F1TSM-HF

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

Product Classification

Product Type	Wireless and radiating connector
Product Brand	HELIAX®

General Specifications

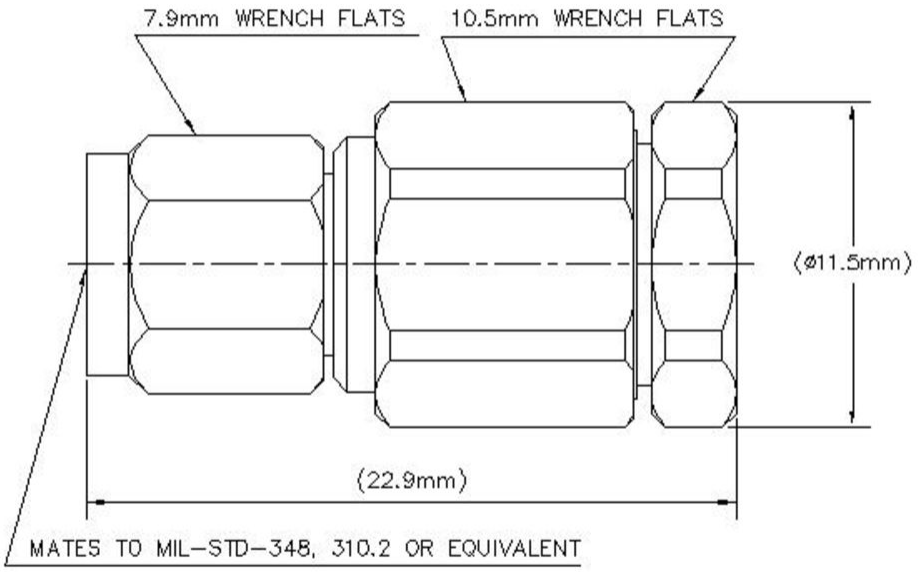
Body Style	Straight
Cable Family	FSJ1-50A
Inner Contact Attachment Method	Solder
Inner Contact Plating	Gold
Interface	SMA Male
Mounting Angle	Straight
Outer Contact Attachment Method	Tab-flare
Outer Contact Plating	Trimetal
Pressurizable	No

Dimensions

Height	0.45 in | 11.43 mm
Width	0.45 in | 11.43 mm
Length	0.9 in | 22.86 mm
Diameter	0.45 in | 11.43 mm
Nominal Size	1/4 in

Outline Drawing

F1TSM-HF



Electrical Specifications

Attenuation, Ambient Temperature	20 °C | 68 °F
Average Power at Frequency	0.4 kW @ 900 MHz
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 – 18000 MHz
Outer Contact Resistance, maximum	2.5 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)
824–2700 MHz	1.03	40
3000–6000 MHz	1.05	34
6000–12000 MHz	1.11	26
12000–19000 MHz	1.33	17

Mechanical Specifications

Connector Retention Tensile Force	101 lbf | 449.27 N
Coupling Nut Proof Torque	15.05 in lb | 1.7 N-m
Coupling Nut Proof Torque Method	IEC 61169-16:9.3.11
Coupling Nut Retention Force	60.02 lbf | 266.982 N
Coupling Nut Retention Force Method	IEC 61169-15:9.3.11
Insertion Force	22 lbf | 97.861 N
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 °C to +85 °C (-67 °F to +185 °F)
Storage Temperature	-65 °C to +125 °C (-85 °F to +257 °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	15.88 g | 0.035 lb

Regulatory Compliance/Certifications

Agency	Classification
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