

# F1PNF

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Type N Female for 1/4 in FSJ1-50A cable

## Product Classification

|                      |                                  |
|----------------------|----------------------------------|
| <b>Product Type</b>  | Wireless and radiating connector |
| <b>Product Brand</b> | HELIAX®                          |

## General Specifications

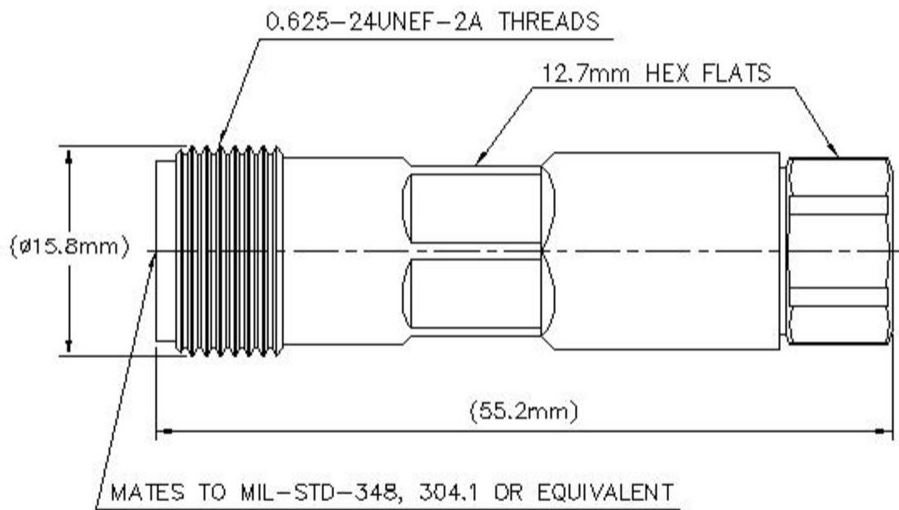
|  |               |
|--|---------------|
| <b>Body Style</b>                      | Straight      |
| <b>Cable Family</b>                    | FSJ1-50A      |
| <b>Inner Contact Attachment Method</b> | Solder        |
| <b>Inner Contact Plating</b>           | Gold          |
| <b>Interface</b>                       | N Female      |
| <b>Mounting Angle</b>                  | Straight      |
| <b>Outer Contact Attachment Method</b> | Self-clamping |
| <b>Outer Contact Plating</b>           | Silver        |
| <b>Pressurizable</b>                   | No            |

## Dimensions

|                     |                     |
|---------------------|---------------------|
| <b>Height</b>       | 0.62 in   15.748 mm |
| <b>Width</b>        | 0.62 in   15.748 mm |
| <b>Length</b>       | 2.17 in   55.118 mm |
| <b>Diameter</b>     | 0.62 in   15.748 mm |
| <b>Nominal Size</b> | 1/4 in              |

## Outline Drawing

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## Electrical Specifications

|  |                      |
|--|----------------------|
| <b>3rd Order IMD at Frequency</b>        | -112 dBm @ 910 MHz   |
| <b>3rd Order IMD Test Method</b>         | Two +43 dBm carriers |
| <b>Attenuation, Ambient Temperature</b>  | 20 °C   68 °F        |
| <b>Average Power at Frequency</b>        | 0.4 kW @ 900 MHz     |
| <b>Cable Impedance</b>                   | 50 ohm               |
| <b>Connector Impedance</b>               | 50 ohm               |
| <b>dc Test Voltage</b>                   | 1600 V               |
| <b>Inner Contact Resistance, maximum</b> | 1 mOhm               |
| <b>Insulation Resistance, minimum</b>    | 5000 MOhm            |
| <b>Operating Frequency Band</b>          | 0 – 8000 MHz         |
| <b>Outer Contact Resistance, maximum</b> | 0.25 mOhm            |

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|   |         |
|---|---------|
| <b>Peak Power, maximum</b>                  | 6.4 kW  |
| <b>RF Operating Voltage, maximum (vrms)</b> | 565 V   |
| <b>Shielding Effectiveness</b>              | -110 dB |

## VSWR/Return Loss

| <b>Frequency Band</b> | <b>VSWR</b> | <b>Return Loss (dB)</b> |
|-----------------------|-------------|-------------------------|
| <b>45–4100 MHz</b>    | 1.12        | 25                      |
| <b>4100–6200 MHz</b>  | 1.18        | 22                      |
| <b>6200–11000 MHz</b> | 1.44        | 15                      |

## Mechanical Specifications

|  |                       |
|--|-----------------------|
| <b>Connector Retention Tensile Force</b>   | 101 lbf   449.27 N    |
| <b>Coupling Nut Proof Torque</b>           | 15.05 in lb   1.7 N-m |
| <b>Coupling Nut Proof Torque Method</b>    | IEC 61169-16:9.3.11   |
| <b>Coupling Nut Retention Force</b>        | 100.04 lbf   445 N    |
| <b>Coupling Nut Retention Force Method</b> | IEC 61169-16:9.3.11   |
| <b>Insertion Force</b>                     | 28 lbf   124.55 N     |
| <b>Insertion Force Method</b>              | IEC 61169-16:9.3.5    |
| <b>Interface Durability</b>                | 500 cycles            |
| <b>Interface Durability Method</b>         | IEC 61169-4:17        |
| <b>Mechanical Shock Test Method</b>        | IEC 60068-2-27        |

## Environmental Specifications

|   |                                       |
|---|---------------------------------------|
| <b>Operating Temperature</b>                      | -55 °C to +85 °C (-67 °F to +185 °F)  |
| <b>Storage Temperature</b>                        | -65 °C to +125 °C (-85 °F to +257 °F) |
| <b>Average Power, Ambient Temperature</b>         | 40 °C   104 °F                        |
| <b>Average Power, Inner Conductor Temperature</b> | 100 °C   212 °F                       |
| <b>Corrosion Test Method</b>                      | IEC 60068-2-11                        |
| <b>Immersion Depth</b>                            | 1 m                                   |
| <b>Immersion Test Mating</b>                      | Mated                                 |
| <b>Immersion Test Method</b>                      | IEC 60529:2001, IP68                  |
| <b>Moisture Resistance Test Method</b>            | IEC 60068-2-3                         |
| <b>Thermal Shock Test Method</b>                  | IEC 60068-2-14                        |

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**Vibration Test Method** IEC 60068-2-6

## Packaging and Weights

**Weight, net** 100.46 g | 0.221 lb

## Regulatory Compliance/Certifications

### Agency

CHINA-ROHS

ISO 9001:2015

REACH-SVHC

ROHS

### Classification

Below maximum concentration value

Designed, manufactured and/or distributed under this quality management system

Compliant as per SVHC revision on [www.commscope.com/ProductCompliance](http://www.commscope.com/ProductCompliance)

Compliant



## \* Footnotes

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