

### 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 Style Straight

Cable Family FSJ4-50B

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

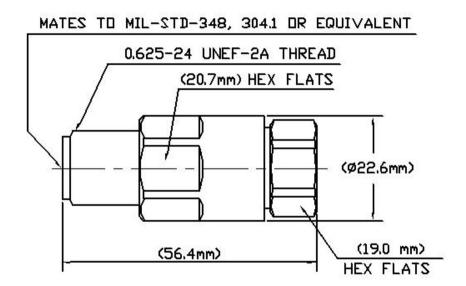
#### **Dimensions**

Length 53.09 mm | 2.09 in

Diameter 22.1 mm | 0.87 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, typical 0.05 dB

Average Power at Frequency 0.6 kW @ 900 MHz

Cable Impedance 50 ohm

Connector Impedance 50 ohm

dc Test Voltage 2000 V

Inner Contact Resistance, maximum 2 mOhm

Insulation Resistance, minimum 5000 MOhm

Operating Frequency Band 0 – 12000 MHz

Outer Contact Resistance, maximum 0.3 mOhm

# F4PNF-C

| Peak Power, maximum                  | 10 kW   |
|--------------------------------------|---------|
| RF Operating Voltage, maximum (vrms) | 707 V   |
| Shielding 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 Force 889.64 N | 200 lbf

Connector Retention Torque 5.42 N-m | 47.998 in lb

Insertion Force 66.72 N | 15 lbf

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)

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 Depth 1 m
Immersion Test Mating Mated

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

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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)