

# CS-5LEB-MP

LazrSPEED® 300

LazrSPEED® 300 Launch Control Bend Insensitive OM3 Multimode Fiber

## Product Classification

|              |               |
|--------------|---------------|
| Portfolio    | CommScope®    |
| Product Type | Optical fiber |

## General Specifications

|   |                        |
|---|------------------------|
| Cladding Diameter                             | 125 µm                 |
| Cladding Diameter Tolerance                   | ±5 µm                  |
| Cladding Non-Circularity, maximum             | 0.7 %                  |
| 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                       | ±0.5 µm                |
| Core/Clad Offset, maximum                     | 0.6 µm                 |
| Proof Tensile Stress                          | 100,000 psi (0.69 GPa) |

## Mechanical Specifications

|   |                                       |
|---|---------------------------------------|
| Macrobanding, 15 mm Ø mandrel, 2 turns  | 0.10 dB @ 850 nm   0.30 dB @ 1,300 nm |
| Macrobanding, 7.5 mm Ø mandrel, 2 turns | 0.20 dB @ 850 nm   0.50 dB @ 1,300 nm |
| Coating Strip Force, maximum            | 4.5 N   1.012 lbf                     |
| Coating Strip Force, minimum            | 0.9 N   0.202 lbf                     |
| Dynamic Fatigue Parameter, minimum      | 18                                    |

## Optical Specifications

|                              |        |
|------------------------------|--------|
| Numerical Aperture           | 0.2    |
| Numerical Aperture Tolerance | ±0.002 |

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|                                     |                     |
|-------------------------------------|---------------------|
| Point Defects, maximum              | 0.15 dB             |
| Zero Dispersion Slope, maximum      | 0.105 ps/[km-nm-nm] |
| Zero Dispersion Wavelength, maximum | 1328 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  |
| Differential Mode Delay Note | Superior to ANSI/TIA TIA-492AAAF and IEC 60793-2-10 at 850 nm |
| Index of Refraction          | 1.479 @ 1,300 nm   1.483 @ 850 nm                             |
| Standards Compliance         | ANSI/TIA-492AAAF (OM3)  |

## Environmental Specifications

|                                       |                    |
|---------------------------------------|--------------------|
| Heat Aging, maximum                   | 0.10 dB/km @ 85 °C |
| Temperature Dependence, maximum       | 0.1 dB/km          |
| Temperature Humidity Cycling, maximum | 0.1 dB/km          |
| Water Immersion, maximum              | 0.10 dB/km @ 23 °C |

## Regulatory Compliance/Certifications

| Agency        | Classification   |
|---------------|--|
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system |

## \* 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 |