ER50-7

Erbium-doped single-clad fiber

This Er-doped single-clad fiber features a high absorption, which is ideal for the design of multi-stage erbium amplifiers with minimal nonlinear effects. Its high quantum efficiency helps minimize the pump power requirements, making this fiber the recommended choice for fiber lasers in a broad range of applications.

Features & Benefits

- High absorption
- Low background losses
- High doping concentration-provides highly efficient energy transfer, minimizing pump power requirements
- Low splice loss

Applications

- Pre-amp stage of erbium-doped fiber lasers & amplifiers
- Sensing & spectroscopy
- Scientific

Related Products

- ER50-7 PM version

Specifications

Optical

Background Loss @1200 nm (dB/km)	<= 10
Core Absorption @ 1530 nm (dB/m)	50 ± 5
Cutoff Wavelength (nm)	1375 ± 125
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 (°C)	-40 to +85