Z-TB-6F

#### **Base Product**

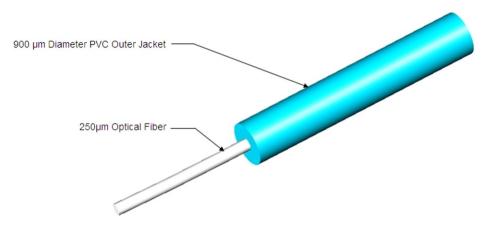


#### OptiSPEED® 900µm Tight Buffered Fiber

#### Product Classification

Regional Availability	Asia   Australia/New Zealand   EMEA   Latin America   North America
Portfolio	CommScope®
Product Type	Fiber indoor cable

## Representative Image



#### Regulatory Compliance/Certifications

#### Classification

ISO 9001:2015

Agency

Designed, manufactured and/or distributed under this quality management system

#### Included Products

CS-6F-TB – OptiSPEED® OM1 Multimode Fiber

Page 1 of 3

©2024 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: October 10, 2023



#### OptiSPEED® OM1 Multimode Fiber

# **OptiSPEED**<sup>®</sup>

#### Product Classification

Portfolio	CommScope®
Product Type	Optical fiber
General Specifications	
Cladding Diameter	125 µm
Cladding Diameter Tolerance	±1.0 μm
Cladding Non-Circularity, maximum	1 %
Coating Diameter (Colored)	254 µm
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
Tight Buffer Diameter	900 µm
Tight Buffer Diameter Tolerance	±40 μm
Mechanical Specifications	

# Macrobending, 75 mm Ø mandrel, 100 turns0.50 dB @ 1,300 nm | 0.50 dB @ 850 nmCoating Strip Force, maximum8.9 N | 2.001 lbfCoating Strip Force, minimum1.3 N | 0.292 lbfDynamic Fatigue Parameter, minimum18

Page 2 of 3

©2024 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: September 1, 2023



# CS-6F-TB

## **Optical Specifications**

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, maximum	0.1 dB/km
Temperature Humidity Cycling, maximum	0.2 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

Page 3 of 3

©2024 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: September 1, 2023

