

ER50-7-PM

Polarization-maintaining erbium-doped fiber

This Erbium-doped single-clad PM fiber features a high absorption and high birefringence that make this product the ideal solution for the design of eye-safe PM fiber lasers and amplifiers for a wide range of 1.5 μm applications.

Features & Benefits

- High absorption– reduces nonlinear effects
- High birefringence – minimizes stress
- Provides highly efficient energy transfer, minimizing pump power requirements
- Low background losses

Applications

- Ultrafast fiber lasers & amplifiers
- LiDAR
- Second Harmonic Generation
- Medical
- Scientific

Specifications

Optical

Background Loss @1200 nm (dB/km)	≤ 10
Birefringence (x10E-04)	≥ 1.4
Core Absorption @ 1530 nm (dB/m)	50 ± 5
Cutoff Wavelength (nm)	1450 ± 50
MFD @ 1550nm (μm)	6.5 ± 0.5
Numerical Aperture - Core	Typ 0.21

Geometrical & Mechanical

Cladding diameter (μm)	125 ± 2
Coating Diameter (μm)	245 ± 10
Core/Cladding Concentricity Error (μm)	≤ 1
Proof Test (kpsi)	≤ 100

Environmental

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