CS-8Z-LT-(0.22DB/KM@1550NM)

Low Water Peak, Dispersion-Unshifted Singlemode Fiber (0.22dB/km @1550nm)

Product Classification

 Portfolio
 CommScope®

 Product Type
 Optical fiber

General Specifications

Cladding Diameter 125 μ m

Cladding Diameter Tolerance $\pm 0.7 \,\mu$ m

Cladding Non-Circularity, maximum 1 %

Coating Diameter (Colored) 250 μ m

Coating Diameter (Uncolored) 245 μ m

Coating Diameter Tolerance (Colored) $\pm 15 \,\mu$ m

Coating Diameter Tolerance (Uncolored) $\pm 10 \,\mu$ m

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, 32 mm Ø mandrel, 1 turn0.50 dB @ 1,550 nmMacrobending, 50 mm Ø mandrel, 100 turns0.05 dB @ 1,550 nmCoating Strip Force, maximum8.9 N | 2.001 lbfCoating Strip Force, minimum1.3 N | 0.292 lbf

Dynamic Fatigue Parameter, minimum 18

Optical Specifications

Cabled Cutoff Wavelength, maximum1260 nmPoint Defects, maximum0.1 dB

Zero Dispersion Slope, maximum 0.092 ps/[km-nm-nm]

Zero Dispersion Wavelength, maximum 1324 nm

COMMSCOPE®

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Zero Dispersion Wavelength, minimum

1300 nm

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

Index of Refraction 1.467 @ 1,310 nm | 1.468 @ 1,550 nm

Mode Field Diameter 10.4 µm @ 1,550 nm | 9.2 µm @ 1,310 nm | 9.6 µm @

1,385 nm

Mode Field Diameter Tolerance $\pm 0.4 \, \mu \text{m} \ @ \ 1310 \, \text{nm} \ | \ \pm 0.5 \, \mu \text{m} \ @ \ 1550 \, \text{nm} \ | \ \pm 0.6 \, \mu \text{m}$

@ 1385 nm

Polarization Mode Dispersion Link Design Value, maximum 0.08 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

* 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

