



DCF-YB-20/128E

Yb-doped fiber for pulsed lasers

The DCF-YB-20/128E shows excellent photodarkening resistance performance ensuring high reliability and longterm 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 multistage 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	
Background Loss @1100 nm (dB/km)	<= 50
Background Loss @1200 nm (dB/km)	<= 50
Cladding Absorption @ 915 nm (dB/m)	3 ± 0.3
Numerical Aperture - Cladding	Min 0.46
Numerical Aperture - Core	0.08 ± 0.005

Geometrical & Mechanical	
Cladding diameter (µm)	128 ± 3
Cladding geometry	Oct.
Coating Diameter (µm)	260 ± 20
Core Diameter (µm)	20 ± 1
Core/Cladding Concentricity Error (µm)	<= 1
Proof Test (kpsi)	>= 100

Environmental	
Storage Temperature (°C)	-40 to +85