

25/400 Passive LMA Double Clad Fiber



Nufern's passive series of Large Mode Area (LMA) double clad fibers are ideal for high power monolithic fiber lasers and amplifiers. These passive fibers are based on a 25 micron diameter core and 400 micron diameter clad size with a low NA (0.06) core and are designed to work well with the active Yb-doped 25/400 LMA fibers. These fibers utilize the latest fiber design and NuCOAT™ coating technology to ensure excellent preservation of beam quality and extended operating life at the high power levels demanded by today's industrial fiber laser applications. These fibers are available in both non-PM and PANDA-style PM fibers.

Typical Applications

- Monolithic high power fiber lasers and amplifiers
- LMA fiber couplers, and pump combiners
- High power pump and signal pigtails
- Military, industrial and medical

Features & Benefits

- Designed for compatibility with 25/400 active fibers
- NuCOAT™ fluoroacrylate coating — Greater fiber durability in extreme environmental operating & storage conditions
- Optimized LMA core design — Easy to maintain single mode LP01 beam through fiber & components at high power
- All fiber proof tested to > 100 kpsi — Critical for ensuring long term reliability when coiling"

Optical Specifications

| | PLMA-GDF-25/400 | LMA-GDF-25/400 |
|--------------------------------|------------------------------|------------------------|
| Operating Wavelength (nominal) | 1060 nm | 1060 nm |
| Core NA | 0.060 ± 0.010 | 0.060 ± 0.010 |
| First Cladding NA (5%) | ≥ 0.460 | ≥ 0.46 |
| Cladding Attenuation | ≤ 15.0 dB/km @ 1095 nm | ≤ 15.0 dB/km @ 1095 nm |
| Birefringence | nominal 3.3×10^{-4} | N/A |

Geometrical & Mechanical Specifications

| | PLMA-GDF-25/400 | LMA-GDF-25/400 |
|-------------------|-------------------------------------|-------------------------------------|
| Cladding Diameter | 400.0 ± 15.0 μm | 400.0 ± 15.0 μm |
| Core Diameter | 25.0 ± 2.5 μm | 25.0 ± 2.0 μm |
| Coating Diameter | 550.0 ± 20.0 μm | 550.0 ± 20.0 μm |
| Proof test Level | ≥ 100 kpsi (0.7 GN/m ²) | ≥ 100 kpsi (0.7 GN/m ²) |

Designed to work with 25/400 LMA Yb-doped active fibers.



7 Airport Park Road, East Granby, CT 06026 • 860.408.5000 • Toll-free 866.466.0214 • Fax 860.844.0210 E-mail info @ nufern.com • www.nufern.com Nufern products are manufactured under an ISO 9001:2008 certified quality management system.



Standard specifications and design parameters are listed above. Specifications are subject to change without notice. Other configurations such as alternative form factors, optimized cut-off and UV cured color coating may be available. Let us know how Nufern can assist with your requirements.