

# CorActive Thulium Doped Fibers For Eye-Safe Fiber Lasers & Amplifiers

CorActive's Tm-doped double clad fibers offer high doping concentrations and high QCE values that ensure minimum fiber length, minimum pump power and reduced non-linearities.

CorActive's Tm-doped double clad fiber features highly efficient energy transfer that makes this product the ideal solution for the design of high-energy LIDAR or high-power eye-safe fiber lasers and amplifiers.

## ADVANTAGES

- Large core diameter for reduced non-linear effects in high-energy/high peak power application
- Low NA value for excellent beam quality
- Very high pump absorption allowing short fiber lengths
- Two-photon cross-relaxation effect leads to very high QCE values, lowering pump power requirements and reducing overall system costs

## APPLICATIONS

- Eye-safe fiber lasers and amplifiers
- High-energy LIDAR
- Scientific/Research
- Medical

## SPECIFICATIONS

Parameters	Specifications
<b>Optical Specifications</b>	
Clad Numerical Aperture	> 0.45
<b>Material Specifications</b>	
Core Material	Tm Doped Silica Glass
Inner Clad Material	Silica Glass
Outer Clad Material	Fluoroacrylate
Coating Material	Acrylate
<b>Geometrical and Mechanical Specifications</b>	
Clad Geometry	Octagonal <sup>1</sup>
Proof Test Level (kpsi)	100 <sup>2</sup>

<sup>1</sup> Unless otherwise specified. Consult product datasheet to verify cladding geometry of specific model

<sup>2</sup> The specified proof test level is for cladding dimensions of 130um or less. Consult specific product datasheet for proof test levels of other cladding dimensions

## AVAILABLE MODELS

Thulium (TM) Doped Double-Clad Fibers						
Model	Core Diameter (μm)	Clad Diameter (μm)	Core NA	Clad Absorption @ 790 nm (dB/m)	Matched Passive Double-Clad Fiber	Matched Passive Single-Clad Fiber
DCF-TM-6/125	6.0 ± 1.0	125 ± 3	0.23 ± 0.2	1.4 ± 0.3	DCF-UN-6/123-23	
DCF-TM-20/400P	20.0 ± 2.0	400 ± 15	0.11 ± 0.01	5.5 ± 1.0		
DCF-TM-30/480P	30.0 ± 3.0	480 ± 20	0.11 ± 0.015	8 ± 2		

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