F1TSR

SMA Male Right Angle for 1/4 in FSJ1-50A cable

Product Classification

Brand	HELIAX®
Product Type	Wireless and radiating connector

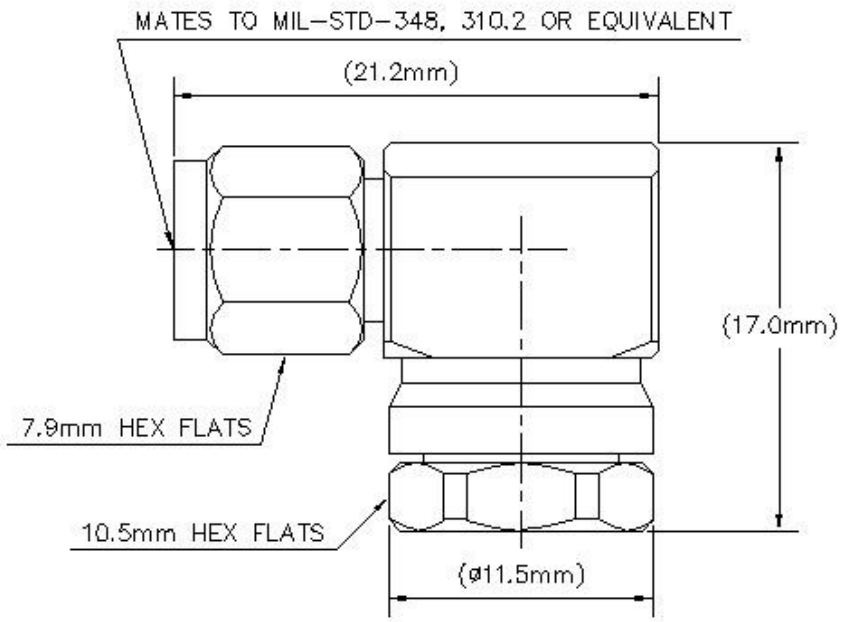
General Specifications

Interface	SMA Male
Body Style	Right angle
Mounting Angle	Right angle

Electrical Specifications

Connector Impedance	50 ohm
Operating Frequency Band	0 – 12000 MHz
Average Power at Frequency	0.4 kW @ 900 MHz
Cable Impedance	50 ohm
RF Operating Voltage, maximum (vrms)	500.00 V
dc Test Voltage	1000 V
Outer Contact Resistance, maximum	2.50 mOhm
Inner Contact Resistance, maximum	3.00 mOhm
Insulation Resistance, minimum	5000 MOhm
Peak Power, maximum	5.00 kW

Outline Drawing



Mechanical Specifications

Outer Contact Attachment Method	Tab-flare
Inner Contact Attachment Method	Solder
Outer Contact Plating	Trimetal
Inner Contact Plating	Gold
Interface Durability	500 cycles
Interface Durability Method	IEC 61169-1:9.5
Connector Retention Tensile Force	450 N | 101 lbf
Coupling Nut Proof Torque	1.70 N-m | 1.25 ft lb
Coupling Nut Proof Torque Method	IEC 61169-1:9.3.6
Coupling Nut Retention Force	180.00 N | 40.47 lbf
Coupling Nut Retention Force Method	IEC 61169-1:9.3.11

Dimensions

Nominal Size	1/4 in
Diameter	11.50 mm | 0.45 in
Height	11.50 mm | 0.45 in
Length	21.15 mm | 0.83 in
Right Angle Length	16.95 mm | 0.67 in

Weight	12.08 g | 0.03 lb
Width	16.95 mm | 0.67 in

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)
Moisture Resistance Test Method	IEC 60068-2-3
Mechanical Shock Test Method	IEC 60068-2-27
Thermal Shock Test Method	IEC 60068-2-14
Vibration Test Method	IEC 60068-2-6
Corrosion Test Method	IEC 60068-2-11

Standard Conditions

Attenuation, Ambient Temperature	20 °C | 68 °F
Average Power, Ambient Temperature	40 °C | 104 °F
Average Power, Inner Conductor Temperature	100 °C | 212 °F

Return Loss/VSWR

Frequency Band	VSWR	Return Loss (dB)
45–2700 MHz	1.07	29.42
2700–4000 MHz	1.12	24.94
4000–6000 MHz	1.20	20.83
6000–8000 MHz	1.25	19.08
8000–10000 MHz	1.40	15.56
10000–12000 MHz	1.50	13.98

Regulatory Compliance/Certifications

Agency	Classification
RoHS 2011/65/EU	Compliant by Exemption
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
China RoHS SJ/T 11364-2014	Above Maximum Concentration Value (MCV)