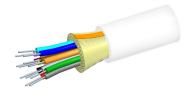
# 760173187 | R-006-DS-6F-FSUWH



### OptiSPEED® Riser Distribution Cable, 6 fiber single-unit

#### **Product Classification**

Regional Availability

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

America

Portfolio CommScope®

**Product Type** Fiber indoor cable

Product Series R-DS

## General Specifications

 Cable Type
 Distribution

 Construction Type
 Non-armored

**Subunit Type** Gel-free

Jacket Color White

Jacket Marking Feet

**Total Fiber Count** 6

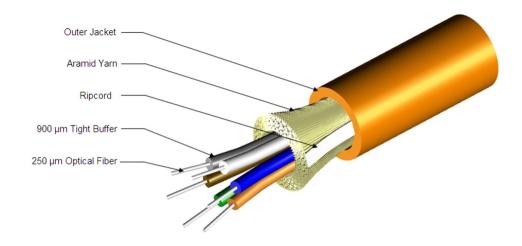
**Dimensions** 

**Diameter Over Jacket** 5.04 mm | 0.198 in

## Representative Image



# 760173187 | R-006-DS-6F-FSUWH



## Mechanical Specifications

Minimum Bend Radius, loaded 76 mm | 2.992 in

Minimum Bend Radius, unloaded 50 mm | 1.969 in Tensile Load, long term, maximum 200 N | 44.962 lbf

Tensile Load, short term, maximum 667 N | 149.948 lbf

**Compression** 10 N/mm | 57.101 lb/in

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

Flex 100 cycles

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

**Impact** 2.94 N-m | 26.021 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**



# 760173187 | R-006-DS-6F-FSUWH

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

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

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

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**  $-20 \, ^{\circ}\text{C} \text{ to } +85 \, ^{\circ}\text{C} \, (-4 \, ^{\circ}\text{F to } +185 \, ^{\circ}\text{F})$ 

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

**Low High Bend** -20 °C to +70 °C (-4 °F to +158 °F)

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

**Temperature Cycle** -20 °C to +70 °C (-4 °F to +158 °F)

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

Packaging and Weights

**Cable weight** 23 kg/km | 15.455 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®

## OptiSPEED® OM1 Multimode Fiber

#### **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

**Proof Tensile Stress** 100,000 psi (0.69 GPa)

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

Mechanical Specifications

Core/Clad Offset, maximum

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

1 µm

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

Optical Specifications

Numerical Aperture 0.275

**COMMSCOPE®** 

## CS-6F-TB

Numerical Aperture Tolerance ±0.015

**Point Defects, maximum** 0.15 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

