

F4A-PNMNF-20-X



HELIAX® 1/2" SureFlex® Jumper with interface types N Male and N Female, 20FT

Product Classification

| | |
|-----------------------|---------------------|
| Product Type | SureFlex® standard |
| Product Brand | HELIAX® SureFlex® |
| Product Series | RSJ4-50 |

General Specifications

| | |
|---|------------------|
| Attachment, Connector B | Field attachment |
| Body Style, Connector A | Straight |
| Body Style, Connector B | Straight |
| Interface, Connector A | N Male |
| Interface, Connector B | N Female |
| Specification Sheet Revision Level | A |

Dimensions

| | |
|---------------------|-----------------|
| Length | 6.096 m 20 ft |
| Nominal Size | 1/2 in |

Electrical Specifications

| | |
|-------------------------|--------|
| DTF, Connector A | -32 dB |
| DTF, Connector B | -32 dB |

VSWR/Return Loss

| Frequency Band | VSWR, typical | Return Loss, typical (dB) |
|----------------|---------------|---------------------------|
| 2.2–2.7 GHz | 1.135 | 23.98 |

Jumper Assembly Sample Label

F4A-PNMNF-20-X



Environmental Specifications

Immersion Test Method Meets IEC 60529:2001, IP68 in mated condition

Regulatory Compliance/Certifications

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

Included Products

- F4PNF-C – Type N Female for 1/2 in FSJ4-50B cable

F4PNF-C



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

Product Classification

| | |
|-----------------------|--------------------------------------|
| Product Type | Wireless and radiating connector |
| Product Brand | HELIAX® |
| Product Series | FSJ4-50B FSJ4RK-50B |
| Ordering Note | CommScope® standard product (Global) |

General Specifications

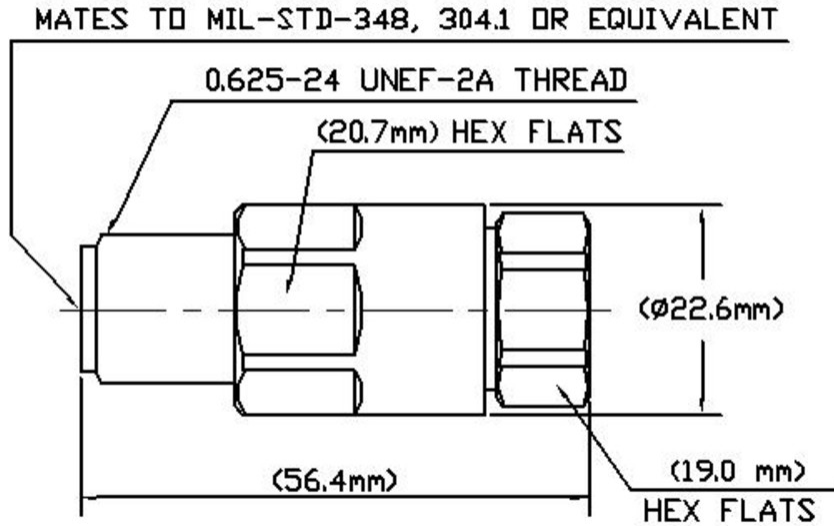
| | |
|--|------------|
| Body Style | Straight |
| Cable Family | FSJ4-50B |
| Inner Contact Attachment Method | Captivated |
| Inner Contact Plating | Gold |
| Interface | N Female |
| Mounting Angle | Straight |
| Outer Contact Attachment Method | Self-flare |
| Outer Contact Plating | Trimetal |
| Pressurizable | No |

Dimensions

| | |
|---------------------|--------------------|
| Length | 53.09 mm 2.09 in |
| Diameter | 22.1 mm 0.87 in |
| Nominal Size | 1/2 in |

Outline Drawing

F4PNF-C



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 |
| 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 |
| 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 | 1.032 | 36.06 |

F4PNF-C

| | | |
|-----------------------|-------|-------|
| 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 °C 68 °F |
| Average Power, Ambient Temperature | 40 °C 104 °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 |
| 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 |
|--------------------|-------------------|

F4PNF-C

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 |
| 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 |