



DCF-EY-12/130H

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. It also provides high pump absorption while maintaining a good beam quality. These features make this fiber ideal for the design of high peak power eye-safe fiber lasers and amplifiers used in sensing applications such as LiDAR

Features & Benefits

- High doping concentration – provides highly efficient energy transfer, minimizing pump power requirements
- High absorption – minimizes fiber length and reduces nonlinearities
- Optimized Er/Yb core composition – reduces 1 μm parasitic emission

Applications

- Eye-safe fiber lasers and amplifiers
- Sensing: LiDAR and spectroscopy

Related Products

- DCF-UN-8/125-14
Matched double-clad fiber
- SCF-UN-8/125-14
Matched single-clad fiber

Specifications

Optical

Cladding Absorption @ 915 nm (dB/m)	3.2 \pm 0.6
Core Absorption @ 1535 nm (dB/m)	80 \pm 25
Numerical Aperture - Cladding	Min 0.46
Numerical Aperture - Core	0.2 \pm 0.02

Geometrical & Mechanical

Cladding diameter (μm)	130 \pm 3
Cladding geometry	Oct.
Coating Diameter (μm)	260 \pm 15
Core Diameter (μm)	12 \pm 1
Core/Cladding Concentricity Error (μm)	\leq 1
Proof Test (kpsi)	\geq 100

Environmental

Storage Temperature ($^{\circ}\text{C}$)	-40 to +85
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