

# TeraSPEED<sup>®</sup>

## Type 8W Optical Fiber

### Dispersion-Unshifted, Matched-Clad

### Single Mode Fiber

### ITU-T G.652.D

1100 CommScope Place SE  
P.O. Box 1729  
Hickory, NC 28603-1729  
(800) 982-1708  
(828) 324-2200  
Fax: (828) 328-3400  
Int'l Fax: (828) 323-4989  
www.commscope.com



Physical Characteristics	
Cladding Diameter	125.0 ± 0.7 μm
Core/Clad Offset	≤ 0.5 μm
Coating Diameter (Uncolored)	235 - 245 μm
Coating Diameter (Colored)	254 ± 7 μm
Coating/Cladding Concentricity Error, max	12 μm
Clad Non-Circularity	≤ 1%

Mechanical Characteristics	
Proof Test	100 kpsi (.69 Gpa)
Coating Strip Force	0.3 - 2.0 lbf (1.3 - 8.9 N)
Fiber Curl	≥ 4 m
Dynamic Fatigue Parameter (nd)	≥ 20
Macrobending, max. (100 turns)	0.05 dB (1310/1550nm @ 50mm) 0.05 dB (1625nm @ 60 mm)
Macrobending, max. (1 turn @ 32 mm mandrel)	0.05 dB @ 1550 nm

Optical Characteristics, Wavelength Specific			
	1310-nm	1385-nm	1550-nm
Max. Attenuation, Loose Tube Cable	0.34 dB/km	0.31 dB/km	0.22 dB/km
Max Attenuation, Tight Buffer Cable	0.50 dB/km	0.50 dB/km	0.50 dB/km
Mode Field Diameter	9.2 ± 0.3 μm	9.6 ± 0.6 μm	10.4 ± 0.5 μm
Group Refractive Index	1.467	1.468	1.468
Dispersion, max.	3.2 ps/(nm-km) from 1285 to 1330 nm		18 ps/(nm-km)

Optical Characteristics, General	
Point Defects, max.	0.10 dB
Cutoff Wavelength	≤ 1260
Zero Dispersion Wavelength	1302 - 1322 nm
Zero Dispersion Slope, max.	0.090 ps/[km-nm-nm]
Polarization Mode Dispersion Link Design Value	≤ 0.06 ps/sqrt(km)

Environmental Characteristics	
Temperature Dependence -60 C to +85 C	≤ 0.05 dB
Temperature Humidity Cycling -10 C to +85 C up to 95% RH	≤ 0.05 dB
Water Immersion, 23+2 C	≤ 0.05 dB
Heat Aging, 85 + 2 C	≤ 0.05 dB