F4A-PDMDR-4M5-X



FSJ4-50B SureFlex® Jumper with interface types 7-16 DIN Male and 7-16 DIN Male Right Angle, 4.5 m

Product Classification

Product Type SureFlex® standard

Product Brand HELIAX® | SureFlex®

Product Series FSJ4-50B

General Specifications

Attachment, Connector B Field attachment

Body Style, Connector AStraightBody Style, Connector BRight angleInterface, Connector A7-16 DIN MaleInterface, Connector B7-16 DIN Male

Specification Sheet Revision Level A

Dimensions

Length 4.5 m | 14.764 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 1.106 25.96 **2.2–2.7 GHz** 1.083 27.99

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

F4PDR-C

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

cable



F4PDR-C



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

Product Classification

Product Type Wireless and radiating connector

Product Brand HELIAX®

General Specifications

Body StyleRight angleCable FamilyFSJ4-50BInner Contact Attachment MethodCaptivated

Inner Contact Plating Gold

Interface7-16 DIN MaleMounting AngleRight angleOuter Contact Attachment MethodCrush-flareOuter Contact PlatingTrimetalPressurizableNo

Dimensions

 Width
 31.75 mm | 1.25 in

 Length
 60.96 mm | 2.4 in

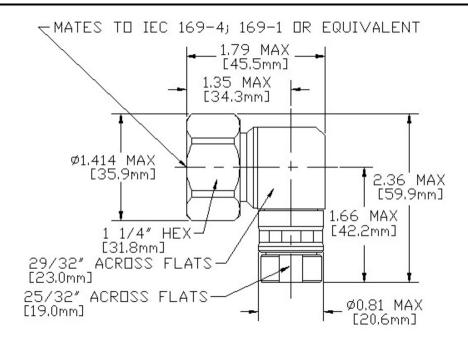
 Right Angle Length
 45.72 mm | 1.8 in

 Diameter
 40.39 mm | 1.59 in

Nominal Size 1/2 in

Outline Drawing





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 **Connector Impedance** 50 ohm dc Test Voltage 2500 V Inner Contact Resistance, maximum 0.8 m0hm Insulation Resistance, minimum 5000 MOhm **Operating Frequency Band** 0 - 5200 MHz **Outer Contact Resistance, maximum** 1.5 m0hm Peak Power, maximum 15.6 kW RF Operating Voltage, maximum (vrms) 884 V **Shielding Effectiveness** -110 dB

VSWR/Return Loss

Frequency Band VSWR Return Loss (dB)

50–1000 MHz 1.04 34.16



F4PDR-C

1000-1900 MHz	1.04	34.16
1900-2200 MHz	1.07	29.42
2000-2700 MHz	1.1	26.45
2700-3600 MHz	1.13	24.29
3600-5000 MHz	1.25	19.09

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 Method MIL-STD-202F, Method 213B, Test Condition C

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

Immersion Depth1 mImmersion Test MatingMated

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 IEC 60068-2-6

Water Jetting Test Mating Mated

Water Jetting Test Method IEC 60529:2001, IP66



F4PDR-C

Packaging and Weights

Weight, net 207.36 g | 0.457 lb

* Footnotes

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

Immersion Depth Immersion at specified depth for 24 hours

