

DCF-YB-20/128P-08-FA-G2

Yb-doped fiber for pulsed lasers



This phosphosilicate Yb-doped double-clad fiber features high and flattened pump absorption with photodarkening-free performance. This fiber is the ideal solution for a wide range of demanding high peak power pulsed fiber 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
- Batch-to-batch consistency in beam quality performance

Applications

- High-energy / high peak power pulsed lasers & amplifiers for MOPA configuration
- Laser marking and engraving
- Medical

Related Products

- SCF-UN-20/125-100
Matched passive single-clad fiber
- DCF-UN-20/125-100
Matched passive double-clad fiber

Specifications

Optical

Background Loss @1200 nm (dB/km)	≤ 100
Cladding Absorption @ 915 nm (dB/m)	5 ± 0.5
Cladding Absorption @ 974 nm (dB/m)	Typ. 30
Numerical Aperture - Cladding	Min 0.45
Numerical Aperture - Core	0.08 ± 0.01

Geometrical & Mechanical

Cladding diameter (μm)	128 ± 3
Cladding geometry	Oct.
Coating Diameter (μm)	260 ± 20
Core Diameter (μm)	20 ± 2
Core/Cladding Concentricity Error (μm)	≤ 1.5
Proof Test (kpsi)	≥ 100

Environmental

Storage Temperature ($^{\circ}\text{C}$)	-40 to +85
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