

# CS-8Z-RB-I\O

## Low 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	1 %
Coating Diameter (Colored)	250 µm
Coating Diameter (Uncolored)	245 µm
Coating Diameter Tolerance (Colored)	±15 µm
Coating Diameter Tolerance (Uncolored)	±10 µm
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
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### 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	0.03 dB @ 1,550 nm   0.03 dB @ 1,625 nm
Coating Strip Force, maximum	8.9 N   2.001 lbf
Coating Strip Force, minimum	1.3 N   0.292 lbf
Dynamic Fatigue Parameter, minimum	18

### Optical Specifications

Cabled Cutoff Wavelength, maximum	1260 nm
Point Defects, maximum	0.1 dB
Zero Dispersion Slope, maximum	0.092 ps/[km-nm-nm]

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Zero Dispersion Wavelength, maximum	1324 nm
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
Backscatter Coefficient	-79.6 dB @ 1,310 nm   -82.1 dB @ 1,550 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   1.468 @ 1,385 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	±0.4 µm @ 1310 nm   ±0.5 µm @ 1550 nm   ±0.6 µm @ 1385 nm
Polarization Mode Dispersion Link Design Value, maximum	0.2 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

## 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