# Product Specifications





### F1TNR-HC

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

### **General Specifications**

Interface N Male
Body Style Right angle
Brand HELIAX®
Mounting Angle Right angle

## **Electrical Specifications**

Connector Impedance 50 ohm

Operating Frequency Band 0 - 6000 MHz

Cable Impedance 50 ohm

3rd Order IMD, typical -112 dBm @ 910 MHz 3rd Order IMD Test Method Two +43 dBm carriers

RF Operating Voltage, maximum (vrms) 565.00 V
dc Test Voltage 1600 V
Outer Contact Resistance, maximum 0.25 mOhm
Inner Contact Resistance, maximum 1.00 mOhm
Insulation Resistance, minimum 5000 MOhm

Average Power 0.4 kW @ 900 MHz

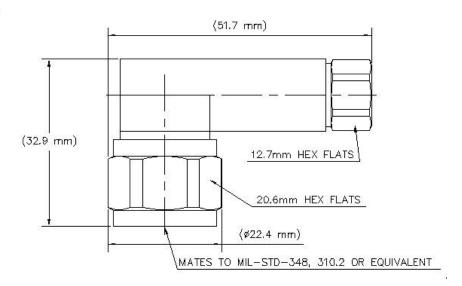
Peak Power, maximum 6.40 kW Shielding Effectiveness -110 dB

# Product Specifications



F1TNR-HC

# **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
Connector Retention Torque	1.40 N-m   1.03 ft lb
Insertion Force	124.55 N   28.00 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	445.00 N   100.04 lbf

#### **Dimensions**

Nominal Size	1/4 in
Diameter	22.35 mm   0.88 in
Height	20.62 mm   0.81 in
Length	51.70 mm   2.04 in
Weight	78.65 g   0.17 lb
Width	32.90 mm   1.30 in

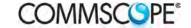
IEC 61169-16:9.3.11

## **Environmental Specifications**

Coupling Nut Retention Force Method

Operating Temperature -55 °C to +85 °C (-67 °F to +185 °F)

# Product Specifications



F1TNR-HC

Storage Temperature -65 °C to +125 °C (-85 °F to +257 °F)

Immersion Depth 1 m **Immersion Test Mating** Mated

Immersion Test Method IEC 60529:2001, IP68

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	- 1	212 °F

### **Return Loss/VSWR**

Frequency Band	VSWR	Return Loss (dB)
824-960 MHz	1.08	28.3
1710-1880 MHz	1.12	24.94
1850-1990 MHz	1.12	24.94
1910-2200 MHz	1.14	23.69
2200-2700 MHz	1.16	22.61
3000-5000 MHz	1.18	21.66
5000-6000 MHz	1.25	19.08

## **Regulatory Compliance/Certifications**

**Agency** 

RoHS 2011/65/EU

China RoHS SJ/T 11364-2006

ISO 9001:2008

#### Classification

Compliant by Exemption

Above Maximum Concentration Value (MCV)

Designed, manufactured and/or distributed under this quality management system





### \* Footnotes

Immersion Depth

Immersion at specified depth for 24 hours