

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

Cladding Absorption @ 915 nm (dB/m)	0.60 ± 0.15
Cladding Absorption @ 975 nm - Nominal (dB/m)	2.4
Numerical Aperture - Core (Typical)	0.13
Numerical Aperture - Cladding	> 0.45
Cutoff Wavelength (nm)	950 ± 100
Birefringence	≥ 2.2E-04
Mode Field Diameter @ 1060 nm (µm)	6.0 ± 1.0
Background Loss @ 1200 nm (dB/km)	< 10

Geometrical & Mechanical

Core Diameter (µm)	6.0 ± 1.0
Cladding Diameter (µm)	128 ± 3
Core/Cladding Concentricity Error (µm)	< 1.0
Cladding Geometry	Round
Coating Diameter (µm)	260 ± 20
Proof Test (kpsi)	≥ 100