

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 \pm 0.25
Core Absorption @ 1535 nm (dB/m)	65 \pm 15
Numerical Aperture - Cladding	Min 0.45
Numerical Aperture - Core	0.11 \pm 0.01

Geometrical & Mechanical

Cladding diameter (μm)	250 \pm 5
Cladding geometry	Oct.
Coating Diameter (μm)	375 \pm 20
Core Diameter (μm)	16 \pm 1
Core Ovality (%)	\leq 8
Core/Cladding Concentricity Error (μm)	\leq 2.5
Proof Test (kpsi)	\geq 100

Environmental

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