DCF-EY-10/128P

Erbium/Ytterbium co-doped double-clad fiber

This single mode Erbium/Ytterbium co-doped fiber is specially designed for applications in the 1.5 µm, where great optical efficiency and signal-to-noise ratio are required. With high absorption and optimal beam quality, this product is an excellent choice for the design of high-power optical amplifiers used in the fields of LIDAR (automotive or industrial) and space communications.

Features & Benefits

- Strictly single mode operation at 1.5 µm range
- High absorption – minimizes fiber length and reduces nonlinearities
- High optical efficiency
- Optimized Er/Yb core– high OSNR at 1.5 µm and reduced 1 µm emission

Applications

- High-power 1.5 µm pulsed and CW amplifiers
- LIDAR
- Space communications

Related Products

- DCF-UN-8/125-10
  Matched passive double-clad fiber

Specifications

Optical

Mode Field Diameter @ 1550 nm (µm)	12.5 ± 1.0
Cutoff Wavelength (nm)	< 1480
Cladding Absorption @ 915 nm (dB/m)	2.9 ± 0.6
Core Absorption @ 1535 nm - Nominal (dB/m)	65 ± 25
Numerical Aperture - Core (Typical)	0.10
Numerical Aperture - Cladding	> 45
Background Loss @ 1200 nm (dB/km)	< 20

Geometrical & Mechanical

Core Diameter (µm)	10 ± 1
Cladding Diameter (µm)	128 ± 3
Core/Cladding Concentricity Error (µm)	< 1.0
Cladding Geometry	Octogonal
Coating Diameter (µm)	260 ± 15
Proof Test (kpsi)	≥ 100