DCF-EY-16/250P

Erbium/Ytterbium co-doped double-clad fiber



As LiDAR applications head towards longer detection distances, higher power is required. The DCF-EY-16/250P features a large mode area, high doping concentration and high slope efficiency, which makes it ideal for the design of high-power/peak power fiber lasers and amplifiers.

Features & Benefits

- High doping concentration provides highly efficient energy transfer, minimizing pump power requirements
- Large mode area and high absorption minimize fiber length and reduce nonlinearities
- High slope efficiency
- Optimized Er/Yb core composition reduces 1 µm parasitic emission

Applications

- High-power fiber lasers and amplifiers
 @ 1.5 µm
- · Sensing: LiDAR and spectroscopy
- Defense

Specifications

Optical	
Cladding Absorption @ 915 nm (dB/m)	1.75 ± 0.25
Core Absorption @ 1535 nm - Nominal (dB/m)	65 ± 15
Numerical Aperture – Core	0.11 ± 0.01
Numerical Aperture - Cladding	> 0.45
Background Loss @ 1200 nm (dB/km)	< 250

Geometrical & Mechanical

Core Diameter (µm)	16 ± 1
Cladding Diameter (µm)	250 ± 5
Core/Cladding Concentricity Error (µm)	< 2.5
Cladding Geometry	Octogonal
Coating Diameter (µm)	375 ± 20
Proof Test (kpsi)	≥ 100