F4A-PNFDM-X

Base Product



HELIAX® 1/2" Superflexible SureFlex® Jumper with interface types N Female and 7-16 DIN Male, variable length

Product Classification

Product Type Wireless transmission cable assembly

Product Series FSJ4-50B

General Specifications

Attachment, Connector B Field attachment

Body Style, Connector AStraightBody Style, Connector BStraightInterface, Connector AN FemaleInterface, Connector B7-16 DIN Male

Specification Sheet Revision Level A

Variable Length For custom lengths, contact your local ANDREW representative

Dimensions

Length 0 m | 0 ft

Nominal Size 1/2 in

Electrical Specifications

DTF, Connector A -32 dB

VSWR/Return Loss

Frequency Band VSWR, typical Return Loss, typical (dB)

0–3000 MHz 1.11 26 **2.2–2.7 GHz** 1.09 28

Jumper Assembly Sample Label





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

F4HMP-D - 4.3-10 Male for 1/2 in FSJ4-50B cable F4HMP-D - 4.3-10 Male Push Pull for 1/2 in FSJ4-50B

cable

F4PDMV2-C - 7-16 DIN Male for 1/2 in FSJ4-50B cable



4.3-10 Male for 1/2 in FSJ4-50B cable

Product Classification

Product Type Wireless and radiating connector

Product Brand HELIAX®

Product Series FSJ4-50B | FSJ4RK-50B

Ordering Note ANDREW® standard product (Global)

General Specifications

Body StyleStraightCable FamilyFSJ4-50BInner Contact Attachment MethodCaptivatedInner Contact PlatingSilver

Interface 4.3-10 Male

Mounting Angle Straight

Outer Contact Attachment Method Crush-flare

Outer Contact Plating Trimetal

Dimensions

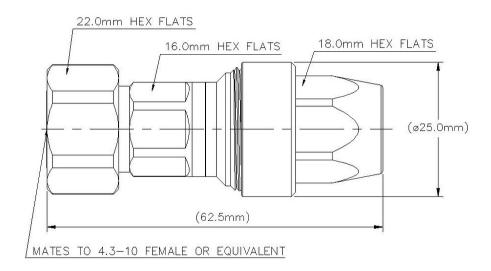
 Length
 62.48 mm | 2.46 in

 Diameter
 24.89 mm | 0.98 in

Nominal Size 1/2 in



Outline Drawing



Electrical Specifications

Insertion Loss Coefficient, typical

3rd Order IMD at Frequency-116 dBm @ 910 MHz3rd Order IMD Dynamic Test MethodTwo +43 dBm carriers

3rd Order IMD Dynamic, typical -116 dB

Average Power at Frequency 600.0 W @ 900 MHz

Cable Impedance50 ohmConnector Impedance50 ohmdc Test Voltage2500 VInner Contact Resistance, maximum0.8 mOhm

Insulation Resistance, minimum 5000 MOhm

Operating Frequency Band 0 - 7500 MHz

Outer Contact Resistance, maximum 1.5 mOhm

Peak Power, maximum 22.5 kW

RF Operating Voltage, maximum (vrms) 884 V



0.05

Shielding Effectiveness -110 dB

VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
45-1000 MHz	1.02	40.09
1000-2700 MHz	1.03	36.61
2700-3800 MHz	1.065	30.04
3800-6000 MHz	1.15	23.13

Mechanical Specifications

Attachment Durability 25 cycles

Connector Retention Tensile Force 889.64 N | 200 lbf

Connector Retention Torque 5.42 N-m | 47.998 in lb

Coupling Nut Proof Torque10 N-m | 88.507 in lbCoupling Nut Retention Force449.27 N | 101 lbf

Interface Durability 100 cycles

Interface Durability MethodIEC 61169-4:9.5Mechanical Shock Test MethodIEC 60068-2-27

Environmental Specifications

Operating Temperature-55 °C to +85 °C (-67 °F to +185 °F)Storage Temperature-55 °C to +85 °C (-67 °F to +185 °F)

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

Water Jetting Test Mating Mated

Water Jetting Test Method IEC 60529:2001, IP66



Packaging and Weights

Weight, net 100 g | 0.22 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 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





4.3-10 Male Push Pull for 1/2 in FSJ4-50B cable

Product Classification

Product Type Wireless and radiating connector

Product Brand HELIAX®

Product Series FSJ4-50B | FSJ4RK-50B

Ordering Note ANDREW® standard product (Global)

General Specifications

Body StyleStraightCable FamilyFSJ4-50BInner Contact Attachment MethodCaptivatedInner Contact PlatingSilver

Interface4.3-10 MaleMounting AngleStraightOuter Contact Attachment MethodCrush-flareOuter Contact PlatingTrimetal

Dimensions

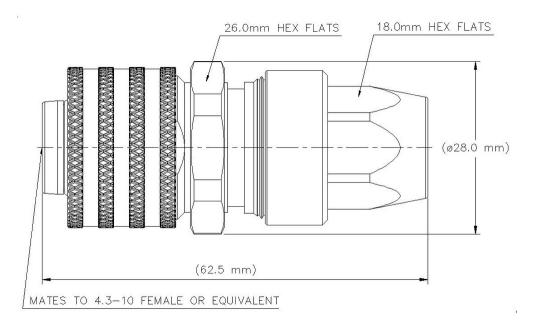
 Length
 62.48 mm | 2.46 in

 Diameter
 27.94 mm | 1.1 in

Nominal Size 1/2 in



Outline Drawing



Electrical Specifications

3rd Order IMD at Frequency -116 dBm @ 910 MHz

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

3rd Order IMD Dynamic, typical -116 dB

Insertion Loss Coefficient, typical 0.05

Average Power at Frequency 600.0 W @ 900 MHz

Cable Impedance50 ohm

Connector Impedance 50 ohm

dc Test Voltage 2500 V

Inner Contact Resistance, maximum 0.8 mOhm

Insulation Resistance, minimum 5000 MOhm

Operating Frequency Band 0 – 7500 MHz

Outer Contact Resistance, maximum 1.5 m0hm

Peak Power, maximum 22.5 kW

RF Operating Voltage, maximum (vrms) 884 V

Shielding Effectiveness -110 dB



VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
45-1000 MHz	1.02	40.09
1000-2700 MHz	1.03	36.61
2700-3800 MHz	1.065	30.04
3800-6000 MHz	1.15	23.13

Mechanical Specifications

Attachment Durability 5 cycles

Connector Retention Tensile Force 889.64 N | 200 lbf

Connector Retention Torque 5.42 N-m | 47.998 in lb

Interface Durability 25 cycles

Interface Durability MethodIEC 61169-4:9.5Mechanical Shock Test MethodIEC 60068-2-27

Environmental Specifications

Operating Temperature-55 °C to +85 °C (-67 °F to +185 °F)Storage Temperature-55 °C to +85 °C (-67 °F to +185 °F)

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

Water Jetting Test Mating Mated

Water Jetting Test Method IEC 60529:2001, IP66

Packaging and Weights



Weight, net 123.37 g | 0.272 lb

Regulatory Compliance/Certifications

Agency Classification

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

* Footnotes

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

Immersion Depth Immersion at specified depth for 24 hours



F4PDMV2-C



7-16 DIN Male for 1/2 in FSJ4-50B cable

Product Classification

Product TypeWireless and radiating connector

Product Brand HELIAX®

Product Series FSJ4-50B | FSJ4RK-50B

Ordering Note ANDREW® standard product (Global)

General Specifications

Body Style Straight

Cable Family FSJ4-50B

Inner Contact Attachment Method Captivated

Inner Contact Plating Silver

Interface 7-16 DIN Male

Mounting AngleStraightOuter Contact Attachment MethodCrush-flareOuter Contact PlatingTrimetalPressurizableNo

Dimensions

 Length
 50.04 mm | 1.97 in

 Diameter
 34.54 mm | 1.36 in

Nominal Size 1/2 in

Electrical Specifications

3rd Order IMD at Frequency -120 dBm @ 910 MHz
3rd Order IMD Test Method Two +43 dBm carriers

Insertion Loss Coefficient, typical 0.05

Average Power at Frequency 1.0 kW @ 900 MHz

Cable Impedance 50 ohm

ANDREW® an Amphenol company

F4PDMV2-C

50 ohm Connector Impedance 2500 V dc Test Voltage Inner Contact Resistance, maximum 0.8 m0hm 5000 MOhm Insulation Resistance, minimum 0 - 7500 MHz **Operating Frequency Band Outer Contact Resistance, maximum** 1.5 m0hm 15.6 kW Peak Power, maximum RF Operating Voltage, maximum (vrms) 884 V **Shielding Effectiveness** -110 dB

VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
0-2200 MHz	1.032	36.06
2200-2700 MHz	1.046	32.96
2700-3000 MHz	1.052	31.92

Mechanical Specifications

Attachment Durability 25 cycles

Connector Retention Tensile Force 889.64 N | 200 lbf

Connector Retention Torque5.42 N-m | 47.998 in lbCoupling Nut Proof Torque24.86 N-m | 220.003 in lb

Coupling Nut Retention Force 1,000.85 N | 225 lbf

Coupling Nut Retention Force Method MIL-C-39012C-3.25, 4.6.22

Insertion Force200.17 N | 45 lbfInsertion Force MethodIEC 61169-1:15.2.4

Interface Durability 500 cycles

Interface Durability Method IEC 61169-4:9.5

Mechanical Shock Test MethodMIL-STD-202F, Method 213B, Test Condition C

Environmental Specifications

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

Attenuation, Ambient Temperature 20 °C | 68 °F



F4PDMV2-C

Average Power, Ambient Temperature 40 °C | 104 °F

Corrosion Test Method MIL-STD-1344A, Method 1001.1, Test Condition A

Immersion Depth 1 m

Immersion Test Mating Mated

Immersion Test Method IEC 60529:2001, IP68

Moisture Resistance Test Method MIL-STD-202F, Method 106F

Thermal Shock Test Method MIL-STD-202, Method 107, Test Condition A-1, Low Temperature -55 °C

Vibration Test Method MIL-STD-202F, Method 204D, Test Condition B

Water Jetting Test Mating Mated

Water Jetting Test Method IEC 60529:2001, IP66

Packaging and Weights

Weight, net 136.08 g | 0.3 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 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

