

# 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 pre-amplifiers 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 ± 0.5
Cladding Absorption @ 975 nm - Nominal (dB/m)	18
Numerical Aperture - Core	0.08 ± 0.01
Numerical Aperture - Cladding	> 0.45

### Geometrical & Mechanical

Core Diameter (µm)	12 ± 1
Cladding Diameter (µm)	128 ± 3
Core/Cladding Concentricity Error (µm)	< 1.3
Cladding Geometry	Octagonal
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: 101-10-0838.R1