F1TSM-C

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

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

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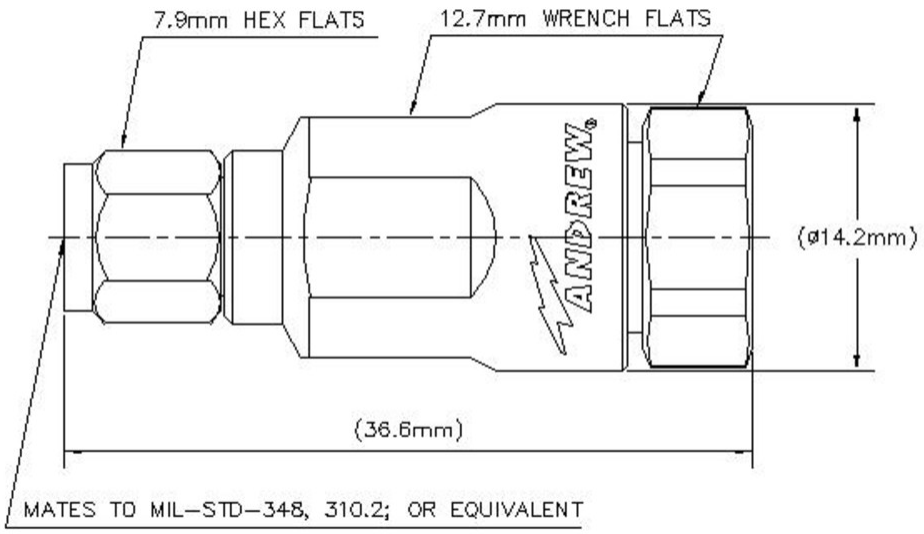

Electrical Specifications

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 – 6000 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)
0–3000 MHz	1.173	21.98
3000–6000 MHz	1.222	20.01
6000–9000 MHz	1.29	18

Mechanical Specifications

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 °C to +85 °C (-67 °F to +185 °F)
Storage Temperature	-65 °C to +125 °C (-85 °F to +257 °F)
Attenuation, Ambient Temperature	20 °C | 68 °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	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/Exempted