

## 0.22 NA Standard Glass-Clad, Silica Core Multimode Fiber



### Description

Thorlabs' 0.22 NA step-index multimode fibers feature a pure silica core with a fluorine-doped silica cladding, and are available with either high or low hydroxyl ion (OH) concentrations for UV to visible (250 - 1200 nm) or visible to NIR (400 - 2400 nm) applications, respectively.

### Specifications

0.22 NA Hard Cladding, Silica Core, Multimode Fiber	
Wavelength Range	400 - 2400 nm (Low OH) 250 - 1200 nm (High OH) <sup>a</sup>
Core / Cladding	Pure Silica / Fluorine-Doped Silica
Coating	Acrylate
Proof Test	≥100 kpsi
Operating Temperature	-40 to 85 °C
Numerical Aperture (NA)	0.22 ± 0.02



a. Solarization may occur at wavelengths below 300 nm

#### Visible to IR Transmission (400 - 2400 nm), Low OH

Item #	Core Diameter	Clad Diameter	Coating Diameter	Maximum Attenuation @ 808 nm	Bandwidth @ 820 nm	Bend Radius Short Term / Long Term
FG050LGA	50 ± 1 μm	125 +1/-2 μm	250 ± 10 μm	8 dB/km	15 MHz•km	16 mm / 32 mm
FG105LCA	105 +1/-3 μm	125 +1/-2 μm	250 ± 10 μm	8 dB/km		16 mm / 32 mm
FG200LEA	200 ± 4 μm	220 ± 2 μm	320 ± 16 μm	8 dB/km		23 mm / 46 mm
FG400LEA	400 ± 8 μm	440 ± 4 μm	550 ± 15 μm	8 dB/km	N/A	47 mm / 94 mm
FG600LEA	600 ± 12 μm	660 ± 6 μm	750 ± 20 μm	8 dB/km		53 mm / 106 mm

#### UV to Visible Transmission (250 - 1200 nm), High OH

Item #	Core Diameter	Clad Diameter	Coating Diameter	Maximum Attenuation @ 808 nm	Bandwidth @ 820 nm	Bend Radius Short Term / Long Term
FG050UGA	50 ± 1 μm	125 +1/-2 μm	250 ± 10 μm	10 dB/km	15 MHz•km	16 mm / 32 mm
FG105UCA	105 +1/-3 μm	125 +1/-2 μm	250 ± 10 μm	10 dB/km		16 mm / 32 mm
FG200UEA	200 ± 4 μm	220 ± 2 μm	320 ± 16 μm	10 dB/km		23 mm / 46 mm
FG400UEA	400 ± 8 μm	440 ± 4 μm	550 ± 15 μm	10 dB/km	N/A	47 mm / 94 mm
FG600UEA	600 ± 12 μm	660 ± 6 μm	750 ± 20 μm	10 dB/km		53 mm / 106 mm

## Specifications Cont.

Item #s	Stripping Tool
FG050LGA, FB050UGA	T06S13
FG105LCA, FG105UCA	T06S13
FG200LEA, FG200UEA	T10S13
FG400LEA, FG400UEA	T18S25
FG600LEA, FG600UEA	T28S31

## Performance Plot

