



DCF-YB-7/128-FHA

Yb-doped fiber for pulsed lasers

This phosphosilicate fiber is the high absorption version of our DCF-YB-7/128-FA product. It 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 singlemode 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 preamplifiers 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
Numerical Aperture - Cladding	Min 0.45
Numerical Aperture - Core	0.19 ± 0.02

Geometrical & Mechanical

Cladding diameter (µm)	128 ± 3
Cladding geometry	Oct.
Coating Diameter (µm)	260 ± 20
Core Diameter (µm)	7 ± 1
Core/Cladding Concentricity Error (µm)	≤ 1
Proof Test (kpsi)	≤ 100

Environmental

Storage Temperature (°C)	-40 to +85
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