



DCF-TM-25/400-08

LMA Tm doped fiber pedestal-free design

This fiber combines the advantages of a large mode area (LMA) thulium-doped, cladding-pumped fiber with a pedestal-free design. Featuring a 25 μm core and a 400 μm cladding, it is intended for high-power laser and amplifier applications operating in the 1.9–2.1 μm wavelength range while delivering excellent beam quality and high brightness. The non-pedestal design eliminates parasitic mode guidance and reduces splice sensitivity, resulting in more robust and reproducible optical assemblies.

Features & Benefits

- Octagonal cladding shape
- Constant pump absorption
- Pedestal-free design LMA fiber
- 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

Specifications

Optical

Cladding Absorption @ 790nm (dB/m)	2 ± 0.5
Numerical Aperture - Cladding	Min 0.45
Numerical Aperture - Core	0.0875 ± 0.0125

Geometrical & Mechanical

Cladding diameter (μm)	400 ± 10
Cladding geometry	Oct.
Coating Diameter (μm)	565 ± 15
Core Diameter (μm)	25 ± 1
Core Ovality (%)	<= 8
Core/Cladding Concentricity Error (μm)	<= 3
Proof Test (kpsi)	>= 100

Environmental

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