

DCF-EY-6/105/125-21/22-HTA

All-Glass Erbium/Ytterbium co-doped double-clad fiber



This Erbium/Ytterbium co-doped fiber offers single-mode operation for excellent beam quality, and its core composition is expertly designed for efficient pump energy conversion in 1.5 μm fiber lasers and amplifiers. Featuring an all-glass design and a high-temperature resistant coating, this fiber is made for the rigorous environmental requirements of the automotive industry and other demanding applications.

Features & Benefits

- High-temperature resistant coating
- All-glass second cladding design - free of low index polymer
- High energy conversion
- Optimized Er/Yb core composition - reduces 1 μm parasitic emission

Applications

- Eye-safe fiber lasers and amplifiers for LIDAR
- Space communications
- High-power telecom amplifiers
- Industrial and harsh environment laser sensing

Related Products

- [DCF-UN-6/105/125-21/22-HTA](#)
Matched all-glass double-clad passive fiber

Spécifications

Optical

Cladding Absorption @ 915 nm (dB/m)	1.2 \pm 0.2
Core Absorption @ 1535 nm (dB/m)	75 \pm 20
Numerical Aperture - Core (Typical)	0.21
Numerical Aperture - Cladding (Typical)	0.23 \pm 0.01
Cutoff Wavelength (nm)	1385 \pm 95
Mode Field Diameter @ 1550 nm (μm)	6.0 \pm 0.4

Geometrical & Mechanical

Core Diameter (Typical) (μm)	5.5
Cladding Diameter - Flat-To-Flat (μm)	105 \pm 5
Outer Cladding Diameter (μm)	125 \pm 2
Core/Cladding Concentricity Error (μm)	\leq 0.8
Cladding Geometry	Octagonal
Coating Diameter (μm)	245 \pm 15
Proof Test (kpsi)	\geq 100

Environmental

Operating Non-Condensing Humidity (%)	5 - 85
Operating Temperature ($^{\circ}\text{C}$)	0 to +150
Storage Non-Condensing Humidity (%)	5 - 85
Storage Temperature ($^{\circ}\text{C}$)	-40 to +150