F4PNF-C



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

Product Classification

Product TypeWireless and radiating connector

Product Brand HELIAX®

Product Series FSJ4-50B | FSJ4RK-50B

Ordering Note ANDREW® 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



MATES TO MIL-STD-348, 304.1 OR EQUIVALENT 0.625-24 UNEF-2A THREAD (20.7mm) HEX FLATS (Ø22.6mm) (19.0 mm) HEX FLATS

Electrical Specifications

3rd Order IMD at Frequency -120 dBm @ 910 MHz
3rd Order IMD Test Method Two +43 dBm carriers

Insertion Loss Coefficient, typical 0.05

Average Power at Frequency 0.6 kW @ 900 MHz

Cable Impedance 50 ohm **Connector Impedance** 50 ohm 2000 V dc Test Voltage Inner Contact Resistance, maximum 2 m0hm Insulation Resistance, minimum 5000 MOhm **Operating Frequency Band** 0 - 12000 MHz **Outer Contact Resistance, maximum** 0.3 m0hm Peak Power, maximum 10 kW RF Operating Voltage, maximum (vrms) 707 V

VSWR/Return Loss

Shielding Effectiveness

Frequency Band VSWR Return Loss (dB)

0–1000 MHz 1.032 36.06



-110 dB

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| 1000-2300 MHz | 1.052 | 31.92 |
|----------------|-------|-------|
| 2300-3000 MHz | 1 074 | 28 95 |
| 3000-4000 MHz | 1.173 | 21.98 |
| 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 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

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



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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.andrew.com/ProductCompliance

ROHS Compliant UK-ROHS Compliant



* Footnotes

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

Immersion Depth Immersion at specified depth for 24 hours

