



DCF-YB-10/125E-PM

Polarization-maintaining ytterbium-doped fiber

The DCF-YB-10/125E-PM Yb double-clad fiber has been designed to address the ultrafast laser market where high birefringence and high pump absorption are required. This fiber also shows excellent beam quality and batch-to-batch consistency, which is ideal for high-volume production of pulsed fiber lasers for different applications.

Features & Benefits

- Highly effective pump absorption – allows fiber length reduction and nonlinear effect mitigation
- Very low photodarkening at high power – ensures stable long-term operation
- High birefringence – minimizes stress
- Excellent beam quality – efficient fiber laser

Applications

- Ultrafast fiber lasers
- Pulsed fiber lasers & amplifiers
- Material processing
- Second Harmonic Generation

Related Products

- DCF-UN-10/125-08-PM
Matched PM passive double-clad fiber
- DCF-YB-10/128E
Non-PM Yb-doped fiber

Specifications

Optical

Background Loss @1200 nm (dB/km)	≤ 50
Birefringence (x10E-04)	≥ 3
Cladding Absorption @ 915 nm (dB/m)	1.3 ± 0.25
Numerical Aperture - Cladding	Min 0.45
Numerical Aperture - Core	0.075 ± 0.005

Geometrical & Mechanical

Cladding diameter (µm)	125 ± 2
Cladding geometry	Circ.
Coating Diameter (µm)	245 ± 15
Core Diameter (µm)	11 ± 0.5
Core/Cladding Concentricity Error (µm)	≤ 1
Proof Test (kpsi)	≤ 100

Environmental

Storage Temperature (°C)	-40 to +85
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