# F1TSR-HF





#### **Product Classification**

**Product Type**Wireless and radiating connector

Product Brand HELIAX®
Product Series FSJ1-50A

### General Specifications

Body StyleRight angleCable FamilyFSJ1-50AInner Contact Attachment MethodSolderInner Contact PlatingGold

 Interface
 SMA Male

 Outer Contact Attachment Method
 Clamp

 Outer Contact Plating
 Trimetal

 Pressurizable
 No

#### **Dimensions**

 Height
 18.8 mm | 0.74 in

 Width
 10.92 mm | 0.43 in

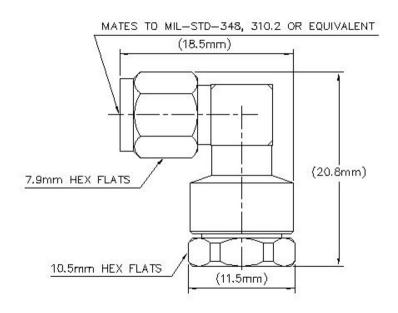
 Length
 20.83 mm | 0.82 in

 Right Angle Length
 18.8 mm | 0.74 in

Nominal Size 1/4 in

# Outline Drawing





# **Electrical Specifications**

| Average Power at Frequency | 0.4 kW @ 900 MHz |
|----------------------------|------------------|
|----------------------------|------------------|

Cable Impedance50 ohmConnector Impedance50 ohmdc Test Voltage1000 VInner Contact Resistance, maximum3 mOhmInsulation Resistance, minimum5000 MOhmOperating Frequency Band0 - 18000 MHz

Outer Contact Resistance, maximum 2.5 mOhm

Peak Power, maximum 2.5 kW

**RF Operating Voltage, maximum (vrms)** 565 V

## VSWR/Return Loss

| Frequency Band | VSWR  | Return Loss (dB) |
|----------------|-------|------------------|
| 45-2700 MHz    | 1.058 | 31               |
| 2700-4000 MHz  | 1.065 | 30.04            |
| 4000-6000 MHz  | 1.119 | 25.01            |
| 6000-9000 MHz  | 1.196 | 20.99            |
| 9000-10200 MHz | 1.222 | 20.01            |

**COMMSCOPE®** 

# F1TSR-HF

Insertion Force Method

 10000-12000 MHz
 1.26
 19

 12000-16200 MHz
 1.29
 18

 16200-18000 MHz
 1.433
 14.99

#### Mechanical Specifications

Connector Retention Tensile Force449.27 N | 101 lbfCoupling Nut Proof Torque1.7 N-m | 15.046 in lbCoupling Nut Proof Torque MethodIEC 61169-15:9.3.6Coupling Nut Retention Force180.02 N | 40.47 lbfCoupling Nut Retention Force MethodIEC 61169-15:9.3.11Insertion Force22.02 N | 4.95 lbf

**Interface Durability** 500 cycles

Interface Durability Method IEC 61169-15:9.5

Mechanical Shock Test Method IEC 60068-2-27

#### **Environmental Specifications**

Operating Temperature  $-40 \,^{\circ}\text{C}$  to  $+85 \,^{\circ}\text{C}$  (-40  $^{\circ}\text{F}$  to  $+185 \,^{\circ}\text{F}$ )

Storage Temperature  $-65 \,^{\circ}\text{C}$  to  $+125 \,^{\circ}\text{C}$  (-85  $^{\circ}\text{F}$  to  $+257 \,^{\circ}\text{F}$ )

IEC 61169-15:9.3.5

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

Moisture Resistance Test Method IEC 60068-2-14

Vibration Test Method IEC 60068-2-6

Water Jetting Test Mating Mated

Water Jetting Test Method IEC 60529:2001, IP65

Packaging and Weights

**Weight, net** 8.76 g | 0.019 lb

Regulatory Compliance/Certifications

Agency Classification

COMMSCOPE®

# F1TSR-HF

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

