbium Doped Fibre (EDF)

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 flatness gain to get ideal power conversion efficiency. YOFC erbium doped fibres are 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 co-doping with Erbium and Aluminum technology to ensure the high quality performance.

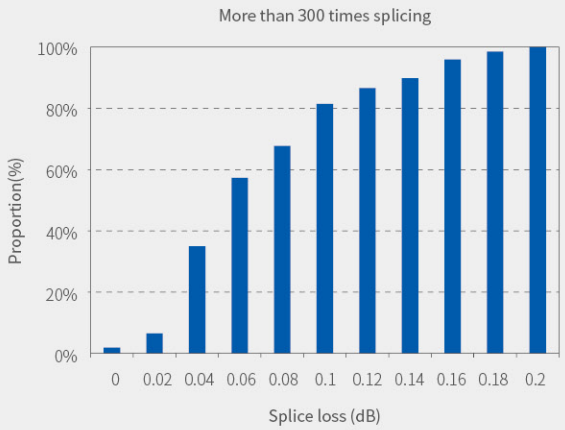
Absorption Reproducibility (+/- 0.3% in the C Band)



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
- Good performance of anti-hydrogen loss
- Lower splice loss

Excellent Splicing Performance



Application

For the Telecommunication Industry

- DWDM amplifiers
- CATV amplifiers
- 980nm or 1480nm pumps
- Terrestrial and Submarine telecommunications
- Defense/Military/Aerospace

Products

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
Absorption Peak Coefficient at 1532 nm (Max. [1530 – 1534 nm])					
Specified Value	2~4 dB/m	4~9 dB/m	10~15 dB/m	19~25 dB/m	32~40 dB/m
Typical	3 dB/m	7 dB/m	13 dB/m	22 dB/m	36 dB/m
Application	C Band	C Band	C & L Band	C & L Band	C & L 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
Optical Properties					
*Absorption Peak 1532nm (Max.[1530~1534 nm]) Specified Value (dB/m)	2 ~ 4	4 ~ 9	10 ~ 15	19 ~ 25	32 - 40
*Absorption Peak 1532nm (Max.[1530~1534 nm]) Typical (dB/m)	3	7	13	22	36
Absorption Reproducibility (%) (250m)	⩽ 2.5	⩽ 2.5	⩽ 2.5	⩽ 2.5	⩽ 2.5
Background Attenuation(Min.[1100~1300 nm]) (dB/km)	⩽ 10	⩽ 10	⩽ 10	⩽ 10	⩽ 10
Background Attenuation(Min.[1100~1300 nm]) Typical (dB/km)	⩽ 6	⩽ 6	⩽ 6	⩽ 6	⩽ 6
Macro-bend Induced Attenuation (100 m, 15 mm diameter, λ< 1620 nm) (dB)	⩽ 0.1	⩽ 0.1	⩽ 0.1	⩽ 0.1	⩽ 0.1
*Cutoff Wavelength (nm)	⩽ 1300	⩽ 1300	⩽ 1300	⩽ 1300	⩽ 1300
*MFD 1550 nm (μm)	5.4 ± 0.7	5.4 ± 0.7	5.4 ± 0.7	5.4 ± 0.7	5.4 ± 0.7
NA	0.23 ± 0.02	0.23 ± 0.02	0.23 ± 0.02	0.23 ± 0.02	0.23 ± 0.02
Splicing Loss (with G.652 at 1300 & 1700 nm) (dB)	⩽ 0.2	⩽ 0.2	⩽ 0.2	⩽ 0.2	⩽ 0.2
PMD (100 m) (ps)	⩽ 0.25	⩽ 0.25	⩽ 0.25	⩽ 0.25	⩽ 0.25
Geometrical Properties					
Cladding Diameter (μm)	125.0±1.0	125.0±1.0	125.0±1.0	125.0±1.0	125.0±1.0
Coating Diameter (μm)	250.0±7.0	250.0±7.0	250.0±7.0	250.0±7.0	250.0±7.0
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)	100	100	100	100	100
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~+75	-40~+75	-40~+75	-40~+75	-40~+75
Operating Temperature Range (°C)	-5~ +75	-5~ +75	-5~ +75	-5~ +75	-5~ +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

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