# CS-8F-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 Tensile Stress 100,000 psi (0.69 GPa)

**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, 50 mm Ø mandrel, 100 turns
 0.03 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, maximum0.1 dB

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

**COMMSCOPE®** 

# CS-8F-200UM-LT

Zero Dispersion Wavelength, maximum1324 nmZero Dispersion Wavelength, minimum1300 nm

Optical Specifications, Wavelength Specific

**Attenuation, maximum** 0.25 dB/km @ 1,550 nm | 0.27 dB/km @ 1,490

nm | 0.27 dB/km @ 1,625 nm | 0.33 dB/km @ 1,385

nm | 0.36 dB/km @ 1,310 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
 8.6 μm @ 1,310 nm | 9.8 μm @ 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, maximum 0.06 ps/sqrt(km)

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

### **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

#### 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

COMMSCOPE®