

DCF-YB-6/128S-PM

Polarization-maintaining ytterbium-doped fiber



The DCF-YB-6/128S-PM offers excellent photodarkening resistance performance ensuring high reliability and long-term stability. This PM fiber is designed for single-mode operation and shows high absorption and high birefringence, which are ideal for the design of ultrafast or frequency-doubled fiber lasers.

Features & Benefits

- Single-mode operation for excellent beam quality
- Very low photodarkening at high power – ensures stable long-term operation
- High birefringence – minimizes stress
- High efficiency – reduces pump power requirements

Applications

- Ultrafast pulsed fiber lasers
- Pulsed lasers and amplifiers
- Material processing
- Second Harmonic Generation
- Scientific

Related Products

- DCF-UN-6/125-14-PM
Matched double-clad passive fiber
- DCF-YB-6/128S
Non-PM Yb-doped version

Specifications

Optical

Background Loss @1100 nm (dB/km)	≤ 15
Background Loss @1200 nm (dB/km)	≤ 10
Birefringence (x10E-04)	≥ 2.2
Cladding Absorption @ 915 nm (dB/m)	0.6 ± 0.15
Cutoff Wavelength (nm)	950 ± 100
Numerical Aperture - Cladding	Min 0.46
Numerical Aperture - Core	Typ. 0.13

Geometrical & Mechanical

Cladding diameter (μm)	128 ± 3
Cladding geometry	Circ.
Coating Diameter (μm)	260 ± 20
Core Diameter (μm)	Typ. 6.0
Core/Cladding Concentricity Error (μm)	≤ 1
MFD @ 1060nm (μm)	6 ± 1
Proof Test (kpsi)	≤ 100

Environmental

Storage Temperature (°C)	-40 to +85
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