CS-8V2-TB

Enhanced Low Macrobending, Low Water Peak, Dispersion-Unshifted Single-mode 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 0.5 % **Coating Diameter (Colored)** 254 µm **Coating Diameter (Uncolored)** 242 µm **Coating Diameter Tolerance (Colored)** ±7 µm **Coating Diameter Tolerance (Uncolored)** ±7 µm Coating/Cladding Concentricity Error, maximum 10 µm

Proof Test 689.476 N/mm² | 100000 psi

 $0.5 \, \mu m$

Tight Buffer Diameter 900 μm Tight Buffer Diameter Tolerance $\pm 40 \ \mu m$

Dimensions

Core/Clad Offset, maximum

Fiber Curl, minimum 4 m | 13.123 ft

Mechanical Specifications

 Macrobending, 10 mm Ø mandrel, 1 turn
 0.15 dB @ 1,550 nm
 0.45 dB @ 1,625 nm

 Macrobending, 15 mm Ø mandrel, 1 turn
 0.08 dB @ 1,550 nm
 0.25 dB @ 1,625 nm

 Macrobending, 20 mm Ø mandrel, 1 turn
 0.03 dB @ 1,550 nm
 0.10 dB @ 1,625 nm

Coating Strip Force, maximum8.9 N | 2.001 lbfCoating Strip Force, minimum1.3 N | 0.292 lbf

Dynamic Fatigue Parameter, minimum 20

Optical Specifications

Cabled Cutoff Wavelength, maximum 1260 nm



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Point Defects, maximum 0.1 dB

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

Zero Dispersion Wavelength, maximum1324 nmZero Dispersion Wavelength, minimum1300 nm

Optical Specifications, Wavelength Specific

Attenuation, maximum 0.50 dB/km @ 1,310 nm | 0.50 dB/km @ 1,385

nm | 0.50 dB/km @ 1,550 nm

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

 $\textbf{Mode Field Diameter} \hspace{1.5cm} 8.8~\mu m~\textcircled{@}~1,310~nm~~ |~~9.8~\mu m~\textcircled{@}~1,550~nm$

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

Polarization Mode Dispersion Link Design Value, maximum0.06 ps/sqrt(km)Standards ComplianceITU-T G.657.B3

Environmental Specifications

Heat Aging, maximum 0.05 dB/km @ 85 °C

Temperature Dependence, maximum0.05 dB/kmTemperature Humidity Cycling, maximum0.05 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

