# CS-8Z-TB-0.40/0.30/093

### Low Water Peak, Dispersion-Unshifted Singlemode Fiber

#### **Product Classification**

 Portfolio
 CommScope®

 Product Type
 Optical fiber

General Specifications

Cladding Diameter 125  $\mu$ m

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

Cladding Non-Circularity, maximum 1 %

Coating Diameter (Colored) 250  $\mu$ m

Coating Diameter (Uncolored) 245  $\mu$ m

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

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

**Core/Clad Offset, maximum** 0.5 μm

**Proof Test** 689.476 N/mm<sup>2</sup> | 100000 psi

**Dimensions** 

**Fiber Curl, minimum** 4 m | 13.123 ft

Mechanical Specifications

Coating/Cladding Concentricity Error, maximum

 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

12 µm

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, maximum1260 nmPoint Defects, maximum0.1 dB

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

**Zero Dispersion Wavelength, maximum** 1324 nm



## CS-8Z-TB-0.40/0.30/093

**Zero Dispersion Wavelength, minimum** 1300 nm

Optical Specifications, Wavelength Specific

**Attenuation, maximum** 0.30 dB/km @ 1,550 nm | 0.40 dB/km @ 1,310

nm | 0.40 dB/km @ 1,385 nm

**Index of Refraction** 1.467 @ 1,310 nm | 1.468 @ 1,550 nm | 1.468 @ 1,625

nm

Mode Field Diameter9.0 μm @ 1,310 nm

 $\begin{tabular}{lll} \textbf{Mode Field Diameter Tolerance} & \pm 0.4 \ \mu m \ @ \ 1310 \ nm \end{tabular}$ 

**Polarization Mode Dispersion Link Design Value, maximum** 0.1 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, maximum0.05 dB/kmTemperature Humidity Cycling, maximum0.05 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

