

CS-5E-PFC

50µm OM3 Bend-Insensitive Multimode Fiber

Product Classification

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

General Specifications

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| Cladding Diameter | 125 µm |
| Cladding Diameter Tolerance | ±5 µm |
| Cladding Non-Circularity, maximum | 0.7 % |
| Coating Diameter (Colored) | 242 µm |
| Coating Diameter Tolerance (Colored) | ±7 µm |
| Coating/Cladding Concentricity Error, maximum | 10 µm |
| Core Diameter | 50 µm |
| Core Diameter Tolerance | ±2.5 µm |
| Core/Clad Offset, maximum | 1 µm |
| Proof Test | 689.476 N/mm ² 100000 psi |

Mechanical Specifications

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| 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 |
| Coating Strip Force, maximum | 8.9 N 2.001 lbf |
| Coating Strip Force, minimum | 1.3 N 0.292 lbf |
| Dynamic Fatigue Parameter, minimum | 25 |

Optical Specifications

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| Numerical Aperture | 0.2 |
| Numerical Aperture Tolerance | ±0.015 |
| Point Defects, maximum | 0.2 dB |
| Zero Dispersion Slope, maximum | 0.105 ps/[km-nm-nm] |
| Zero Dispersion Wavelength, maximum | 1340 nm |
| Zero Dispersion Wavelength, minimum | 1295 nm |

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Optical Specifications, Wavelength Specific

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|-------------------------------------|---|
| Attenuation, maximum | 1.20 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 Note | Superior to ANSI/TIA TIA-492AAAF and IEC 60793-2-10 at 850 nm |
| Index of Refraction | 1.477 @ 1,300 nm 1.482 @ 850 nm |
| Standards Compliance | ANSI/TIA-492AAAF (OM3) |

Environmental Specifications

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| 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

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|--|---|
| 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 |