

LazrSPEED® 550 OM4 Bend-Insensitive Multimode Fiber

LazrSPEED® 550

Product Classification

<b>Portfolio</b>	CommScope®
<b>Product Type</b>	Optical fiber
<b>Regional Availability</b>	Asia   Australia/New Zealand   EMEA   Latin America   North America

Optical Specifications, Wavelength Specific

<b>Standards Compliance</b>	IEC 60793-2-10, type A1a.3a   IEC 60793-2-10, type A1a.3b   TIA-492AAAD (OM4)
<b>Attenuation, maximum</b>	1.00 dB/km @ 1300 nm 3.00 dB/km @ 850 nm
<b>Differential Mode Delay Note</b>	Superior to TIA-492AAAC and IEC 60793-2-10 at 850 nm
<b>Index of Refraction</b>	1.479 @ 1300 nm 1.483 @ 850 nm
<b>1 Gbps Ethernet Distance</b>	600 m @ 1300 nm 1110 m @ 850 nm
<b>10 Gbps Ethernet Distance</b>	550 m @ 850 nm 1804 ft @ 850 nm
<b>Bandwidth, Laser, minimum</b>	500 MHz-km @ 1300 nm 4700 MHz-km @ 850 nm
<b>Bandwidth, OFL, minimum</b>	500 MHz-km @ 1300 nm 3500 MHz-km @ 850 nm
<b>Differential Mode Delay</b>	0.70 ps/m @ 850 nm 0.88 ps/m @ 1300 nm
<b>Backscatter Coefficient</b>	-75.7 dB @ 1300 nm -68.0 dB @ 850 nm

Physical Specifications

<b>Cladding Diameter</b>	125.0 µm
<b>Cladding Diameter Tolerance</b>	±1.0 µm
<b>Cladding Non-Circularity, maximum</b>	1.0 %
<b>Coating Diameter (Colored)</b>	254 µm
<b>Coating Diameter (Uncolored)</b>	245 µm
<b>Coating Diameter Tolerance (Colored)</b>	±7 µm
<b>Coating Diameter Tolerance (Uncolored)</b>	±10 µm
<b>Coating/Cladding Concentricity Error, maximum</b>	12 µm
<b>Core Diameter</b>	50.0 µm
<b>Core Diameter Tolerance</b>	±2.5 µm
<b>Core/Clad Offset, maximum</b>	1.5 µm

## Optical Specifications, General

<b>Numerical Aperture</b>	0.200
<b>Numerical Aperture Tolerance</b>	±0.015
<b>Point Defects, maximum</b>	0.15 dB
<b>Zero Dispersion Slope, maximum</b>	0.105 ps/[km-nm-nm]
<b>Zero Dispersion Wavelength, maximum</b>	1316 nm
<b>Zero Dispersion Wavelength, minimum</b>	1297 nm

## Mechanical Specifications

<b>Coating Strip Force, maximum</b>	8.9 N   2.0 lbf
<b>Coating Strip Force, minimum</b>	1.3 N   0.3 lbf
<b>Dynamic Fatigue Parameter, minimum</b>	18
<b>Macrobending, 15 mm mandrel, 2 turns</b>	0.20 dB @ 850 nm 0.50 dB @ 1300 nm
<b>Macrobending, 30 mm mandrel, 2 turns</b>	0.10 dB @ 850 nm 0.30 dB @ 1300 nm
<b>Macrobending, 75 mm mandrel, 100 turns</b>	0.50 dB @ 850 nm 0.50 dB @ 1300 nm
<b>Proof Test</b>	689.48 N/mm <sup>2</sup>   100000.00 psi

## Environmental Specifications

<b>Heat Aging, maximum</b>	0.20 dB/km @ 85 °C
<b>Temperature Dependence, maximum</b>	0.10 dB/km
<b>Temperature Humidity Cycling, maximum</b>	0.20 dB/km
<b>Water Immersion, maximum</b>	0.20 dB/km @ 23 °C

## Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2008	Designed, manufactured and/or distributed under this quality management system

### \* 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