CORNING

Corning® ClearCurve® Multimode Mid-Temperature Specialty Optical Fibers for Harsh Environments

Multimode bend insensitive optical fiber with mid-temperature acrylate-based coatings

Inquire for information about the application of mid-temperature coatings on glasses with optical properties that match your application or custom need.

The Corning® ClearCurve® Multimode bend insensitive fiber now includes even higher temperature and higher bandwidth capability. For use at temperatures up to 180 °C and beyond, this acrylate-based fiber delivers incredible macro bend performance with ease of use and handling; benefiting sensing systems operating in harsh environments.

Applications

- Fiber Sensing and Data Transmission with tight bend and/or high bandwidth requirements for:
  - Aerospace and Defense
  - Structural Health Monitoring
  - Down-Hole Drilling

Features

- Acrylate-base for ease of handling
- Rated for up to 180 °C
- Test data available for 150 °C - 200 °C temperature range
- Higher bandwidths available
- Hermetic coating (optional) for protection against hydrogen induced attenuation increase and improved fatigue resistance
- Consistent strength over time at elevated temperatures
- A fiber designed to meet your specific needs with recommended minimum bending radius of 7.5 mm
- Fully compliant with ITU-Recommendations G651.1, and compatible with current optical fibers and practices

M0300120
Revised: October 2017
Supersedes: April 2016

	MM50BIA-XMT
Key Optical Specifications	
Operating Wavelength (nm)	850, 1060, 1300
Maximum Attenuation (dB/km)	
@ 850 nm	2.5
@ 1300 nm	0.7
Numerical Aperture	0.20 ± 0.015
Bandwidth (MHz-km)*	
@ 850 nm	700
@ 1300 nm	500
* Higher bandwidths available, contact Corning representative	
Key Geometric, Mechanical and Environmental Specifications	
Core Diameter (µm)	50 ± 2.5
Cladding Outside Diameter (µm)	125 ± 2.0
Coating Outside Diameter (µm)	245 ± 10
Core-to-Cladding Offset (µm)	≤ 1.5
Lengths	Long lengths available (500 m minimum)
Proof Test (kpsi)	100 or 200
Operating Temperature (°C)	-60 to 180
Coating	Mid-Temperature Acrylate Optional Hermetic Layer
Performance Characteristics (values in this table are nominal or calculated)	
Refractive Index Profile	Graded Index
Recommended Minimum Bending Radius (mm)	7.5

Part Number Table — MM50BIA-XMT

Multimode Bend Insensitive Optical Fiber with:

	Category	Definition	Product Code
A	Hermetic Indicator	Non Hermetic Hermetic	(blank) H

For more information about Corning's leadership in Specialty Fiber technology visit our website at www.corning.com/specialtyfiber
To obtain additional technical information, an engineering sample, or to place an order for this product, please contact us at:

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