CS-8W-200UM-LT

200 Micron Low Macrobending, Zero Water Peak, Dispersion-Unshifted 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)** 200 µm **Coating Diameter (Uncolored)** 190 µm **Coating Diameter Tolerance (Colored)** ±10 μm **Coating Diameter Tolerance (Uncolored)** ±10 μm Coating/Cladding Concentricity Error, maximum 12 µm

Proof Test 689.476 N/mm² | 100000 psi

Dimensions

Core/Clad Offset, maximum

Fiber Curl, minimum 4 m | 13.123 ft

Mechanical Specifications

 Macrobending, 20 mm Ø mandrel, 1 turn
 0.75 dB @ 1,550 nm
 | 1.50 dB @ 1,625 nm

 Macrobending, 30 mm Ø mandrel, 10 turns
 0.25 dB @ 1,550 nm
 | 1.00 dB @ 1,625 nm

 Macrobending, 60 mm Ø mandrel, 100 turns
 0.05 dB @ 1,550 nm
 | 0.05 dB @ 1,625 nm

 $0.5 \, \mu m$

Coating Strip Force, maximum8.9 N | 2.001 lbfCoating Strip Force, minimum0.5 N | 0.112 lbf

Dynamic Fatigue Parameter, minimum 20

Optical Specifications

Cabled Cutoff Wavelength, maximum1260 nmPoint Defects, maximum0.05 dB

Zero Dispersion Slope, maximum 0.09 ps/[km-nm-nm]

COMMSCOPE®

CS-8W-200UM-LT

Zero Dispersion Wavelength, maximum1324 nmZero Dispersion Wavelength, minimum1300 nm

Optical Specifications, Wavelength Specific

Attenuation, maximum 0.20 dB/km @ 1550 nm | 0.24 dB/km @ 1625

nm | 0.33 dB/km @ 1310 nm | 0.34 dB/km @ 1385 nm

Dispersion, maximum 18 ps(nm-km) at 1550 nm | 3.5 ps(nm-km) from 1285

nm to 1330 nm at 1310 nm

Index of Refraction 1.467 @ 1,310 nm | 1.467 @ 1,385 nm | 1.468 @ 1,550

nm

Mode Field Diameter $10.4 \ \mu \text{m} \ @ \ 1,550 \ \text{nm} \quad | \ 9.2 \ \mu \text{m} \ @ \ 1,310 \ \text{nm} \quad | \ 9.6 \ \mu \text{m} \ @ \ 1,000 \ \text{m} \ | \ 9.6 \ \mu \text{m} \ | \ 9.6 \$

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 0.04 ps/sqrt(km)

Standards Compliance ITU-T G.652.D | ITU-T G.657.A1 | TIA-492CAAB (OS2)

Environmental Specifications

Heat Aging, maximum $0.05 \text{ dB/km} \otimes 85 \text{ }^{\circ}\text{C}$

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

Water Immersion, maximum 0.05 dB/km @ 23 °C

Included Products

CS-8W-LT – TeraSPEED® G652D/G657A1 Singlemode Fiber

* 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

