

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 μm 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 μm parasitic emission

Applications

- Ultrafast 1.5 μm 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

Specifications

Optical

Cladding Absorption @ 915 nm (dB/m)	0.7 ± 0.15
Core Absorption @ 1535 nm (dB/m)	60 ± 10
Cutoff Wavelength (nm)	1400 ± 80
MFD @ 1550nm (μm)	6.5 ± 0.8
Numerical Aperture - Cladding	Min 0.45
Polarization Cross Talk (L=10m)	≤ -25

Geometrical & Mechanical

Cladding diameter (μm)	128 ± 3
Cladding geometry	Octagonal
Coating Diameter (μm)	260 ± 20
Core Ovality (%)	≤ 15
Core/Cladding Concentricity Error (μm)	≤ 1
Proof Test (kpsi)	≤ 100

Environmental

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