# R-002-ZC-6F-F29

Fiber indoor cable, OptiSPEED® 2.9mm Riser Zipcord, 2 fiber, Multimode OM1, Feet jacket marking

#### **Product Classification**

Regional Availability

Asia | Australia/New Zealand | Latin America | Middle East/Africa | North

America

PortfolioCommScope®Product TypeFiber indoor cable

**Product Series** R-ZC

# General Specifications

Cable Type Cordage

Construction Type Non-armored

Fiber Type, quantity 2

Jacket Marking Feet

Subunit Type Gel-free

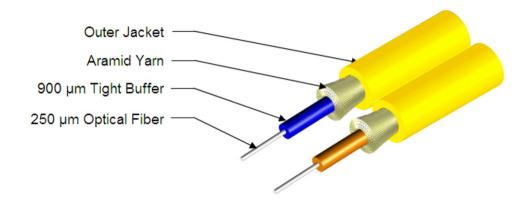
Total Fiber Count 2

**Dimensions** 

 Height Over Jacket
 2.9 mm | 0.114 in

 Width Over Jacket
 5.9 mm | 0.232 in

# Representative Image





# R-002-ZC-6F-F29

## Mechanical Specifications

Minimum Bend Radius, loaded44 mm1.732 inMinimum Bend Radius, unloaded23 mm0.906 inTensile Load, long term, maximum120 N26.977 lbfTensile Load, short term, maximum400 N89.924 lbf

 Compression
 10 N/mm | 57.101 lb/in

 Compression Test Method
 FOTP-41 | IEC 60794-1 E3

Flex 300 cycles

Flex Test Method FOTP-104 | IEC 60794-1 E6

**Impact** 0.74 N-m | 6.55 in lb

Impact Test Method FOTP-25 | IEC 60794-1 E4

**Strain** See long and short term tensile loads

Strain Test Method FOTP-33 | IEC 60794-1 E1

Twist 10 cycles

Twist Test Method FOTP-85 | IEC 60794-1 E7

**Vertical Rise, maximum** 500 m | 1,640.42 ft

**Optical Specifications** 

Fiber Type OM1, OptiSPEED® | OM1, OptiSPEED®

# **Environmental Specifications**

Installation temperature  $-20 \,^{\circ}\text{C}$  to  $+70 \,^{\circ}\text{C}$  (-4 °F to +158 °F)

Operating Temperature  $-20 \,^{\circ}\text{C}$  to  $+70 \,^{\circ}\text{C}$  (-4 °F to +158 °F)

Storage Temperature  $-40 \,^{\circ}\text{C}$  to  $+70 \,^{\circ}\text{C}$  (-40 °F to +158 °F)

Cable Qualification Standards ANSI/ICEA S-83-596 | Telcordia GR-409

Environmental Space Riser

Flame Test Listing NEC OFNR (ETL) and c(ETL)

Flame Test Method UL 1666

#### **Environmental Test Specifications**

**Heat Age** -20 °C to +85 °C (-4 °F to +185 °F)

**Heat Age Test Method** IEC 60794-1 F9

**Low High Bend**  $-20 \,^{\circ}\text{C} \text{ to } +70 \,^{\circ}\text{C} \, (-4 \,^{\circ}\text{F to } +158 \,^{\circ}\text{F})$ 

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# R-002-ZC-6F-F29

**Low High Bend Test Method** FOTP-37 | IEC 60794-1 E11

**Temperature Cycle**  $-20 \,^{\circ}\text{C} \text{ to } +70 \,^{\circ}\text{C} \, (-4 \,^{\circ}\text{F to } +158 \,^{\circ}\text{F})$ 

**Temperature Cycle Test Method** FOTP-3 | IEC 60794-1 F1

Packaging and Weights

**Cable weight** 17 kg/km | 11.423 lb/kft

Regulatory Compliance/Certifications

Agency Classification

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system



#### Included Products

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

## \* Footnotes

**Operating Temperature** Specification applicable to non-terminated bulk fiber cable



## OptiSPEED® OM1 Multimode Fiber

# OptiSPEED®

#### **Product Classification**

Portfolio CommScope®
Product Type Optical fiber

General Specifications

**Cladding Diameter** 125 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/mm² | 100000 psi

Tight Buffer Diameter $900 \ \mu m$ Tight Buffer Diameter Tolerance $\pm 40 \ \mu m$ 

Mechanical Specifications

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

Coating Strip Force, maximum $8.9 \,\mathrm{N}$  |  $2.001 \,\mathrm{lbf}$ Coating Strip Force, minimum $1.3 \,\mathrm{N}$  |  $0.292 \,\mathrm{lbf}$ 

**Dynamic Fatigue Parameter, minimum** 18

**COMMSCOPE®** 

# CS-6F-TB

#### **Optical Specifications**

Numerical Aperture0.275Numerical Aperture Tolerance±0.015Point Defects, maximum0.15 dB

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

Zero Dispersion Wavelength, maximum1365 nmZero Dispersion Wavelength, minimum1320 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

COMMSC PE°