



#### **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

InterfaceSMA MaleMounting AngleRight angleOuter Contact Attachment MethodTab-flareOuter Contact PlatingTrimetal

#### **Dimensions**

 Height
 11.43 mm | 0.45 in

 Width
 17.02 mm | 0.67 in

 Length
 21.08 mm | 0.83 in

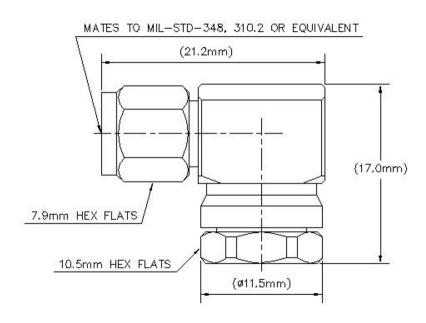
 Right Angle Length
 17.02 mm | 0.67 in

 Diameter
 11.43 mm | 0.45 in

Nominal Size 1/4 in

# Outline Drawing





## **Electrical Specifications**

Average Power at Frequency	0.4 kW @ 900 MHz
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Cable Impedance 50 ohm

Connector Impedance 50 ohm

dc Test Voltage 1000 V

Inner Contact Resistance, maximum 3 mOhm

Insulation Resistance, minimum 5000 MOhm

Operating Frequency Band 0 - 12000 MHz

**Outer Contact Resistance, maximum** 2.5 mOhm

Peak Power, maximum 5 kW

**RF Operating Voltage, maximum (vrms)** 500 V

## VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
45-2700 MHz	1.07	29.42
2700-4000 MHz	1.106	25.96
4000-6000 MHz	1.2	20.83
6000-8000 MHz	1.25	19.09
8000-10000 MHz	1.4	15.57

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# **FITSR**

**10000–12000 MHz** 1.5 13.98

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 61169-1:9.3.6

**Coupling Nut Retention Force** 180.02 N | 40.47 lbf

**Coupling Nut Retention Force Method** IEC 61169-1:9.3.11

Interface Durability 500 cycles

**Interface Durability Method** IEC 61169-1:9.5

Mechanical Shock Test Method IEC 60068-2-27

**Environmental Specifications** 

**Operating Temperature**  $-55 \,^{\circ}\text{C} \text{ to } +85 \,^{\circ}\text{C} \, (-67 \,^{\circ}\text{F to } +185 \,^{\circ}\text{F})$ 

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

Attenuation, Ambient Temperature  $20~^{\circ}\text{C} \mid 68~^{\circ}\text{F}$ 

**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 60068-2-3

Thermal Shock Test Method IEC 60068-2-14

Vibration Test Method IEC 60068-2-6

Packaging and Weights

**Weight, net** 12.08 g | 0.027 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

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

ROHS Compliant

UK-ROHS Compliant/Exempted



# **F1TSR**





