



DCF-YB-12/128P-FA

Yb-doped fiber for pulsed lasers

This phosphosilicate Yb-doped double-clad fiber offers high doping concentrations and high QCE values that ensure minimum fiber length, minimum pump power and reduced non-linearities. With all the benefits that phosphosilicate fibers have to offer, such as high energy saturation and no photodarkening, it is the perfect solution for a wide range of demanding pulsed laser and amplifier applications in the industrial and medical markets.

Features & Benefits

- Large core diameter with high pump absorption – allows a shorter fiber length for a more compact and less expensive design while reducing non-linear effects
- 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
- Low splice loss with standard fiber such as HI 1060

Applications

- Pulsed fiber lasers: gain media in preamplifiers or low power amplifiers for MOPA configuration
- Material processing: laser marking, laser engraving, micromachining and welding
- Medical

Related Products

- SCF-UN-10/125-080
Matched passive single-clad fiber
- DCF-UN-10/125-080
Matched passive double-clad fiber

Specifications

Optical

Cladding Absorption @ 915 nm (dB/m)	3 ± 0.5
Numerical Aperture - Cladding	Min 0.45
Numerical Aperture - Core	0.08 ± 0.01

Geometrical & Mechanical

Cladding diameter (µm)	128 ± 3
Cladding geometry	Octagonal
Coating Diameter (µm)	260 ± 20
Core Diameter (µm)	12 ± 1
Core/Cladding Concentricity Error (µm)	≤ 1.3
Proof Test (kpsi)	≤ 100

Environmental

Storage Temperature (°C)	-40 to +85
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