F4PNF-C



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

Product Classification

Brand HELIAX®

Product Type Wireless and radiating connector

General Specifications

InterfaceN FemaleBody StyleStraightMounting AngleStraight

Ordering Note CommScope® standard product (Global)

Electrical Specifications

Connector Impedance 50 ohm

Operating Frequency Band 0 – 12000 MHz **Average Power at Frequency** 0.6 kW @ 900 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) 707.00 V dc Test Voltage 2000 V

Outer Contact Resistance, maximum 2.00 mOhm

Inner Contact Resistance, maximum 5000 MOhm

Insulation Resistance, minimum 5000 MOhm

Peak Power, maximum 10.00 kW

Insertion Loss, typical 0.05 dB

Shielding Effectiveness -110 dB

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Outline Drawing

0.625-24 UNEF-2A THREAD (20.7mm) HEX FLATS (Ø22.6mm) (56.4mm) (19.0 mm) HEX FLATS

Mechanical Specifications

Outer Contact Attachment Method
Inner Contact Attachment Method
Outer Contact Plating
Inner Contact Plating
Attachment Durability
Interface Durability Method
Self-flare
Captivated
Trimetal
Gold
25 cycles
Interface Durability
IEC 61169-16:9.5

Connector Retention Tensile Force890 N | 200 lbfConnector Retention Torque5.42 N-m | 48.00 in lbInsertion Force66.72 N | 15.00 lbfInsertion Force MethodMIL-C-39012C-3.12, 4.6.9

Pressurizable No

Dimensions

Nominal Size 1/2 in

 Diameter
 22.00 mm
 0.87 in

 Length
 53.01 mm
 2.09 in

 Weight
 95.26 g | 0.21 lb

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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)

Immersion Depth1 mImmersion Test MatingMated

Immersion Test Method IEC 60529:2001, IP68

Water Jetting Test Mating Mated

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-202, Method 107, Test Condition A-1, Low Temperature -55 °C

Vibration Test MethodMIL-STD-202F, Method 204D, Test Condition BCorrosion Test MethodMIL-STD-1344A, Method 1001.1, Test Condition A

Standard Conditions

Attenuation, Ambient Temperature $20 \,^{\circ}\text{C} \mid 68 \,^{\circ}\text{F}$ Average Power, Ambient Temperature $40 \,^{\circ}\text{C} \mid 104 \,^{\circ}\text{F}$

Return Loss/VSWR

Frequency Band	VSWR	Return Loss (dB)
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

Agency Classification

RoHS 2011/65/EU Compliant by Exemption

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system

China RoHS SJ/T 11364-2014 Above Maximum Concentration Value (MCV)







* 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)

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