F2A-PNMNF

Base Product

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

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F2A-PNMNF



Environmental Specifications

Immersion Test Method

Meets IEC 60529:2001, IP68 in mated condition

Regulatory Compliance/Certifications

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

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35422-42



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

Coaxial wireless cable

7.112 mm | 0.28 in

2.794 mm | 0.11 in

9.652 mm | 0.38 in

3/8 in

10.541 mm | 0.415 in

FSJ2-50

HELIAX® | SureFlex®

Product Classification

Product Type Product Brand

Product Series

General Specifications

 Flexibility
 Superflexible

 Jacket Color
 Black

 Performance Note
 Attenuation values typical, guaranteed within 5%

Dimensions

Diameter Over Dielectric Diameter Over Jacket Inner Conductor OD Outer Conductor OD Nominal Size

Electrical Specifications

Cable Impedance	50 ohm ±1 ohm
Capacitance	79.7 pF/m 24.293 pF/ft
dc Resistance, Inner Conductor	4.232 ohms/km 1.29 ohms/kft
dc Resistance, Outer Conductor	4.987 ohms/km 1.52 ohms/kft
dc Test Voltage	2300 V
Inductance	0.2 µH/m 0.061 µH/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 Bends	25.4 mm 1 in
Minimum Bend Radius, single Bend	25.4 mm 1 in
Number of Bends, minimum	20
Number of Bends. typical	50

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 °C to +60 °C (-40 °F to +140 °F)
Operating Temperature	-55 °C to +85 °C (-67 °F to +185 °F)
Storage Temperature	-70 °C to +85 °C (-94 °F to +185 °F)
Attenuation, Ambient Temperature	68 °F 20 °C
Average Power, Ambient Temperature	104 °F 40 °C
Average Power, Inner Conductor Temperature	212 °F 100 °C

Packaging and Weights

Cable weight

0.12 kg/m | 0.081 lb/ft

Regulatory Compliance/Certifications

Classification

ISO 9001:2015

Agency

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

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FSJ2-50



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 **Product Number** 887019902/00 | SZ887019902/00 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 Nominal Size

Electrical Specifications

Cable Impedance	50 ohm ±1 ohm
apacitance 79.7 pF/m 24.293 pF/ft	
dc Resistance, Inner Conductor	4.232 ohms/km 1.29 ohms/kft
dc Resistance, Outer Conductor	4.987 ohms/km 1.52 ohms/kft
dc Test Voltage	2300 V
Inductance	0.2 µH/m 0.061 µH/ft

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9.652 mm | 0.38 in

3/8 in



FSJ2-50

Insulation Resistance	100000 MOhms-km
Jacket Spark Test Voltage (rms)	4000 V
Operating Frequency Band	1 – 13400 MHz
Peak Power	13.2 kW
Velocity	83 %

VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
2.5–2.7 GHz	1.106	25.96
680–800 MHz	1.106	25.96
800–960 MHz	1.106	25.96
1700–2200 MHz	1.101	26.36

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 Bends	25.4 mm 1 in
Minimum Bend Radius, single Bend	25.4 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 °C to +60 °C (-40 °F to +140 °F)
Operating Temperature	-55 °C to +85 °C (-67 °F to +185 °F)
Storage Temperature	-70 °C to +85 °C (-94 °F to +185 °F)
Attenuation, Ambient Temperature	68 °F 20 °C
Average Power, Ambient Temperature	104 °F 40 °C

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FSJ2-50

Average Power, Inner Conductor Temperature

212 °F | 100 °C

Packaging and Weights

Cable weight

0.12 kg/m | 0.081 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
ROHS	Compliant
UK-ROHS	Compliant

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