

DCF-YB-7/128-FHA

Yb-doped fiber for pulsed lasers



This phosphosilicate fiber is ideal as a gain medium for lower power amplifiers or the pre-amplifier stage and is mainly used in a MOPA configuration of a pulsed fiber laser. On top of all the benefits found in a phosphosilicate fiber (high saturation energy, photodarkening-free performance and high absorption), this fiber shows easy single-mode operation and very low splice loss when matching with standard fibers such as HI 1060.

Features & Benefits

- Easy single-mode operation and low splice loss with passive matching fibers
- **Photodarkening-free** – ensures stable long-term operation
- Wide, flat absorption from 910 nm to 970 nm – reduces pump cooling requirements and allows 940-960 nm pumping

Applications

- Pulsed fiber lasers: gain media in pre-amplifiers or low power amplifiers
- Material processing: laser marking, laser engraving, micromachining and welding

Related Products

- **DCF-UN-6/125-14**
Matched double-clad fiber
- **HI 1060**
Industry-standard optical fiber

Specifications

Optical

Cladding Absorption @ 915 nm (dB/m)	1.3 ± 0.2
Cladding Absorption @ 975 nm - Nominal (dB/m)	7.8
Numerical Aperture - Core	0.19 ± 0.02
Numerical Aperture - Cladding	> 0.45

Geometrical & Mechanical

Core Diameter (µm)	7 ± 1
Cladding Diameter (µm)	128 ± 3
Core/Cladding Concentricity Error (µm)	< 1
Cladding Geometry	Octogonal
Coating Diameter (µm)	260 ± 20
Proof Test (kpsi)	≥ 100

ISO 9001:2015 certified quality system | RoHS and REACH compliant.
All specifications are subject to change without notice. Reference: 101-10-0575.R1