

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

## Product Classification

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

## General Specifications

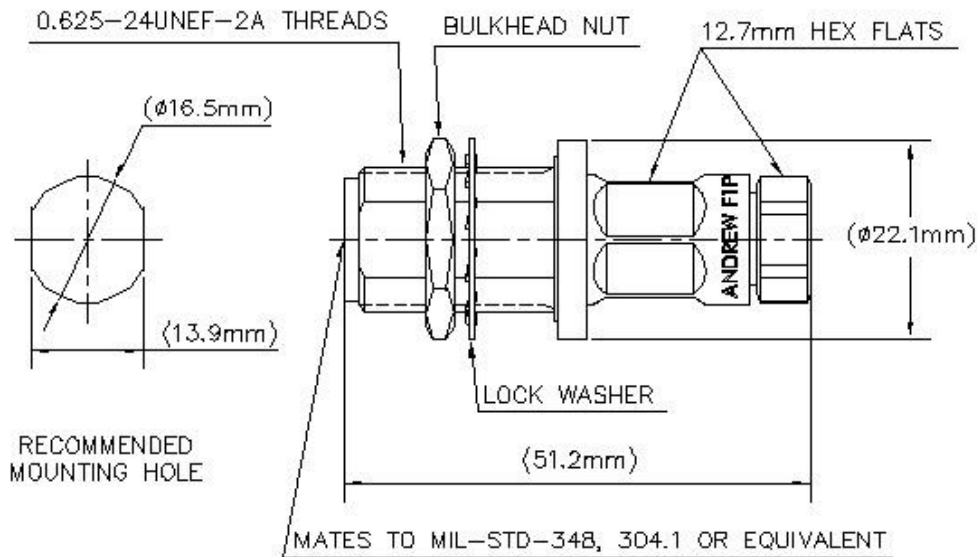
|                       |          |
|-----------------------|----------|
| <b>Interface</b>      | N Female |
| <b>Body Style</b>     | Bulkhead |
| <b>Mounting Angle</b> | Straight |

## Electrical Specifications

|   |                      |
|---|----------------------|
| <b>Connector Impedance</b>                  | 50 ohm               |
| <b>Operating Frequency Band</b>             | 0 – 6000 MHz         |
| <b>Cable Impedance</b>                      | 50 ohm               |
| <b>3rd Order IMD, typical</b>               | -112 dBm @ 910 MHz   |
| <b>3rd Order IMD Test Method</b>            | Two +43 dBm carriers |
| <b>RF Operating Voltage, maximum (vrms)</b> | 565.00 V             |
| <b>dc Test Voltage</b>                      | 1600 V               |
| <b>Outer Contact Resistance, maximum</b>    | 0.25 mOhm            |
| <b>Inner Contact Resistance, maximum</b>    | 1.00 mOhm            |
| <b>Insulation Resistance, minimum</b>       | 5000 MOhm            |
| <b>Average Power</b>                        | 0.4 kW @ 900 MHz     |
| <b>Peak Power, maximum</b>                  | 6.40 kW              |
| <b>Shielding Effectiveness</b>              | -110 dB              |

# F1PNF-BHC

## Outline Drawing



## Mechanical Specifications

|  |                       |
|--|-----------------------|
| <b>Outer Contact Plating</b>               | Trimetal              |
| <b>Inner Contact Plating</b>               | Silver                |
| <b>Interface Durability</b>                | 500 cycles            |
| <b>Interface Durability Method</b>         | IEC 61169-4:17        |
| <b>Connector Retention Tensile Force</b>   | 450 N   101 lbf       |
| <b>Insertion Force</b>                     | 124.55 N   28.00 lbf  |
| <b>Insertion Force Method</b>              | IEC 61169-16:9.3.5    |
| <b>Pressurizable</b>                       | No                    |
| <b>Coupling Nut Proof Torque</b>           | 1.70 N-m   1.25 ft lb |
| <b>Coupling Nut Proof Torque Method</b>    | IEC 61169-16:9.3.11   |
| <b>Coupling Nut Retention Force</b>        | 445.00 N   100.04 lbf |
| <b>Coupling Nut Retention Force Method</b> | IEC 61169-16:9.3.11   |

## Dimensions

|                     |                    |
|---------------------|--------------------|
| <b>Nominal Size</b> | 1/4 in             |
| <b>Diameter</b>     | 22.10 mm   0.87 in |
| <b>Height</b>       | 22.10 mm   0.87 in |
| <b>Length</b>       | 51.16 mm   2.01 in |

# F1PNF-BHC

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|               |                    |
|---------------|--------------------|
| <b>Weight</b> | 59.20 g   0.13 lb  |
| <b>Width</b>  | 22.10 mm   0.87 in |

## 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>Moisture Resistance Test Method</b> | IEC 60068-2-3                         |
| <b>Mechanical Shock Test Method</b>    | IEC 60068-2-27                        |
| <b>Thermal Shock Test Method</b>       | IEC 60068-2-14                        |
| <b>Vibration Test Method</b>           | IEC 60068-2-6                         |
| <b>Corrosion Test Method</b>           | IEC 60068-2-11                        |

## Standard Conditions

|   |                 |
|---|-----------------|
| <b>Attenuation, Ambient Temperature</b>           | 20 °C   68 °F   |
| <b>Average Power, Ambient Temperature</b>         | 40 °C   104 °F  |
| <b>Average Power, Inner Conductor Temperature</b> | 100 °C   212 °F |

## Return Loss/VSWR

| <b>Frequency Band</b> | <b>VSWR</b> | <b>Return Loss (dB)</b> |
|-----------------------|-------------|-------------------------|
| 824–2700 MHz          | 1.04        | 34.00                   |
| 3000–6000 MHz         | 1.25        | 19.00                   |

## Regulatory Compliance/Certifications

| <b>Agency</b>              | <b>Classification</b>  |
|----------------------------|--|
| 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)  |

