

DCF-EY-6/128

Erbium/Ytterbium co-doped double-clad fiber



This Erbium/Ytterbium co-doped fiber offers a high doping concentration and efficient energy transfer for operation in the 1.5 μm region. As this fiber allows single-mode operation and provides excellent beam quality, it is ideal for the design of low-power optical amplifiers used in various markets such as CATV in telecom or low-power LiDAR.

Features & Benefits

- Single-mode operation – provides excellent beam quality
- High doping concentration – provides highly efficient energy transfer, minimizing pump power requirements
- Optimized Er/Yb core composition – reduces 1 μm parasitic emission

Applications

- High-power telecom amplifiers
- Low-power fiber lasers and optical amplifiers
- Sensing: LiDAR

Related Products

- [DCF-UN-8/125-14](#)
Matched double-clad passive fiber
- [SCF-UN-8/125-14](#)
Matched single-clad passive fiber

Specifications

Optical

| | |
|--|-----------------|
| Cladding Absorption @ 915 nm (dB/m) | 0.90 \pm 0.15 |
| Core Absorption @ 1535 nm - Nominal (dB/m) | 60 \pm 10 |
| Numerical Aperture - Core | 0.2 \pm 0.02 |
| Numerical Aperture - Cladding | > 0.45 |
| Cutoff Wavelength (nm) | 1400 \pm 80 |
| Background Loss @ 1200 nm (dB/km) | < 250 |
| Mode Field Diameter (μm) | 6.5 \pm 0.8 |

Geometrical & Mechanical

| | |
|---|---------------|
| Core Diameter (μm) | 5.5 \pm 0.5 |
| Cladding Diameter (μm) | 128 \pm 3 |
| Core/Cladding Concentricity Error (μm) | < 1.0 |
| Cladding Geometry | Octagonal |
| Coating Diameter (μm) | 260 \pm 20 |
| Proof Test (kpsi) | \geq 100 |

ISO 9001:2015 certified quality system | RoHS and REACH compliant.
All specifications are subject to change without notice. Reference: 101-10-0574.R1