F2A-PNMNM

Base Product



FSJ2-50 SureFlex® Jumper with interface types N Male and N Male, variable length

Product Classification

Product Type Wireless transmission cable assembly

Product Brand HELIAX® | SureFlex®

Product Series FSJ2-50

General Specifications

Body Style, Connector A Straight

Body Style, Connector B Straight

Interface, Connector A N Male

Interface, Connector B N Male

Specification Sheet Revision Level A

Variable Length For custom lengths contact 828-324-2200 or 1-800-982-1708 (toll free), or your local

CommScope representative

Dimensions

 Length
 0 m | 0 ft

 Nominal Size
 3/8 in

VSWR/Return Loss

Frequency Band VSWR Return Loss (dB)

700–3000 MHz 1.43 15.04

Jumper Assembly Sample Label



F2A-PNMNM



Environmental Specifications

Immersion Test MethodMeets IEC 60529:2001, IP68 in mated condition

Regulatory Compliance/Certifications

Agency	Classification
Adency	Classification

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

Included Products

35422-42 — Heat Treated FSJ2-50, HELIAX® Superflexible Foam Coaxial Cable, corrugated copper, 3/8 in,

black PE jacket

FSJ1-50A - FSJ1-50A, HELIAX® Superflexible Low Density Foam Coaxial Cable, corrugated copper, 1/4 in,

black PE jacket





Heat Treated FSJ2-50, HELIAX® Superflexible Foam Coaxial Cable, corrugated copper, 3/8 in, black PE jacket

Product Classification

 Product Type
 Coaxial wireless cable

 Product Brand
 HELIAX® | SureFlex®

Product Series FSJ2-50

General Specifications

Flexibility Superflexible

Jacket Color Black

Performance Note Attenuation values typical, guaranteed within 5%

Dimensions

 Diameter Over Dielectric
 7.112 mm | 0.28 in

 Diameter Over Jacket
 10.541 mm | 0.415 in

 Inner Conductor OD
 2.794 mm | 0.11 in

 Outer Conductor OD
 9.652 mm | 0.38 in

Nominal Size 3/8 in

Electrical Specifications

Cable Impedance 50 ohm ±1 ohm

Capacitance 79.7 pF/m | 24.293 pF/ft

dc Resistance, Inner Conductor4.232 ohms/km | 1.29 ohms/kftdc Resistance, Outer Conductor4.987 ohms/km | 1.52 ohms/kft

dc Test Voltage 2300 V

Inductance $0.2 \,\mu\text{H/m} \,\mid\, 0.061 \,\mu\text{H/ft}$

Insulation Resistance 100000 MOhms-km

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35422-42

Jacket Spark Test Voltage (rms) 4000 V

Operating Frequency Band 1 – 13400 MHz

Peak Power 13.2 kW
Velocity 83 %

Material Specifications

Dielectric Material Foam PE

Jacket Material PE

Inner Conductor Material Copper-clad aluminum wire

Outer Conductor Material Corrugated copper

Mechanical Specifications

Minimum Bend Radius, multiple Bends25.4 mm | 1 inMinimum Bend Radius, single Bend25.4 mm | 1 in

Number of Bends, minimum 20 Number of Bends, typical 50

 Tensile Strength
 95 kg | 209.439 lb

 Bending Moment
 2.3 N-m | 20.357 in lb

Flat Plate Crush Strength 1.8 kg/mm | 100.795 lb/in

Environmental Specifications

Installation temperature $-40 \, ^{\circ}\text{C}$ to $+60 \, ^{\circ}\text{C}$ ($-40 \, ^{\circ}\text{F}$ to $+140 \, ^{\circ}\text{F}$)Operating Temperature $-55 \, ^{\circ}\text{C}$ to $+85 \, ^{\circ}\text{C}$ ($-67 \, ^{\circ}\text{F}$ to $+185 \, ^{\circ}\text{F}$)Storage Temperature $-70 \, ^{\circ}\text{C}$ to $+85 \, ^{\circ}\text{C}$ ($-94 \, ^{\circ}\text{F}$ to $+185 \, ^{\circ}\text{F}$)

Attenuation, Ambient Temperature68 °F | 20 °CAverage Power, Ambient Temperature104 °F | 40 °CAverage Power, Inner Conductor Temperature212 °F | 100 °C

Packaging and Weights

Cable weight 0.12 kg/m | 0.081 lb/ft

Regulatory Compliance/Certifications

Agency Classification

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

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FSJ1-50A, HELIAX® Superflexible Low Density Foam Coaxial Cable, corrugated copper, 1/4 in, black PE jacket

Product Classification

 Product Type
 Coaxial wireless cable

 Product Brand
 HELIAX® | SureFlex®

 Product Series
 FSJ1-50A | MLOC

General Specifications

Product Number 887009902/00 | SZ887009902/00

Flexibility Superflexible

Jacket Color Black

Performance NoteAttenuation values typical, guaranteed within 5%

Dimensions

 Diameter Over Dielectric
 4.826 mm | 0.19 in

 Diameter Over Jacket
 7.366 mm | 0.29 in

 Inner Conductor OD
 1.905 mm | 0.075 in

 Outer Conductor OD
 6.35 mm | 0.25 in

Nominal Size 1/4 in

Electrical Specifications

Cable Impedance 50 ohm ±1 ohm

Capacitance 79.4 pF/m | 24.201 pF/ft

dc Resistance, Inner Conductor 9.843 ohms/km | 3 ohms/kft

dc Resistance, Outer Conductor 7.216 ohms/km | 2.199 ohms/kft

dc Test Voltage 1600 V

Inductance 0.2 μ H/m | 0.061 μ H/ft

COMMSCOPE®

FSJ1-50A

Insulation Resistance 100000 MOhms-km

Jacket Spark Test Voltage (rms) 5000 V

Operating Frequency Band 1 – 18000 MHz

 $\begin{array}{lll} \textbf{Peak Power} & & 6.4 \, \text{kW} \\ \textbf{Velocity} & & 82 \, \% \\ \end{array}$

VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
680-960 MHz	1.201	20.8
1700-2200 MHz	1.201	20.8
2200-2700 MHz	1.433	15

Material Specifications

Dielectric Material Foam PE

Jacket Material PE

Inner Conductor Material Copper-clad aluminum wire

Outer Conductor Material Corrugated copper

Mechanical Specifications

Minimum Bend Radius, multiple Bends25.4 mm | 1 inMinimum Bend Radius, single Bend25.4 mm | 1 in

Number of Bends, minimum15Number of Bends, typical20

 Tensile Strength
 68 kg | 149.914 lb

 Bending Moment
 0.7 N-m | 6.196 in lb

Flat Plate Crush Strength 1.8 kg/mm | 100.795 lb/in

Environmental Specifications

Installation temperature $-40 \, ^{\circ}\text{C}$ to $+60 \, ^{\circ}\text{C}$ ($-40 \, ^{\circ}\text{F}$ to $+140 \, ^{\circ}\text{F}$)Operating Temperature $-55 \, ^{\circ}\text{C}$ to $+85 \, ^{\circ}\text{C}$ ($-67 \, ^{\circ}\text{F}$ to $+185 \, ^{\circ}\text{F}$)Storage Temperature $-70 \, ^{\circ}\text{C}$ to $+85 \, ^{\circ}\text{C}$ ($-94 \, ^{\circ}\text{F}$ to $+185 \, ^{\circ}\text{F}$)

Attenuation, Ambient Temperature68 °F | 20 °CAverage Power, Ambient Temperature104 °F | 40 °CAverage Power, Inner Conductor Temperature212 °F | 100 °C

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FSJ1-50A

Packaging and Weights

Cable weight 0.07 kg/m | 0.047 lb/ft

Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on www.commscope.com/ProductCompliance
ROHS	Compliant





