Corning® ClearCurve® Multimode Optical Fiber
Product Information

Bend Performance and Compatibility
Corning® ClearCurve® ultra-bendable, laser-optimized™ multimode optical fiber delivers enhanced macrobending performance while maintaining compatibility with current optical fibers, equipment, practices, and procedures. ClearCurve® OM2, OM3, and OM4 multimode fibers are designed to withstand tight bends and challenging cabling routes with substantially less signal loss than conventional multimode fiber.

### Standards Compliance

<table>
<thead>
<tr>
<th></th>
<th>ClearCurve® OM4 fiber</th>
<th>ClearCurve® OM3 fiber</th>
<th>ClearCurve® OM2 fiber</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISO/IEC 11801</td>
<td>Type OM4 fiber</td>
<td>Type OM3 fiber</td>
<td>Type OM2 fiber</td>
</tr>
<tr>
<td>IEC 60793-2-10</td>
<td>Type A1a.3 fiber</td>
<td>Type A1a.2 fiber</td>
<td>Type A1a.1 fiber</td>
</tr>
<tr>
<td>TIA/EIA</td>
<td>492AAAD</td>
<td>492AAAC-B</td>
<td>492AAAB-A</td>
</tr>
</tbody>
</table>

Optical Specifications

#### Bandwidth

<table>
<thead>
<tr>
<th>Wavelength (nm)</th>
<th>Corning Optical Fiber</th>
<th>High Performance EMB* (MHz-km)</th>
<th>Overfilled Modal Bandwidth** (MHz-km)</th>
</tr>
</thead>
<tbody>
<tr>
<td>850</td>
<td>850</td>
<td>850</td>
<td>1300</td>
</tr>
<tr>
<td>1300</td>
<td>4700</td>
<td>3500</td>
<td>500</td>
</tr>
<tr>
<td>2000</td>
<td>2000</td>
<td>1500</td>
<td>500</td>
</tr>
<tr>
<td>950</td>
<td>950</td>
<td>700</td>
<td>500</td>
</tr>
</tbody>
</table>

*Ensured via minEMBc, per TIA/EIA 455-220A and IEC 60793-1-49, for high performance laser-based systems.

** OFL BW, per TIA/EIA 455-204 and IEC 60793-1-41.

#### Attenuation

<table>
<thead>
<tr>
<th>Wavelength (nm)</th>
<th>Maximum Value (dB/km)</th>
</tr>
</thead>
<tbody>
<tr>
<td>850</td>
<td>≤ 2.3</td>
</tr>
<tr>
<td>1300</td>
<td>≤ 0.6</td>
</tr>
</tbody>
</table>

No point discontinuity greater than 0.2 dB. Attenuation at 1380 nm does not exceed the attenuation at 1300 nm by more than 3.0 dB/km.

#### Numerical Aperture

0.200 ± 0.015

#### Dimensional Specifications

**Glass Geometry**

- Core Diameter: 50.0 ± 2.5 μm
- Cladding Diameter: 125.0 ± 1.0 μm
- Core-Clad Concentricity: ≤ 1.5 μm
- Cladding Non-Circularity: ≤ 1.0%
- Core Non-Circularity: ≤ 5%

**Coating Geometry**

- Coating Diameter: 242 ± 5 μm
- Coating-Cladding Concentricity: < 12 μm

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How to Order
Contact your sales representative, or call the Optical Fiber Customer Service Department:
Email: cofic@corning.com
Please specify the fiber type, attenuation, and quantity when ordering.

Issued: January 2017
Supersedes: July 2016
TL9000/ISO 9001 Certified
Environmental Specifications

<table>
<thead>
<tr>
<th>Environmental Test</th>
<th>Test Condition</th>
<th>Induced Attenuation 850 nm &amp; 1300 nm (dB/km)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature Dependence</td>
<td>-60°C to +85°C*</td>
<td>≤0.10</td>
</tr>
<tr>
<td>Temperature Humidity Cycling</td>
<td>-10°C to +85°C and 4% to 98% RH</td>
<td>≤0.10</td>
</tr>
<tr>
<td>Water Immersion</td>
<td>23°C ± 2°C</td>
<td>≤0.20</td>
</tr>
<tr>
<td>Heat Aging</td>
<td>85°C ± 2°C</td>
<td>≤0.20</td>
</tr>
<tr>
<td>Damp Heat</td>
<td>85°C at 85% RH</td>
<td>≤0.20</td>
</tr>
</tbody>
</table>

*Reference temperature = +23°C
Operating Temperature Range: -60°C to +85°C

Mechanical Specification

Proof Test
The entire fiber length is subjected to a tensile stress ≥100 kpsi (0.69 GPa).*
*Higher proof test levels available

Length
Fiber lengths available up to 17.6 km/spool.

Performance Characterizations

Characterized parameters are typical values.

- Effective Group Index of Refraction ($N_{\text{eff}}$)
  - 850 nm: 1.482
  - 1300 nm: 1.477

- Fatigue Resistance Parameter ($N_d$)
  - 20

- Coating Strip Force
  - Dry: 0.6 lbs (2.7 N)
  - Wet, 14 days in 23°C water soak: 0.6 lbs (2.7 N)

Chromatic Dispersion
Zero Dispersion Wavelength ($\lambda_0$): 1295 nm ≤ $\lambda_0$ ≤ 1315 nm
Zero Dispersion Slope ($S_0$): ≤ 0.101 ps/(nm²*km)

Spectral Attenuation (Typical Fiber)

![Graph of Spectral Attenuation](image-url)