# Product Specifications



#### F4DR-C

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

#### **Product Classification**

Brand HELIAX®

Product Type Wireless and radiating connector

#### **General Specifications**

Interface 7-16 DIN Male
Body Style Right angle
Brand HELIAX®
Mounting Angle Right angle

Ordering Note CommScope® standard product (Global)

### **Electrical Specifications**

Connector Impedance 50 ohm
Operating Frequency Band 0 - 7500 MHz

Cable Impedance 50 ohm

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

RF Operating Voltage, maximum (vrms) 884.00 V
dc Test Voltage 2500 V
Outer Contact Resistance, maximum 1.50 mOhm
Inner Contact Resistance, maximum 0.80 mOhm
Insulation Resistance, minimum 5000 MOhm
Average Power 1.0 kW @ 900 MHz

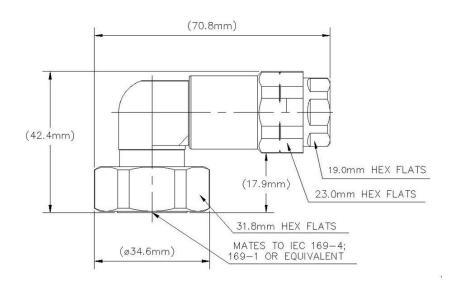
Peak Power, maximum 15.60 kW Insertion Loss, typical 0.05 dB Shielding Effectiveness -110 dB

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### **Outline Drawing**



## **Mechanical Specifications**

Outer Contact Attachment Method Self-flare
Inner Contact Attachment Method Captivated
Outer Contact Plating Trimetal
Inner Contact Plating Gold | Silver
Interface Durability 500 cycles
Interface Durability Method IEC 61169-4:9.5

Connector Retention Tensile Force 445 N | 100 lbf

Connector Retention Torque 5.42 N-m | 48.00 in lb

Pressurizable No

Coupling Nut Proof Torque 24.86 N-m | 220.00 in lb Coupling Nut Retention Force 1000.85 N | 225.00 lbf Coupling Nut Retention Force Method MIL-C-39012C-3.25, 4.6.22

### **Dimensions**

 Nominal Size
 1/2 in

 Height
 42.41 mm | 1.67 in

 Length
 70.82 mm | 2.79 in

 Right Angle Length
 17.91 mm | 0.71 in

 Weight
 197.20 g | 0.43 lb

 Width
 34.60 mm | 1.36 in

## **Environmental Specifications**

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

Immersion Depth 1 m
Immersion Test Mating Unmated

Immersion Test Method IEC 60529:2001, IP68

Water Jetting Test Mating Unmated

Water Jetting Test Method IEC 60529:2001, IP66
Moisture Resistance Test Method MIL-STD-202F, Method 106F

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

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

Vibration Test Method MIL-STD-202F, Method 204D, Test Condition B
Corrosion Test Method MIL-STD-1344A, Method 1001.1, Test Condition A

#### **Standard Conditions**

Attenuation, Ambient Temperature 20 °C | 68 °F Average Power, Ambient Temperature 40 °C | 104 °F

#### **Return Loss/VSWR**

Frequency Band	VSWR	Return Loss (dB)
50-1000 MHz	1.04	33.00
1000-1900 MHz	1.04	33.00
1900-2200 MHz	1.07	29.00
2200-2700 MHz	1.10	26.00
2700-3600 MHz	1.13	24.00
3600-6000 MHz	1.25	19.00
6000-8800 MHz	1.67	12.00
8000-10200 MHz	1.67	12.00

### **Regulatory Compliance/Certifications**

Agency Classification

ISO 9001:2008 Designed, manufactured and/or distributed under this quality management system

#### \* Footnotes

Immersion Depth Immersion at specified depth for 24 hours

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