

CS-5E-PFC

50µm OM3 Bend-Insensitive 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)	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 Tensile Stress	100,000 psi (0.69 GPa)

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
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

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

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

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