CS-5C-TB-3.0/1.0/093

OM5 WideBand 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)	250 µm
Coating Diameter (Uncolored)	242 µm
Coating Diameter Tolerance (Colored)	±7 µm
Coating Diameter Tolerance (Uncolored)	±10 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)
Tight Buffer Diameter	900 µm
Tight Buffer Diameter Tolerance	±40 µm

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	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	±0.015
Point Defects, maximum	0.15 dB

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Zero Dispersion Slope, maximum (OM5)	-412/(840(1-(λ0/840)^4)) ps/[km-nm-nm]

Optical Specifications, Wavelength Specific

1 Gbps Ethernet Distance	1,110 m @ 850 nm	600 m @ 1,300 nm
10 Gbps Ethernet Distance	550 m @ 850 nm
Attenuation, maximum	1.00 dB/km @ 1,300 nm	2.30 dB/km @ 953 nm	3.00 dB/km @ 850 nm
Bandwidth, Laser, minimum	2,470 MHz-km @ 953 nm	4,700 MHz-km @ 850 nm
Bandwidth, OFL, minimum	1,850 MHz-km @ 953 nm	3,500 MHz-km @ 850 nm
Index of Refraction	1.477 @ 1,300 nm	1.482 @ 850 nm
Standards Compliance	ANSI/TIA-568.3-D wideband multimode fiber cable	IEC 60793-2-10, edition 6, model A1a.4	ISO 11801-1 cabled optical fiber performance category OM5	TIA-492AAAE (OM5)

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

* 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

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