



# 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  $\mu\text{m}$  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  $\mu\text{m}$  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)	0.9 $\pm$ 0.15
Core Absorption @ 1535 nm (dB/m)	60 $\pm$ 10
Cutoff Wavelength (nm)	1400 $\pm$ 80
MFD @ 1550nm ( $\mu\text{m}$ )	6.5 $\pm$ 0.8
Numerical Aperture - Cladding	Min 0.46

#### Geometrical & Mechanical

Cladding diameter ( $\mu\text{m}$ )	128 $\pm$ 3
Cladding geometry	Oct.
Coating Diameter ( $\mu\text{m}$ )	260 $\pm$ 20
Core/Cladding Concentricity Error ( $\mu\text{m}$ )	$\leq$ 1
Proof Test (kpsi)	$\geq$ 100

#### Environmental

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