### OptiSPEED® OM1 Multimode Fiber

# OptiSPEED®

### **Product Classification**

PortfolioCommScope®Product TypeOptical fiber

### General Specifications

**Cladding Diameter** 125 µm **Cladding Diameter Tolerance** ±1.0 µm 1 % **Cladding Non-Circularity, maximum Coating Diameter (Colored)**  $254 \, \mu m$ **Coating Diameter (Uncolored)** 245 µm **Coating Diameter Tolerance (Colored)** ±7 µm **Coating Diameter Tolerance (Uncolored)** ±10 µm Coating/Cladding Concentricity Error, maximum 12 µm **Core Diameter** 62.5 µm **Core Diameter Tolerance** ±2.5 µm Core/Clad Offset, maximum 1 µm

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

### Mechanical Specifications

**Macrobending, 75 mm Ø mandrel, 100 turns** 0.50 dB @ 1,300 nm | 0.50 dB @ 850 nm

Coating Strip Force, maximum8.9 N | 2.001 lbfCoating Strip Force, minimum1.3 N | 0.292 lbf

**Dynamic Fatigue Parameter, minimum** 18

### Optical Specifications



## CS-6F-LT

Numerical Aperture 0.275

Numerical Aperture Tolerance ±0.015

Point Defects, maximum 0.15 dB

**Zero Dispersion Slope, maximum** 0.097 ps/[km-nm-nm]

**Zero Dispersion Wavelength, maximum** 1365 nm **Zero Dispersion Wavelength, minimum** 1320 nm

### Optical Specifications, Wavelength Specific

**1 Gbps Ethernet Distance** 300 m @ 850 nm | 550 m @ 1,300 nm

**Attenuation, maximum** 1.00 dB/km @ 1,300 nm | 3.00 dB/km @ 850 nm

**Backscatter Coefficient** -68.0 dB @ 850 nm | -75.7 dB @ 1,300 nm

**Bandwidth, OFL, minimum** 220 MHz-km @ 850 nm | 500 MHz-km @ 1,300 nm

**Index of Refraction** 1.491 @ 1,300 nm | 1.496 @ 850 nm

Standards Compliance TIA-492AAAA (OM1)

### **Environmental Specifications**

**Heat Aging, maximum** 0.20 dB/km @ 85 °C

Temperature Dependence, maximum0.1 dB/kmTemperature Humidity Cycling, maximum0.2 dB/km

Water Immersion, maximum 0.20 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

COMMSCOPE®