# F4PNF-C



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

#### **Product Classification**

**Product Type** Wireless and radiating connector

Product Brand HELIAX®

Ordering Note CommScope® standard product (Global)

## General Specifications

Body StyleStraightCable FamilyFSJ4-50B

Inner Contact Attachment Method Captivated

Inner Contact Plating Gold

**Interface** N Female

Mounting Angle Straight

Outer Contact Attachment Method Self-flare

Outer Contact Plating Trimetal

**Pressurizable** No

### Dimensions

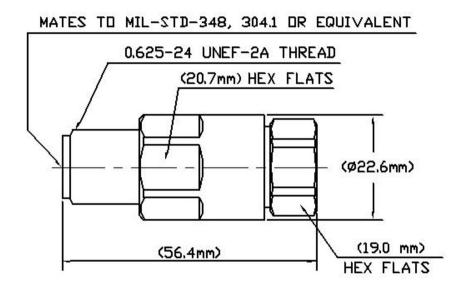
 Length
 2.09 in | 53.086 mm

 Diameter
 0.87 in | 22.098 mm

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, typical** 0.05 dB

Attenuation, Ambient Temperature  $20 \, ^{\circ}\text{C} \mid 68 \, ^{\circ}\text{F}$ Average Power at Frequency  $0.6 \, \text{kW} \circledcirc 900 \, \text{MHz}$ 

Cable Impedance50 ohmConnector Impedance50 ohmdc Test Voltage2000 VInner Contact Resistance, maximum2 mOhmInsulation Resistance, minimum5000 MOhmOperating Frequency Band0 - 12000 MHz

Page 2 of 4



# F4PNF-C

Outer Contact Resistance, maximum0.3 mOhmPeak Power, maximum10 kWRF Operating Voltage, maximum (vrms)707 VShielding Effectiveness-110 dB

#### VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
0–1000 MHz	1.04	36
1000–2300 MHz	1.06	32
2300–3000 MHz	1.08	29
3000–4000 MHz	1.18	22
4000-8000 MHz	1.38	16
8000-10200 MHz	1.5	14

### Mechanical Specifications

Attachment Durability 25 cycles

Connector Retention Tensile Force200 lbf | 889.644 NConnector Retention Torque48 in lb | 5.423 N-mInsertion Force15 lbf | 66.723 N

**Insertion Force Method** MIL-C-39012C-3.12, 4.6.9

**Interface Durability** 500 cycles

**Interface Durability Method** IEC 61169-16:9.5

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)

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

Page 3 of 4



## F4PNF-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** 95.26 g | 0.21 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.commscope.com/ProductCompliance

ROHS Compliant



#### \* Footnotes

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

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

