



## F1TSM-HF

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

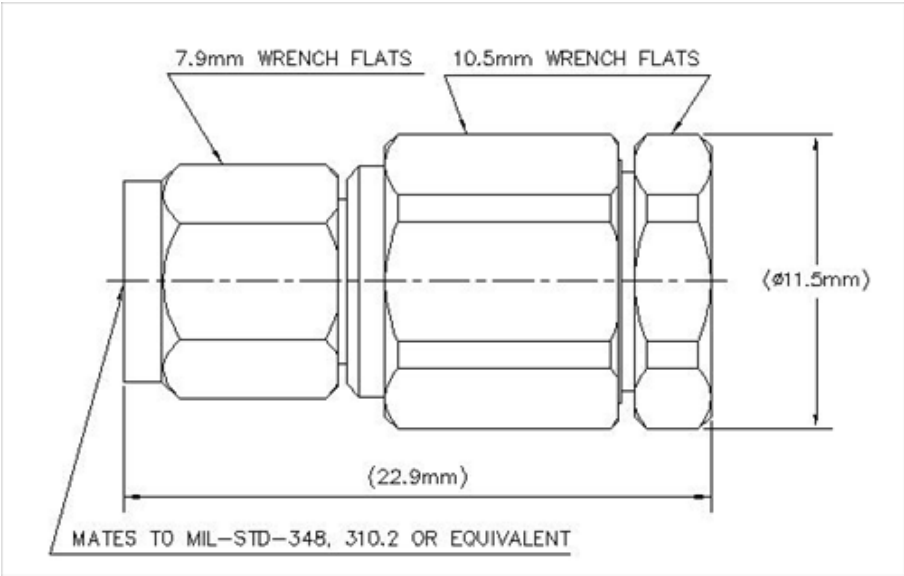
### General Specifications

Interface	SMA Male
Body Style	Straight
Brand	HELIAX®
Mounting Angle	Straight

### Electrical Specifications

Connector Impedance	50 ohm
Operating Frequency Band	0 – 18000 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	Tab-flare
Inner Contact Attachment Method	Solder
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
Connector Retention Torque	1.40 N-m   1.03 ft lb
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	11.50 mm   0.45 in
Height	11.50 mm   0.45 in
Length	22.89 mm   0.90 in
Weight	15.88 g   0.04 lb
Width	11.50 mm   0.45 in

FITSM-HF



## 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)
824–2700 MHz	1.02	40.00
3000–6000 MHz	1.04	34.00
6000–12000 MHz	1.11	26.00
12000–19000 MHz	1.33	17.00

## Regulatory Compliance/Certifications

Agency	Classification
RoHS 2002/95/EC	Compliant by Exemption
China RoHS SJ/T 11364-2006	Above Maximum Concentration Value (MCV)
ISO 9001:2008	Designed, manufactured and/or distributed under this quality management system

