

# F4PDR-C

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

**OBSOLETE**

Replaced By:

F4DR-C

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

## Product Classification

<b>Product Type</b>	Wireless and radiating connector
<b>Product Brand</b>	HELIAX®

## General Specifications

<b>Body Style</b>	Right angle
<b>Cable Family</b>	FSJ4-50B
<b>Inner Contact Attachment Method</b>	Captivated
<b>Inner Contact Plating</b>	Gold
<b>Interface</b>	7-16 DIN Male
<b>Mounting Angle</b>	Right angle
<b>Outer Contact Attachment Method</b>	Crush-flare
<b>Outer Contact Plating</b>	Trimetal
<b>Pressurizable</b>	No

## Dimensions

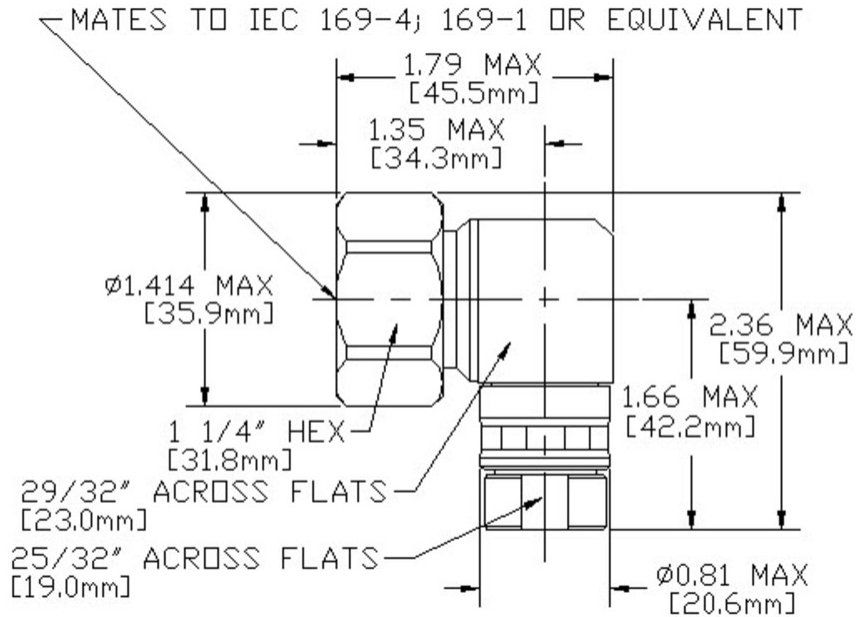
<b>Width</b>	31.75 mm   1.25 in
<b>Length</b>	60.96 mm   2.4 in
<b>Right Angle Length</b>	45.72 mm   1.8 in
<b>Diameter</b>	40.39 mm   1.59 in

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Nominal Size

1/2 in

## Outline Drawing



## Electrical Specifications

<b>3rd Order IMD at Frequency</b>	-120 dBm @ 910 MHz
<b>3rd Order IMD Test Method</b>	Two +43 dBm carriers
<b>Insertion Loss Coefficient, typical</b>	0.05
<b>Average Power at Frequency</b>	1.0 kW @ 900 MHz
<b>Cable Impedance</b>	50 ohm
<b>Connector Impedance</b>	50 ohm
<b>dc Test Voltage</b>	2500 V
<b>Inner Contact Resistance, maximum</b>	0.8 mOhm
<b>Insulation Resistance, minimum</b>	5000 MOhm
<b>Operating Frequency Band</b>	0 – 5200 MHz
<b>Outer Contact Resistance, maximum</b>	1.5 mOhm
<b>Peak Power, maximum</b>	15.6 kW
<b>RF Operating Voltage, maximum (vrms)</b>	884 V
<b>Shielding Effectiveness</b>	-110 dB

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## VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
50–1000 MHz	1.04	34.16
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

<b>Attachment Durability</b>	25 cycles
<b>Connector Retention Tensile Force</b>	889.64 N   200 lbf
<b>Connector Retention Torque</b>	5.42 N-m   47.998 in lb
<b>Coupling Nut Proof Torque</b>	24.86 N-m   220.003 in lb
<b>Coupling Nut Retention Force</b>	1,000.85 N   225 lbf
<b>Coupling Nut Retention Force Method</b>	MIL-C-39012C-3.25, 4.6.22
<b>Insertion Force</b>	200.17 N   45 lbf
<b>Insertion Force Method</b>	IEC 61169-1:15.2.4
<b>Interface Durability</b>	500 cycles
<b>Interface Durability Method</b>	IEC 61169-4:9.5
<b>Mechanical Shock Test Method</b>	MIL-STD-202F, Method 213B, Test Condition C

## Environmental Specifications

<b>Operating Temperature</b>	-55 °C to +85 °C (-67 °F to +185 °F)
<b>Storage Temperature</b>	-55 °C to +85 °C (-67 °F to +185 °F)
<b>Attenuation, Ambient Temperature</b>	20 °C   68 °F
<b>Average Power, Ambient Temperature</b>	40 °C   104 °F
<b>Corrosion Test Method</b>	MIL-STD-1344A, Method 1001.1, Test Condition A
<b>Immersion Depth</b>	1 m
<b>Immersion Test Mating</b>	Mated
<b>Immersion Test Method</b>	IEC 60529:2001, IP68

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<b>Moisture Resistance Test Method</b>	MIL-STD-202F, Method 106F
<b>Thermal Shock Test Method</b>	MIL-STD-202, Method 107, Test Condition A-1, Low Temperature -55 °C
<b>Vibration Test Method</b>	IEC 60068-2-6
<b>Water Jetting Test Mating</b>	Mated
<b>Water Jetting Test Method</b>	IEC 60529:2001, IP66

## Packaging and Weights

**Weight, net** 207.36 g | 0.457 lb

## \* Footnotes

**Insertion Loss Coefficient, typical**  $0.05\sqrt{\text{freq}}$  (GHz) (not applicable for elliptical waveguide)

**Immersion Depth** Immersion at specified depth for 24 hours