

CS-8T-LT

Type 8T Non-Zero Dispersion-Shifted Singlemode Fiber; ITU-T G655.C,D

Product Classification

Portfolio	CommScope®
Product Type	Optical fiber

General Specifications

Cladding Diameter	125 µm
Cladding Diameter Tolerance	±0.7 µm
Cladding Non-Circularity, maximum	1 %
Coating Diameter (Colored)	256 µm
Coating Diameter (Uncolored)	245 µm
Coating Diameter Tolerance (Colored)	±8 µm
Coating Diameter Tolerance (Uncolored)	±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
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Mechanical Specifications

Macrobending, 32 mm Ø mandrel, 1 turn	0.50 dB @ 1,550 nm
Macrobending, 75 mm Ø mandrel, 100 turns	0.05 dB @ 1,550 nm 0.05 dB @ 1,625 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	20

Optical Specifications

Cabled Cutoff Wavelength, maximum	1260 nm
Dispersion Slope	0.050 ps/[km-nm-nm] @ 1,550 nm
Point Defects, maximum	0.1 dB

Optical Specifications, Wavelength Specific

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Attenuation, maximum	0.23 dB/km @ 1,550 nm 0.26 dB/km @ 1,625 nm 0.45 dB/km @ 1,310 nm
Dispersion, maximum	-8 ps(nm-km) at 1310 nm 2.6 ps(nm-km) to 6 ps(nm-km) from 1530 nm to 1565 nm at 1550 nm 4.0 ps(nm-km) to 8.9 ps(nm-km) from 1565 nm to 1625 nm at 1625 nm
Index of Refraction	1.470 @ 1,550 nm 1.470 @ 1,625 nm 1.471 @ 1,310 nm
Mode Field Diameter	8.4 µm @ 1,550 nm 8.9 µm @ 1,625 nm
Mode Field Diameter Tolerance	±0.6 µm @ 1550 nm ±0.6 µm @ 1625 nm
Polarization Mode Dispersion Link Design Value, maximum	0.04 ps/sqrt(km)
Standards Compliance	ITU-T G.655.A ITU-T G.655.B ITU-T G.655.C

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