

Radiation-Resistant Erbium-Ytterbium Co-Doped/ Polarization-Maintaining Erbium-Ytterbium Co-Doped Fibre

YOFC's radiation-resistant erbium-ytterbium co-doped fibre/polarization-maintaining erbium-ytterbium co-doped fibre has numerous advantages, such as long service life, high pump to signal conversion efficiency, and excellent radiation resistance, making it an ideal choice for optical fibre amplifiers used in long-term space satellite communications.

Features

- Optimized for enhanced optical and mechanical tolerances
- Excellent radiation resistance
- Guarantees long-term reliability

Applications

- Optical fibre laser
- Satellite communications

Specifications

Fibre type	EYDF DC SM 10/125RD	PM EYDF DC 10/125RD
Optical specifications		
Operating wavelength (nm)	1530~1625	1530~1625
Core NA	0.12±0.02	0.22±0.02
First cladding NA	≥ 0.46	≥ 0.46
Cladding absorption@915nm (dB/m)	3.0±0.5	3.0±0.5
Core absorption@1535nm (dB/m)	70.0±15.0	55.0±35.0
Cladding attenuation@1095nm (dB/km)	≤ 30	≤ 30
Birefringence	/	≥ 1.5×10 ⁻⁴
Geometrical and mechanical specifications		
Core diameter (μm)	10.0±1.0	10.0±1.0
Cladding diameter (μm)	125.0±3.0	125.0±3.0
Core/Cladding offset (μm)	≤ 1.5	≤ 1.5
Coating diameter (μm)	245.0±10.0	245.0±10.0
Proof test level (kpsi)	≥ 100	≥ 100
Coating material	Low Index Acrylate	Low Index Acrylate
Environmental specifications		
RICV@1550nm (dB/krad)	≤ 0.03	≤ 0.03
Operating temperature (°C)	-40 ~ 85	-40 ~ 85
Standards compliance	ROHS2.0, REACH	ROHS2.0, REACH

- 0100011 Version No. 202506