

# DCF-EY-6/128-PM

Polarization-maintaining erbium/ytterbium co-doped fiber



This PM Erbium/Ytterbium co-doped fiber offers a high doping concentration and efficient energy transfer for operation in the 1.5  $\mu\text{m}$  region ensuring minimum fiber length and minimum pump power. As this polarization maintaining fiber allows single-mode operation and provides excellent beam quality, it is ideal for the design of low power fiber lasers and amplifiers used in various markets such as LiDAR.

## Features & Benefits

- Single-mode operation - provides excellent beam quality
- Highly efficient energy transfer - reduces pump power requirements
- Low splice losses with industry-standard PM1550 fibers
- Optimized Er/Yb core composition - reduces 1  $\mu\text{m}$  parasitic emission

## Applications

- Ultrafast 1.5  $\mu\text{m}$  fiber lasers
- Eye-safe fiber lasers and amplifiers
- LiDAR
- Scientific

## Related Products

- [DCF-UN-8/125-14-PM](#)  
Matched double-clad passive fiber
- [SCF-UN-8/125-14-PM](#)  
Matched single-clad passive fiber
- [DCF-EY-6/128](#)  
Non-PM version

## Specifications

### Optical

Cladding Absorption @ 915 nm (dB/m)	0.70 $\pm$ 0.15
Core Absorption @ 1535 nm - Nominal (dB/m)	60 $\pm$ 0.8
Numerical Aperture - Core	0.2 $\pm$ 0.02
Numerical Aperture - Cladding	> 0.45
Cutoff Wavelength (nm)	1400 $\pm$ 80
Mode Field Diameter @ 1550 nm ( $\mu\text{m}$ )	6.5 $\pm$ 0.8
Birefringence	$\geq$ 1.2E-04

### Geometrical & Mechanical

Core Diameter ( $\mu\text{m}$ )	5.5 $\pm$ 0.5
Cladding Diameter ( $\mu\text{m}$ )	128 $\pm$ 3
Core/Cladding Concentricity Error ( $\mu\text{m}$ )	< 1.0
Cladding Geometry	Round
Coating Diameter ( $\mu\text{m}$ )	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: 101-10-0690.R1