0.10 NA Double-Clad, Step-Index, High Power Multimode Fiber

FG105LVA

Description

Thorlabs' 0.10 NA double-clad, multimode, step-index fibers feature double-clad fiber construction (low refractive index acrylate coating over fluoride-doped silica cladding), allowing for high-power handling capabilities and ultra-high stability in laser transmission. The structure with high refractive index acrylate buffer guarantees long-term performance and reliability, insensitivity to tight bending radii, which results in improved bend performance. Stripping will remove both the low refractive index acrylate coating and high refractive index acrylate buffer.

Specifications

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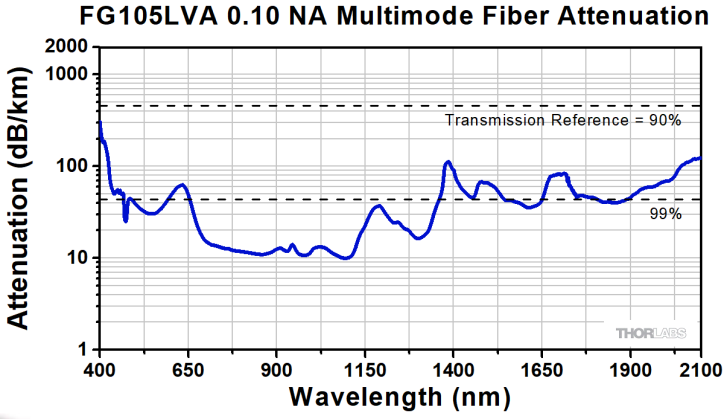
Wavelength Range	400 - 2100 nm
Core / Cladding	Pure Silica / Fluorine-Doped Silica
Coating	Low Refractive Index Acrylate
Buffer	High Refractive Index Acrylate
Operating Temperature	-40 to 85 °C
Numerical Aperture (NA)	0.100 ±0.015
Proof Test	≥100 kpsi
Core Diameter	105 ± 3 µm
Cladding Diameter	125 ± 2 µm
Coating Diameter	195 ± 10 µm
Buffer Diameter	250 ± 10 µm
Max Attenuation @ 808 nm	15 dB/km
Max Core-Cladding Offset	1 µm
Minimum Bend Radius	16 mm (Short Term) 32 mm (Long Term)
Stripping Tool	T06S13

Performance Plot



The dashed lines on this graph are benchmarks. Each is calculated for a one meter long hypothetical reference fiber that transmits the noted percentage of input light. As an example, a 1 m long fiber that transmits 90% of input light has an attenuation of 0.458 dB/m, which is equivalent to 458 dB/km.