

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

Wireless and radiating connector

HELIAX®

FSJ1-50A

Product Type Product Brand

Product Series

General Specifications

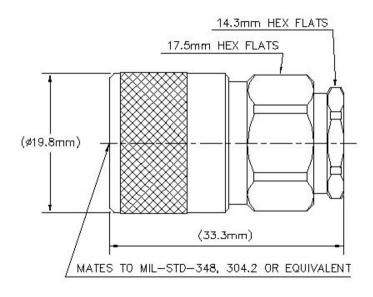
| Body Style                      | Straight  |
|---------------------------------|-----------|
| Cable Family                    | FSJ1-50A  |
| Inner Contact Attachment Method | Solder    |
| Inner Contact Plating           | Gold      |
| Interface                       | N Male    |
| Mounting Angle                  | Straight  |
| Outer Contact Attachment Method | Tab-flare |
| Outer Contact Plating           | Silver    |
| Pressurizable                   | No        |
| Dimensions                      |           |

| Height       | 20.32 mm   0.8 in  |
|--------------|--------------------|
| Width        | 20.32 mm   0.8 in  |
| Length       | 33.27 mm   1.31 in |
| Diameter     | 20.32 mm   0.8 in  |
| Nominal Size | 1/4 in             |

### Outline Drawing

Page 1 of 4





### **Electrical Specifications**

| Average Power at Frequency           | 0.4 kW @ 900 MHz |
|--------------------------------------|------------------|
| Cable Impedance                      | 50 ohm           |
| Connector Impedance                  | 50 ohm           |
| dc Test Voltage                      | 1600 V           |
| Inner Contact Resistance, maximum    | 1 m0hm           |
| Insulation Resistance, minimum       | 5000 MOhm        |
| Operating Frequency Band             | 0 – 18000 MHz    |
| Outer Contact Resistance, maximum    | 0.25 m0hm        |
| Peak Power, maximum                  | 6.4 kW           |
| RF Operating Voltage, maximum (vrms) | 565 V            |
| Shielding Effectiveness              | -110 dB          |

#### VSWR/Return Loss

| Frequency Band  | VSWR  | Return Loss (dB) |
|-----------------|-------|------------------|
| 45-4100 MHz     | 1.046 | 32.96            |
| 4100-6200 MHz   | 1.083 | 27.99            |
| 6200–11000 MHz  | 1.173 | 21.98            |
| 11000–18000 MHz | 1.222 | 20.01            |

Page 2 of 4



### Mechanical Specifications

| Connector Retention Tensile Force   | 449.27 N   101 lbf     |
|-------------------------------------|------------------------|
| Coupling Nut Proof Torque           | 1.7 N-m   15.046 in lb |
| Coupling Nut Proof Torque Method    | IEC 61169-16:9.3.11    |
| Coupling Nut Retention Force        | 445 N   100.04 lbf     |
| Coupling Nut Retention Force Method | IEC 61169-16:9.3.11    |
| Insertion Force                     | 124.55 N   28 lbf      |
| Insertion Force Method              | IEC 61169-16:9.3.5     |
| Interface Durability                | 500 cycles             |
| Interface Durability Method         | IEC 61169-4:17         |
| Mechanical Shock Test Method        | IEC 60068-2-27         |

### Environmental Specifications

| Operating Temperature                                    | -55 °C to +85 °C (-67 °F to +185 °F)  |
|--|---------------------------------------|
| Storage Temperature                                      | -65 °C to +125 °C (-85 °F to +257 °F) |
| Attenuation, Ambient Temperature                         | 20 °C   68 °F                         |
| Average Power, Ambient Temperature                       | 40 °C   104 °F                        |
| Average Power, Inner Conductor Temperature               | 100 °C   212 °F                       |
| Corrosion Test Method                                    | IEC 60068-2-11                        |
| Immersion Depth  | 1 m                                   |
|  |                                       |
| Immersion Test Mating                                    | Mated                                 |
| Immersion Test Mating Immersion Test Method              | Mated<br>IEC 60529:2001, IP68         |
| 2  |                                       |
| Immersion Test Method                                    | IEC 60529:2001, IP68                  |
| Immersion Test Method<br>Moisture Resistance Test Method | IEC 60529:2001, IP68<br>IEC 60068-2-3 |

#### Packaging and Weights

#### Weight, net

49.18 g | 0.108 lb

#### Regulatory Compliance/Certifications

| Agency        | Classification   |
|---------------|--|
| CHINA-ROHS    | Below maximum concentration value  |
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system |

Page 3 of 4

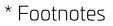


REACH-SVHC

ROHS

UK-ROHS





**Immersion Depth** 

Compliant as per SVHC revision on www.commscope.com/ProductCompliance Compliant Compliant/Exempted

Immersion at specified depth for 24 hours

Page 4 of 4

