LazrSPEED® 300 OM3 Bend-Insensitive Multimode Fiber

Product Classification

Portfolio: CommScope®
Product Type: Optical fiber

General Specifications

- Cladding Diameter: 125 µm
- Cladding Diameter Tolerance: ±0.8 µm
- Cladding Non-Circularity, maximum: 1 %
- Coating Diameter (Colored): 254 µm
- Coating Diameter (Uncolored): 245 µm
- Coating Diameter Tolerance (Colored): ±7 µm
- Coating Diameter Tolerance (Uncolored): ±10 µm
- Coating/Cladding Concentricity Error, maximum: 12 µm
- Core Diameter: 50 µm
- Core Diameter Tolerance: ±2.5 µm
- Core/Clad Offset, maximum: 1.5 µm
- Proof Test: 689.476 N/mm² | 100000 psi

Mechanical Specifications

- Macrobending, 15 mm Ø mandrel, 2 turns: 0.20 dB @ 850 nm | 0.50 dB @ 1,300 nm
- Macrobending, 30 mm Ø mandrel, 2 turns: 0.10 dB @ 850 nm | 0.30 dB @ 1,300 nm
- Macrobending, 75 mm Ø mandrel, 100 turns: 0.50 dB @ 1,300 nm | 0.50 dB @ 850 nm
- Coating Strip Force, maximum: 8.9 N | 2.001 lbf
- Coating Strip Force, minimum: 1.3 N | 0.292 lbf
- Dynamic Fatigue Parameter, minimum: 18

Optical Specifications

- Numerical Aperture: 0.2
- Numerical Aperture Tolerance: ±0.015
- Point Defects, maximum: 0.15 dB
### CS-5L-LT

**Zero Dispersion Slope, maximum**  
0.105 ps/[km-nm-nm]

**Zero Dispersion Wavelength, maximum**  
1316 nm

**Zero Dispersion Wavelength, minimum**  
1297 nm

### Optical Specifications, Wavelength Specific

| 1 Gbps Ethernet Distance | 1,020 m @ 850 nm | 600 m @ 1,300 nm |
| 10 Gbps Ethernet Distance | 300 m @ 850 nm  |
| Attenuation, maximum | 1.00 dB/km @ 1,300 nm | 3.00 dB/km @ 850 nm |
| Backscatter Coefficient | -68.0 dB @ 850 nm | -75.7 dB @ 1,300 nm |
| Bandwidth, Laser, minimum | 2,000 MHz-km @ 850 nm | 500 MHz-km @ 1,300 nm |
| Bandwidth, OFL, minimum | 1,500 MHz-km @ 850 nm | 500 MHz-km @ 1,300 nm |
| Differential Mode Delay | 0.70 ps/m @ 850 nm | 0.88 ps/m @ 1,300 nm |
| Differential Mode Delay Note | Superior to TIA-492AAAC and IEC 60793-2-10 at 850 nm |
| Index of Refraction | 1.479 @ 1,300 nm | 1.483 @ 850 nm |
| Standards Compliance | TIA-492AAAC (OM3) |

### Environmental Specifications

| Heat Aging, maximum | 0.20 dB/km @ 85 °C |
| Temperature Dependence, maximum | 0.1 dB/km |
| Temperature Humidity Cycling, maximum | 0.2 dB/km |
| Water Immersion, maximum | 0.20 dB/km @ 23 °C |

### Regulatory Compliance/Certifications

<table>
<thead>
<tr>
<th>Agency</th>
<th>Classification</th>
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<tr>
<td>ISO 9001:2015</td>
<td>Designed, manufactured and/or distributed under this quality management system</td>
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* Footnotes

**Temperature Dependence, maximum**  
Temperature dependence is conducted at -60 °C to +85 °C (-76 °F to +185 °F)

**Temperature Humidity Cycling, maximum**  
Temperature humidity cycling is conducted at -10 °C to +85 °C (+14 °F to +185 °F) up to 95% relative humidity