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 μ 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 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 Non-PM version

Specifications

Optical	
Cladding Absorption @ 915 nm (dB/m)	0.70 ± 0.15
Core Absorption @ 1535 nm - Nominal (dB/m)	60 ± 10
Numerical Aperture - Core	0.2 ± 0.02
Numerical Aperture - Cladding	> 0.45
Cutoff Wavelength (nm)	1400 ± 80
Mode Field Diameter @ 1550 nm (µm)	6.5 ± 0.8
Birefringence	≥ 1.2E-04

Geometrical & Mechanical

Core Diameter (µm)	5.5 ± 0.5
Cladding Diameter (µm)	128 ± 3
Core/Cladding Concentricity Error (µm)	< 1.0
Cladding Geometry	Round
Coating Diameter (µm)	260 ± 20
Proof Test (kpsi)	≥ 100