

# DCF-YB-20/128E

Yb-doped fiber for pulsed lasers



The DCF-YB-20/128E shows excellent photodarkening resistance performance ensuring high reliability and long-term stability. This fiber shows high absorption and excellent beam quality and is ideal for high-power pulsed fiber lasers and amplifiers used for industrial applications.

## Features & Benefits

- High effective pump absorption for length reduction and nonlinear effect mitigation
- Low photodarkening at high power - ensures long-term stability
- Batch-to-batch consistency for high-volume production

## Applications

- Pulsed lasers & amplifiers
- Power amplification section of multi-stage high-power amplifiers
- Lasers for marking & engraving

## Related Products

- [DCF-UN-20/125-080](#)  
Matched double-clad fiber for pump combiner
- [DCF-UN-20/125M](#)  
Matched MFD double-clad fiber
- [DCF-UN-20/125-100](#)  
Matched double-clad fiber for output isolator
- [SCF-UN-20/125-100](#)  
Matched single-clad fiber

## Specifications

### Optical

Cladding Absorption @ 915 nm (dB/m)	3.0 ± 0.3
Cladding Absorption @ 975 nm - Nominal (dB/m)	12
Numerical Aperture - Core	0.080 ± 0.005
Numerical Aperture - Cladding	> 0.45

### Geometrical & Mechanical

Core Diameter (µm)	20 ± 1
Cladding Diameter (µm)	128 ± 3
Core/Cladding Concentricity Error (µm)	< 1.0
Cladding Geometry	Octagonal
Coating Diameter (µm)	260 ± 20
Proof Test (kpsi)	≥ 100

### Environmental

Operating Non-Condensing Humidity (%)	5 - 85
Operating Temperature (C°)	0 - 70
Storage Non-Condensing Humidity (%)	5 - 85
Storage Temperature (C°)	-40 - 85