CS-8M-LT

Low Water Peak Dispersion-Unshifted OS2 Singlemode Fiber

Product Classification

Portfolio	CommScope®
Product Type	Optical fiber

General Specifications

Cladding Diameter	125 µm
Cladding Diameter Tolerance	±0.7 µm
Cladding Non-Circularity, maximum	0.7 %
Coating Diameter (Colored)	242 µm
Coating Diameter Tolerance (Colored)	±5 µm
Coating/Cladding Concentricity Error, maximum	12 µm
Core/Clad Offset, maximum	0.5 µm
Proof Tensile Stress	100,000 psi (0.69 GPa)

Dimensions

Fiber Curl, minimum	4 m | 13.123 ft

Mechanical Specifications

Macrobending, 20 mm Ø mandrel, 1 turn	0.50 dB @ 1,550 nm | 1.50 dB @ 1,625 nm
Macrobending, 30 mm Ø mandrel, 10 turns	0.10 dB @ 1,550 nm | 0.30 dB @ 1,625 nm
Macrobending, 32 mm Ø mandrel, 1 turn	0.03 dB @ 1,550 nm
Coating Strip Force, maximum	4.9 N | 1.102 lbf
Coating Strip Force, minimum	1.3 N | 0.292 lbf
Dynamic Fatigue Parameter, minimum	20

Optical Specifications

Cabled Cutoff Wavelength, maximum	1260 nm
Point Defects, maximum	0.1 dB
Zero Dispersion Slope, maximum	0.092 ps/[km-nm-nm]
Zero Dispersion Wavelength, maximum	1324 nm
Zero Dispersion Wavelength, minimum	1300 nm

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Optical Specifications, Wavelength Specific

Attenuation, maximum	0.22 dB/km @ 1,550 nm | 0.35 dB/km @ 1,310 nm | 0.35 dB/km @ 1,385 nm
Dispersion, maximum	18 ps(nm-km) at 1550 nm
Index of Refraction	1.467 @ 1,310 nm | 1.468 @ 1,550 nm | 1.468 @ 1,625 nm
Mode Field Diameter	10.3 µm @ 1,550 nm | 9.1 µm @ 1,310 nm
Mode Field Diameter Tolerance	±0.4 µm @ 1310 nm | ±0.5 µm @ 1550 nm
Polarization Mode Dispersion Link Design Value, maximum	0.06 ps/sqrt(km)
Standards Compliance	ITU-T G.652.D | ITU-T G.657.A1 | TIA-492CAAB (OS2)

Environmental Specifications

Heat Aging, maximum	0.05 dB/km @ 85 °C
Temperature Dependence, maximum	0.05 dB/km
Temperature Humidity Cycling, maximum	0.05 dB/km
Water Immersion, maximum	0.05 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