



Product Classification

Product Type Wireless and radiating connector

Product Brand HELIAX® Product Series FSJ1-50A

General Specifications

Body Style Straight **Cable Family** FSJ1-50A **Inner Contact Attachment Method** Captivated **Inner Contact Plating** Gold

Interface SMA Male **Mounting Angle** Straight

Outer Contact Attachment Method Self-clamping

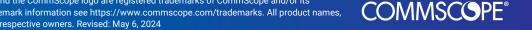
Outer Contact Plating Trimetal **Pressurizable** No

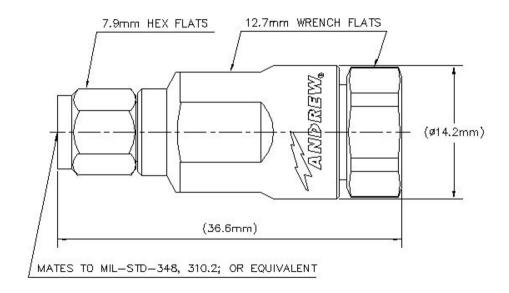
Dimensions

Height 14.22 mm | 0.56 in Width 14.22 mm | 0.56 in Length 36.58 mm | 1.44 in Diameter 14.22 mm | 0.56 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 mOhm

Insulation Resistance, minimum5000 MOhmOperating Frequency Band0 - 6000 MHzOuter Contact Resistance, maximum2.5 mOhm

Peak Power, maximum 5 kW

RF Operating Voltage, maximum (vrms) 500 V

Shielding Effectiveness -110 dB

VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
0-3000 MHz	1.173	21.98
3000-6000 MHz	1.222	20.01
6000-9000 MHz	1.29	18

Mechanical Specifications

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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 266.98 N | 60.02 lbf

Coupling Nut Retention Force Method IEC 61169-15:9.3.11

Insertion Force 97.86 N | 22 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 $-55 \,^{\circ}\text{C} \text{ to } +85 \,^{\circ}\text{C} \, (-67 \,^{\circ}\text{F to } +185 \,^{\circ}\text{F})$

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

Attenuation, Ambient Temperature 20 °C | 68 °F

Average Power, Ambient Temperature $40 \, ^{\circ}\text{C} \, \mid \, 104 \, ^{\circ}\text{F}$

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 24.99 g | 0.055 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



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