

# F1TSR-HF

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



## Product Classification

<b>Product Type</b>	Wireless and radiating connector
<b>Product Brand</b>	HELIAX®

## General Specifications

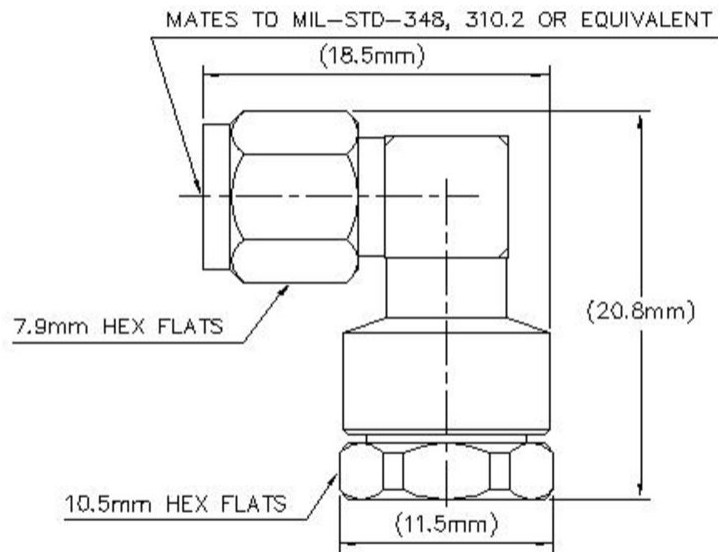
<b>Body Style</b>	Right angle
<b>Cable Family</b>	FSJ1-50A
<b>Inner Contact Attachment Method</b>	Solder
<b>Inner Contact Plating</b>	Gold
<b>Interface</b>	SMA Male
<b>Outer Contact Attachment Method</b>	Clamp
<b>Outer Contact Plating</b>	Trimetal
<b>Pressurizable</b>	No

## Dimensions

<b>Height</b>	18.8 mm   0.74 in
<b>Width</b>	10.92 mm   0.43 in
<b>Length</b>	20.83 mm   0.82 in
<b>Right Angle Length</b>	18.8 mm   0.74 in
<b>Nominal Size</b>	1/4 in

## Outline Drawing

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## Electrical Specifications

<b>Average Power at Frequency</b>	0.4 kW @ 900 MHz
<b>Cable Impedance</b>	50 ohm
<b>Connector Impedance</b>	50 ohm
<b>dc Test Voltage</b>	1000 V
<b>Inner Contact Resistance, maximum</b>	3 mOhm
<b>Insulation Resistance, minimum</b>	5000 MOhm
<b>Operating Frequency Band</b>	0 – 18000 MHz
<b>Outer Contact Resistance, maximum</b>	2.5 mOhm
<b>Peak Power, maximum</b>	2.5 kW
<b>RF Operating Voltage, maximum (vrms)</b>	565 V

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## VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
45–2700 MHz	1.06	31
2700–4000 MHz	1.07	30
4000–6000 MHz	1.12	25
6000–9000 MHz	1.2	21
9000–10200 MHz	1.23	20
10000–12000 MHz	1.26	19
12000–16200 MHz	1.29	18
16200–18000 MHz	1.44	15

## 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 61169-15:9.3.6
Coupling Nut Retention Force	180.02 N   40.47 lbf
Coupling Nut Retention Force Method	IEC 61169-15:9.3.11
Insertion Force	22.02 N   4.95 lbf
Insertion Force Method	IEC 61169-15:9.3.5
Interface Durability	500 cycles
Interface Durability Method	IEC 61169-15:9.5
Mechanical Shock Test Method	IEC 60068-2-27

## Environmental Specifications

Operating Temperature	-40 °C to +85 °C (-40 °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

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<b>Vibration Test Method</b>	IEC 60068-2-6
<b>Water Jetting Test Mating</b>	Mated
<b>Water Jetting Test Method</b>	IEC 60529:2001, IP65

## Packaging and Weights

**Weight, net** 8.76 g | 0.019 lb

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
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 <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
ROHS	Compliant

