F2R-HMHR-P

Base Product



FSJ2RK-50 Jumper with interface types 4.3-10 Male and 4.3-10 Male Right Angle, variable length

Product Classification

Product Type Wireless transmission cable assembly

Product Series FSJ2-50

General Specifications

Body Style, Connector AStraightBody Style, Connector BRight angleInterface, Connector A4.3-10 MaleInterface, Connector B4.3-10 Male

Specification Sheet Revision Level A

Variable Length For custom lengths, contact your local ANDREW representative

Dimensions

Nominal Size 3/8 in

Electrical Specifications

3rd Order IMD Static -110 dBm

3rd Order IMD Static Test Method Two +43 dBm carriers

VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
698-960 MHz	1.11	26.4
1700-2200 MHz	1.11	26.4
2200-2700 MHz	1.11	26.4

Jumper Assembly Sample Label





Environmental Specifications

EN50575 CPR Cable EuroClass Fire PerformanceB2caEN50575 CPR Cable EuroClass Smoke Rating\$1aEN50575 CPR Cable EuroClass Droplets Ratingd0EN50575 CPR Cable EuroClass Acidity Ratinga1

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

Included Products

F2HM-S2 - 4.3-10 Male for 3/8 in foam coaxial cable, factory attached

F2HR-S2 - 4.3-10 Male Right Angle for 3/8 in foam and air coaxial cable, factory attached

FSJ2RK-50 - FSJ2-50, HELIAX® Superflexible Foam Coaxial Cable, corrugated copper, 3/8 in, black non-

halogenated, fire retardant polyolefin jacket B2ca s1a d0 a1 Compliant



F2HM-S2

4.3-10 Male for 3/8 in foam coaxial cable, factory attached

Product Classification

Product Type Wireless and radiating connector

Product Brand HELIAX® | SureFlex®

General Specifications

Body StyleStraightInner Contact Attachment MethodSolderInner Contact PlatingSilver

Interface 4.3-10 Male

 Outer Contact Attachment Method
 Solder

 Outer Contact Plating
 Trimetal

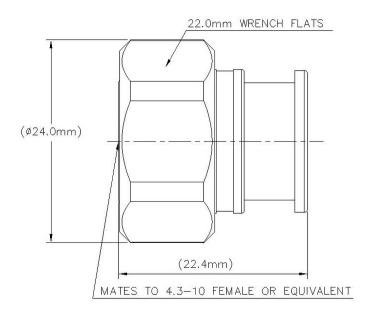
Dimensions

 Length
 25.91 mm | 1.02 in

 Diameter
 23.88 mm | 0.94 in

Nominal Size 3/8 in

Outline Drawing



Electrical Specifications

Inner Contact Resistance, maximum

3rd Order IMD at Frequency -119 dBm @ 910 MHz

3rd Order IMD Test Method Two +43 dBm carriers

Insertion Loss Coefficient, typical 0.05

Cable Impedance 50 ohm

Connector Impedance 50 ohm

dc Test Voltage 2300 V

Insulation Resistance, minimum 5000 MOhm

Operating Frequency Band 0 - 6000 MHz

Outer Contact Resistance, maximum 1 m0hm

Peak Power, maximum 13.2 kW

RF Operating Voltage, maximum (vrms) 813 V

VSWR/Return Loss

Frequency Band VSWR Return Loss (dB)

0–3000 MHz 1.041 33.94



1 m0hm

F2HM-S2

3000–4000 MHz 1.065 30.04 **4000–6000 MHz** 1.119 25.01

Mechanical Specifications

Connector Retention Tensile Force671.68 N | 151 lbfConnector Retention Torque2.7 N-m | 23.897 in lbCoupling Nut Proof Torque8 N-m | 70.806 in lbCoupling Nut Retention Force449.98 N | 101.16 lbf

Interface Durability 100 cycles

Mechanical Shock Test Method IEC 60068-2-27

Environmental Specifications

Operating Temperature $-55 \,^{\circ}\text{C}$ to $+85 \,^{\circ}\text{C}$ (-67 $^{\circ}\text{F}$ to $+185 \,^{\circ}\text{F}$)Storage Temperature $-65 \,^{\circ}\text{C}$ to $+125 \,^{\circ}\text{C}$ (-85 $^{\circ}\text{F}$ to $+257 \,^{\circ}\text{F}$)

Attenuation, Ambient Temperature20 °C | 68 °FAverage Power, Ambient Temperature40 °C | 104 °FAverage Power, Inner Conductor Temperature100 °C | 212 °FCorrosion Test MethodIEC 60068-2-11

Immersion Depth1 mImmersion Test MatingMated

Immersion Test Method IEC 60529:2001, IP68

Moisture Resistance Test Method IEC 60068-2-3

Thermal Shock Test Method IEC 60068-2-14

Vibration Test Method IEC 60068-2-6

Packaging and Weights

Weight, net 32.3 g | 0.071 lb

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.andrew.com/ProductCompliance
ROHS	Compliant



F2HM-S2

UK-ROHS

Compliant



* Footnotes

Insertion Loss Coefficient, typical 0.05√-freq (GHz) (not applicable for elliptical waveguide)

Immersion Depth Immersion at specified depth for 24 hours



F2HR-S2

4.3-10 Male Right Angle for 3/8 in foam and air coaxial cable, factory attached

Product Classification

Product Type Wireless and radiating connector

Product Brand HELIAX® | SureFlex®

General Specifications

Body Style Right angle

Inner Contact Attachment MethodSolderInner Contact PlatingSilver

Interface 4.3-10 Male

 Outer Contact Attachment Method
 Solder

 Outer Contact Plating
 Trimetal

Dimensions

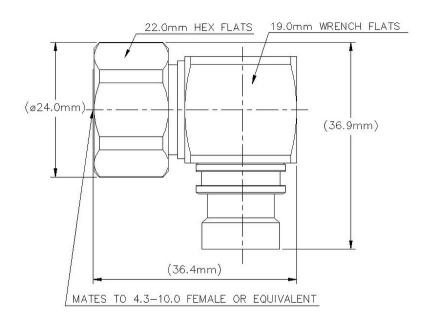
 Height
 34.29 mm | 1.35 in

 Width
 32.26 mm | 1.27 in

 Length
 23.88 mm | 0.94 in

Nominal Size 3/8 in

Outline Drawing



Electrical Specifications

Inner Contact Resistance, maximum

3rd Order IMD at Frequency -119 dBm @ 910 MHz

3rd Order IMD Test Method Two +43 dBm carriers

Insertion Loss Coefficient, typical 0.05

Average Power at Frequency 676.0 W @ 900 MHz

Cable Impedance50 ohmConnector Impedance50 ohm

dc Test Voltage 2300 V

Insulation Resistance, minimum 5000 MOhm

Operating Frequency Band 0 – 6000 MHz

Outer Contact Resistance, maximum 1 m0hm

Peak Power, maximum 13.2 kW

RF Operating Voltage, maximum (vrms) 813 V

Shielding Effectiveness -110 dB

VSWR/Return Loss



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1 m0hm

F2HR-S2

Frequency Band	VSWR	Return Loss (dB)
0-960 MHz	1.036	35.05
1710-2200 MHz	1.046	32.96
2200-2700 MHz	1.065	30.04
2700-3000 MHz	1.065	30.04
3000-6000 MHz	1.222	20.01

Mechanical Specifications

Connector Retention Tensile Force671.68 N | 151 lbfConnector Retention Torque2.7 N-m | 23.897 in lbCoupling Nut Proof Torque8 N-m | 70.806 in lbCoupling Nut Retention Force449.98 N | 101.16 lbf

Interface Durability100 cyclesInterface Durability MethodIEC 61169-4:17Mechanical Shock Test MethodIEC 60068-2-27

Environmental Specifications

Operating Temperature $-55 \,^{\circ}\text{C}$ to $+85 \,^{\circ}\text{C}$ (-67 $^{\circ}\text{F}$ to $+185 \,^{\circ}\text{F}$)Storage Temperature $-65 \,^{\circ}\text{C}$ to $+125 \,^{\circ}\text{C}$ (-85 $^{\circ}\text{F}$ to $+257 \,^{\circ}\text{F}$)

Attenuation, Ambient Temperature20 °C | 68 °FAverage Power, Ambient Temperature40 °C | 104 °FAverage Power, Inner Conductor Temperature100 °C | 212 °FCorrosion Test MethodIEC 60068-2-11

Immersion Depth1 mImmersion Test MatingMated

Immersion Test Method IEC 60529:2001, IP68

Moisture Resistance Test MethodIEC 60068-2-3Thermal Shock Test MethodIEC 60068-2-14Vibration Test MethodIEC 60068-2-6

Packaging and Weights

Weight, net 65.47 g | 0.144 lb

Regulatory Compliance/Certifications



F2HR-S2

Agency Classification

CHINA-ROHS Above maximum concentration value

ROHS Compliant/Exempted UK-ROHS Compliant/Exempted



* Footnotes

Insertion Loss Coefficient, typical 0.05√ freq (GHz) (not applicable for elliptical waveguide)

Immersion Depth Immersion at specified depth for 24 hours



FSJ2RK-50



FSJ2-50, HELIAX® Superflexible Foam Coaxial Cable, corrugated copper, 3/8 in, black non-halogenated, fire retardant polyolefin jacket B2ca s1a d0 a1 Compliant

Product Classification

 Product Type
 Coaxial wireless cable

 Product Brand
 HELIAX® | SureFlex®

Product Series FSJ2-50

General Specifications

Product Number 520102002/00 | SZ520102002/00

Flexibility Superflexible

Jacket Color Black

Performance NoteAttenuation values typical, guaranteed within 5%

Dimensions

 Diameter Over Dielectric
 7.112 mm | 0.28 in

 Diameter Over Jacket
 10.922 mm | 0.43 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 80 pF/m | 24.384 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 μ H/m | 0.061 μ H/ft

Insulation Resistance 100000 MOhms-km

Jacket Spark Test Voltage (rms) 4000 V

Operating Frequency Band 1 – 13400 MHz

ANDREW® an Amphenol company

FSJ2RK-50

 Peak Power
 13.2 kW

 Velocity
 83 %

VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
680-960 MHz	1.201	20.79
1700-2200 MHz	1.201	20.79
2200-2700 MHz	1.433	14.99

Material Specifications

Dielectric Material Foam PE

Jacket Material Non-halogenated, fire retardant polyolefin

Inner Conductor Material Copper-clad aluminum wire

Outer Conductor Material Corrugated copper

Mechanical Specifications

Minimum Bend Radius, multiple Bends25.4 mm1 inMinimum Bend Radius, single Bend25.4 mm1 in

Number of Bends, minimum30Number of Bends, typical50

 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 $-40 \,^{\circ}\text{C}$ to $+60 \,^{\circ}\text{C}$ ($-40 \,^{\circ}\text{F}$ to $+140 \,^{\circ}\text{F}$)

Storage Temperature $-40 \,^{\circ}\text{C}$ to $+60 \,^{\circ}\text{C}$ ($-40 \,^{\circ}\text{F}$ to $+140 \,^{\circ}\text{F}$)

Attenuation, Ambient Temperature $68 \, ^{\circ}\text{F} \mid 20 \, ^{\circ}\text{C}$ Average Power, Ambient Temperature $104 \, ^{\circ}\text{F} \mid 40 \, ^{\circ}\text{C}$ Average Power, Inner Conductor Temperature $212 \, ^{\circ}\text{F} \mid 100 \, ^{\circ}\text{C}$

EN50575 CPR Cable EuroClass Fire PerformanceB2caEN50575 CPR Cable EuroClass Smoke Ratings1aEN50575 CPR Cable EuroClass Droplets Ratingd0

ANDREW® an Amphenol company

FSJ2RK-50

EN50575 CPR Cable EuroClass Acidity Rating a1

Fire Retardancy Test Method | IEC 60332-1-2 | IEC 60332-3-24 | NFPA 130-2010 | UL 1666/CATVR

/CMR | UL 1685

Smoke Index Test Method IEC 61034

Toxicity Index Test MethodIEC 60754-1 | IEC 60754-2

Packaging and Weights

Cable weight 0.13 kg/m | 0.087 lb/ft

Regulatory Compliance/Certifications

Agency	Classification

CENELEC EN 50575 compliant, Declaration of Performance (DoP) available

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.andrew.com/ProductCompliance

ROHS Compliant UK-ROHS Compliant

