

# F4PNF-C



Type N Female for 1/2 in FSJ4-50B cable

## Product Classification

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

## General Specifications

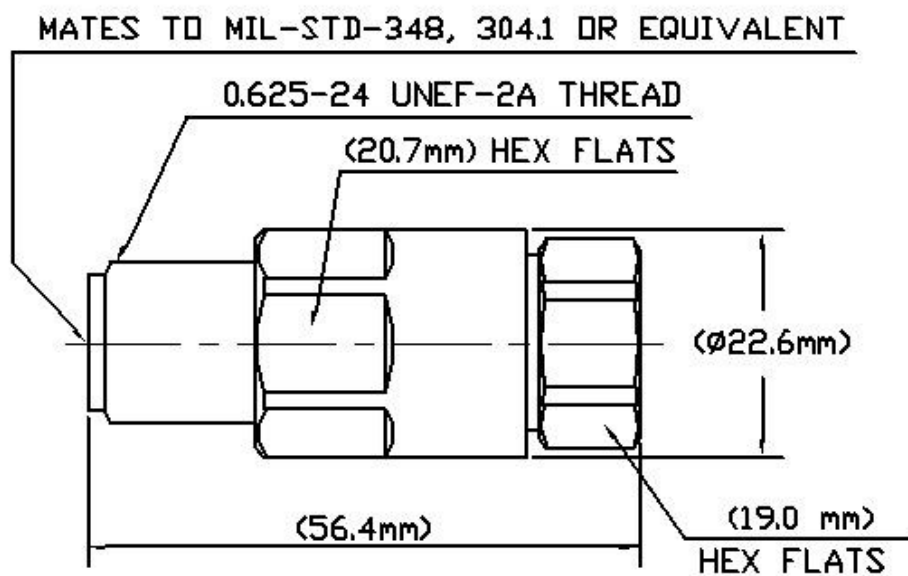
<b>Interface</b>	N Female
<b>Body Style</b>	Straight
<b>Mounting Angle</b>	Straight
<b>Ordering Note</b>	CommScope® standard product (Global)

## Electrical Specifications

<b>Connector Impedance</b>	50 ohm
<b>Operating Frequency Band</b>	0 – 12000 MHz
<b>Cable Impedance</b>	50 ohm
<b>3rd Order IMD, typical</b>	-120 dBm @ 910 MHz
<b>3rd Order IMD Test Method</b>	Two +43 dBm carriers
<b>RF Operating Voltage, maximum (vrms)</b>	707.00 V
<b>dc Test Voltage</b>	2000 V
<b>Outer Contact Resistance, maximum</b>	0.30 mOhm
<b>Inner Contact Resistance, maximum</b>	2.00 mOhm
<b>Insulation Resistance, minimum</b>	5000 MOhm
<b>Average Power</b>	0.6 kW @ 900 MHz
<b>Peak Power, maximum</b>	10.00 kW
<b>Insertion Loss, typical</b>	0.05 dB
<b>Shielding Effectiveness</b>	-110 dB

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## Outline Drawing



## Mechanical Specifications

<b>Outer Contact Attachment Method</b>	Self-flare
<b>Inner Contact Attachment Method</b>	Captivated
<b>Outer Contact Plating</b>	Trimetal
<b>Inner Contact Plating</b>	Gold
<b>Attachment Durability</b>	25 cycles
<b>Interface Durability</b>	500 cycles
<b>Interface Durability Method</b>	IEC 61169-16:9.5
<b>Connector Retention Tensile Force</b>	890 N   200 lbf
<b>Connector Retention Torque</b>	5.42 N-m   48.00 in lb
<b>Insertion Force</b>	66.72 N   15.00 lbf
<b>Insertion Force Method</b>	MIL-C-39012C-3.12, 4.6.9
<b>Pressurizable</b>	No

## Dimensions

<b>Nominal Size</b>	1/2 in
<b>Diameter</b>	22.00 mm   0.87 in
<b>Length</b>	53.01 mm   2.09 in
<b>Weight</b>	95.26 g   0.21 lb

## 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>Immersion Depth</b>	1 m
<b>Immersion Test Mating</b>	Mated
<b>Immersion Test Method</b>	IEC 60529:2001, IP68
<b>Water Jetting Test Mating</b>	Mated
<b>Water Jetting Test Method</b>	IEC 60529:2001, IP66
<b>Moisture Resistance Test Method</b>	MIL-STD-202F, Method 106F
<b>Mechanical Shock Test Method</b>	MIL-STD-202F, Method 213B, Test Condition C
<b>Thermal Shock Test Method</b>	MIL-STD-202, Method 107, Test Condition A-1, Low Temperature -55 °C
<b>Vibration Test Method</b>	MIL-STD-202F, Method 204D, Test Condition B
<b>Corrosion Test Method</b>	MIL-STD-1344A, Method 1001.1, Test Condition A

## Standard Conditions

<b>Attenuation, Ambient Temperature</b>	20 °C   68 °F
<b>Average Power, Ambient Temperature</b>	40 °C   104 °F

## Return Loss/VSWR

<b>Frequency Band</b>	<b>VSWR</b>	<b>Return Loss (dB)</b>
0–1000 MHz	1.03	36.00
1000–2300 MHz	1.05	32.00
2300–3000 MHz	1.07	29.00
3000–4000 MHz	1.17	22.00
4000–8000 MHz	1.38	16.00
8000–10200 MHz	1.5	14.00

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
RoHS 2011/65/EU	Compliant by Exemption
China RoHS SJ/T 11364-2006	Above Maximum Concentration Value (MCV)
ISO 9001:2008	Designed, manufactured and/or distributed under this quality management system



### \* Footnotes

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

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