

# CS-8W-RR-200-0.40/0.30

---

200 Micron Low Macrobending, Zero Water Peak, G.652.D / G.657.A1 Dispersion-Unshifted Singlemode Fiber

## Product Classification

|                     |               |
|---------------------|---------------|
| <b>Portfolio</b>    | CommScope®    |
| <b>Product Type</b> | Optical fiber |

## General Specifications

|  |                        |
|--|------------------------|
| <b>Cladding Diameter</b>                             | 125 µm                 |
| <b>Cladding Diameter Tolerance</b>                   | ±0.7 µm                |
| <b>Cladding Non-Circularity, maximum</b>             | 0.7 %                  |
| <b>Coating Diameter (Colored)</b>                    | 200 µm                 |
| <b>Coating Diameter (Uncolored)</b>                  | 190 µm                 |
| <b>Coating Diameter Tolerance (Colored)</b>          | ±10 µm                 |
| <b>Coating Diameter Tolerance (Uncolored)</b>        | ±10 µm                 |
| <b>Coating/Cladding Concentricity Error, maximum</b> | 12 µm                  |
| <b>Core/Clad Offset, maximum</b>                     | 0.5 µm                 |
| <b>Proof Tensile Stress</b>                          | 100,000 psi (0.69 GPa) |

## Dimensions

|                            |                 |
|----------------------------|-----------------|
| <b>Fiber Curl, minimum</b> | 4 m   13.123 ft |
|----------------------------|-----------------|

## Mechanical Specifications

|   |   |
|---|---|
| <b>Macrobending, 20 mm Ø mandrel, 1 turn</b>    | 0.75 dB @ 1,550 nm   1.50 dB @ 1,625 nm |
| <b>Macrobending, 30 mm Ø mandrel, 10 turns</b>  | 0.25 dB @ 1,550 nm   1.00 dB @ 1,625 nm |
| <b>Macrobending, 60 mm Ø mandrel, 100 turns</b> | 0.05 dB @ 1,550 nm   0.05 dB @ 1,625 nm |
| <b>Coating Strip Force, maximum</b>             | 8.9 N   2.001 lbf                       |
| <b>Coating Strip Force, minimum</b>             | 0.5 N   0.112 lbf                       |
| <b>Dynamic Fatigue Parameter, minimum</b>       | 20                                      |

## Optical Specifications

|  |         |
|--|---------|
| <b>Cabled Cutoff Wavelength, maximum</b> | 1260 nm |
| <b>Point Defects, maximum</b>            | 0.05 dB |

# CS-8W-RR-200-0.40/0.30

---

|  |                    |
|--|--------------------|
| <b>Zero Dispersion Slope, maximum</b>      | 0.09 ps/[km-nm-nm] |
| <b>Zero Dispersion Wavelength, maximum</b> | 1324 nm            |
| <b>Zero Dispersion Wavelength, minimum</b> | 1300 nm            |

## Optical Specifications, Wavelength Specific

|  |   |
|--|---|
| <b>Attenuation, maximum</b>                                    | 0.30 dB/km @ 1,550 nm   0.40 dB/km @ 1,310 nm   0.40 dB/km @ 1,385 nm                               |
| <b>Dispersion, maximum</b>                                     | 18 ps(nm-km) at 1550 nm   3.5 ps(nm-km) from 1285 nm to 1330 nm at 1310 nm                          |
| <b>Index of Refraction</b>                                     | 1.467 @ 1,310 nm   1.467 @ 1,385 nm   1.468 @ 1,550 nm  |
| <b>Mode Field Diameter</b>                                     | 10.4 $\mu\text{m}$ @ 1,550 nm   9.2 $\mu\text{m}$ @ 1,310 nm   9.6 $\mu\text{m}$ @ 1,385 nm         |
| <b>Mode Field Diameter Tolerance</b>                           | $\pm 0.4 \mu\text{m}$ @ 1310 nm   $\pm 0.5 \mu\text{m}$ @ 1550 nm   $\pm 0.6 \mu\text{m}$ @ 1385 nm |
| <b>Polarization Mode Dispersion Link Design Value, maximum</b> | 0.04 ps/sqrt(km)  |
| <b>Standards Compliance</b>                                    | ITU-T G.652.D   ITU-T G.657.A1   TIA-492CAAB (OS2)  |

## Environmental Specifications

|  |                    |
|--|--------------------|
| <b>Heat Aging, maximum</b>                   | 0.05 dB/km @ 85 °C |
| <b>Temperature Dependence, maximum</b>       | 0.05 dB/km         |
| <b>Temperature Humidity Cycling, maximum</b> | 0.05 dB/km         |
| <b>Water Immersion, maximum</b>              | 0.05 dB/km @ 23 °C |

## \* Footnotes

|  |   |
|--|---|
| <b>Temperature Dependence, maximum</b>       | Temperature dependence is conducted at -60 °C to +85 °C (-76 °F to +185 °F)                                   |
| <b>Temperature Humidity Cycling, maximum</b> | Temperature humidity cycling is conducted at -10 °C to +85 °C (+14 °F to +185 °F) up to 95% relative humidity |