F1TSM-C

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

Product Classification

Brand	HELIAX®
Product Type	Wireless and radiating connector

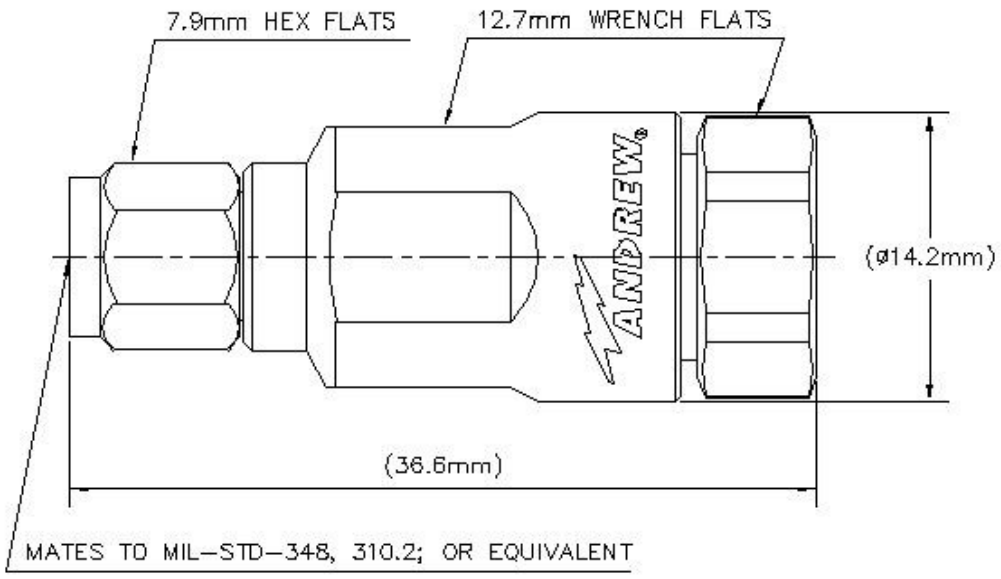
General Specifications

Interface	SMA Male
Body Style	Straight
Mounting Angle	Straight

Electrical Specifications

Connector Impedance	50 ohm
Operating Frequency Band	0 – 6000 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
Average Power	0.4 kW @ 900 MHz
Peak Power, maximum	5.00 kW
Shielding Effectiveness	-110 dB

Outline Drawing



Mechanical Specifications

Outer Contact Attachment Method	Self-clamping
Inner Contact Attachment Method	Captivated
Outer Contact Plating	Trimetal
Inner Contact Plating	Gold
Interface Durability	500 cycles
Interface Durability Method	IEC 61169-4:17
Connector Retention Tensile Force	450 N | 101 lbf
Insertion Force	97.86 N | 22.00 lbf
Insertion Force Method	IEC 61169-16:9.3.5
Pressurizable	No
Coupling Nut Proof Torque	1.70 N-m | 1.25 ft lb
Coupling Nut Proof Torque Method	IEC 61169-16:9.3.11
Coupling Nut Retention Force	267.00 N | 60.02 lbf
Coupling Nut Retention Force Method	IEC 61169-15:9.3.11

Dimensions

Nominal Size	1/4 in
Diameter	14.22 mm | 0.56 in

Height	14.22 mm | 0.56 in
Length	36.57 mm | 1.44 in
Weight	24.99 g | 0.06 lb
Width	14.22 mm | 0.56 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)
0–3000 MHz	1.17	22.00
3000–6000 MHz	1.22	20.00
6000–9000 MHz	1.29	18.00

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)