



Product Classification

Product TypeWireless 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

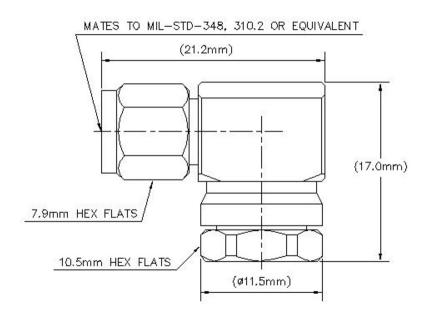
 Right Angle Length
 17.02 mm | 0.67 in

 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
----------------------------	------------------

Cable Impedance50 ohmConnector Impedance50 ohmdc Test Voltage1000 VInner Contact Resistance, maximum3 mOhmInsulation Resistance, minimum5000 MOhmOperating Frequency Band0 - 12000 MHz

 Outer Contact Resistance, maximum
 2.5 mOhm

Peak Power, maximum 5 kW

VSWR/Return Loss

RF Operating Voltage, maximum (vrms)

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

COMMSCOPE®

500 V

F1TSR

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





