

DCF-TM-10/130P-15

Single-mode Tm doped fiber



This single-mode thulium-doped fiber is specifically engineered for eye-safe 2 μm fiber amplifiers and lasers. Featuring strong absorption at 790 nm and an optimized core composition to enhance cross-relaxation processes, it is an excellent choice for high-power optical systems requiring high performance.

Features & Benefits

- Broad emission
- Single mode operation
- High doping concentration
- High absorption to minimize fiber length
- High conversion efficiency
- Optimized core design enables two-for-one cross-relaxation for efficient conversion at 2 μm .
- Low splice losses with Coractive matched passive double-clad fibers

Applications

- Eye-safe fiber lasers and amplifiers
- Medical
- LIDAR
- Telecom Spectroscopy
- Low and mid power CW and pulsed applications

Related Products

- DCF-UN-10/130-15
Matched double-clad passive fiber

Specifications

Optical

Cladding Absorption @ 790 nm (dB/m)	7 $\pm$ 2
Numerical Aperture - Cladding	Min 0.45
Numerical Aperture - Core	0.14 $\pm$ 0.01

Geometrical & Mechanical

Cladding diameter (μm)	128 $\pm$ 3
Cladding geometry	Octagonal
Coating Diameter (μm)	245 $\pm$ 10
Core Diameter (μm)	10 $\pm$ 1
Core Ovality (%)	$\leq$ 8
Core/Cladding Concentricity Error (μm)	$\leq$ 1.5
Proof Test (kpsi)	$\geq$ 100

Environmental

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