



DCF-TM-25/400P-08

LMA Tm doped fiber

Our 25/400 is a high power large-mode-area (LMA) double-clad thulium-doped fiber with a pedestal structure designed to operate efficiently across the 1.9 μm to 2.1 μm wavelength range. Featuring a 25 μm core diameter and 400 μm pump cladding, this fiber is optimized to deliver high output power while prioritizing superior beam quality and high-brightness performance. This passive fiber has been designed to match active fibers such as the DCF-EY-6/128 and the DCF-EY-10/128H in order to minimize splicing losses. Moreover, it can be used for manufacturing passive components used in the design of fiber lasers and amplifiers.

Features & Benefits

- Octagonal cladding shape
- High and constant pump absorption
- Tested at >100 kpsi to ensure long-term reliability during winding
- Strong power scaling capability

Applications

- Precision medical
- High brightness laser systems
- Coherent sensing
- Mid-IR pumping
- Directed energy and advanced research

Related Products

- DCF-UN-25/400-08
Matched double-clad passive fiber

Specifications

Optical

Cladding Absorption @ 790nm (dB/m)	3.9 \pm 0.6
Numerical Aperture - Cladding	Min 0.45
Numerical Aperture - Core	0.085 \pm 0.01

Geometrical & Mechanical

Cladding diameter (μm)	400 \pm 10
Cladding geometry	Oct.
Coating Diameter (μm)	565 \pm 15
Core Diameter (μm)	25 \pm 1
Core Ovality (%)	\leq 8
Core/Cladding Concentricity Error (μm)	\leq 2
Proof Test (kpsi)	\geq 100

Environmental

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