

# F1TNM-HC

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



## Product Classification

Product Type	Wireless and radiating connector
Product Brand	HELIAX®

## General Specifications

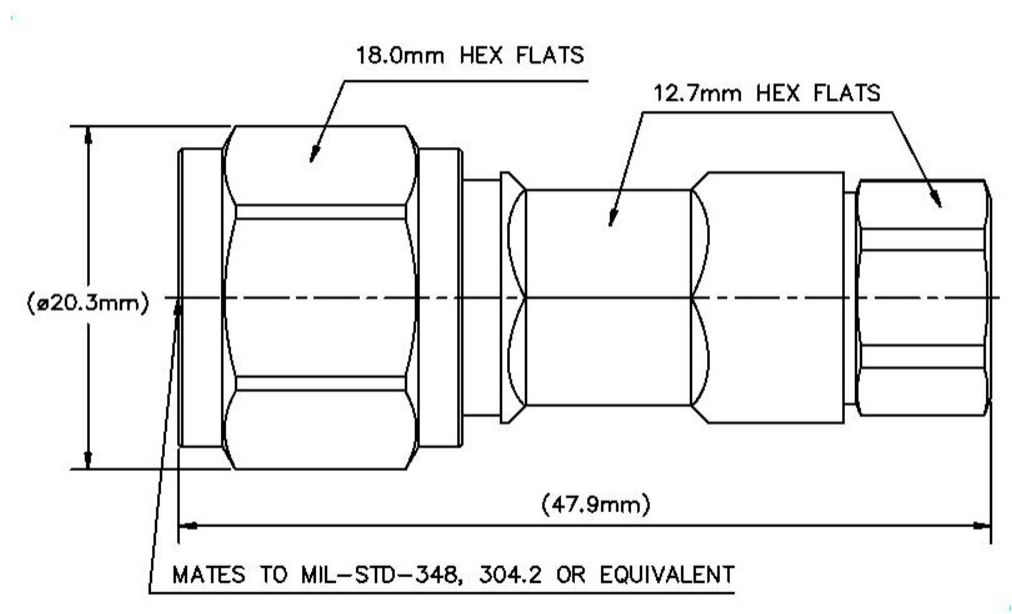
Body Style	Straight
Cable Family	FSJ1-50A
Inner Contact Attachment Method	Captivated
Inner Contact Plating	Silver
Interface	N Male
Mounting Angle	Straight
Outer Contact Attachment Method	Self-clamping
Outer Contact Plating	Trimetal
Pressurizable	No

## Dimensions

Length	48.01 mm   1.89 in
Diameter	20.32 mm   0.8 in
Nominal Size	1/4 in

## Outline Drawing

# F1TNM-HC



## Electrical Specifications

3rd Order IMD at Frequency	-116 dBm @ 910 MHz
3rd Order IMD Test Method	Two +43 dBm carriers
Average Power at Frequency	0.4 kW @ 900 MHz
Cable Impedance	50 ohm
Connector Impedance	50 ohm
dc Test Voltage	1600 V
Inner Contact Resistance, maximum	1 mOhm
Insulation Resistance, minimum	5000 MOhm
Operating Frequency Band	0 – 6000 MHz
Outer Contact Resistance, maximum	0.25 mOhm
Peak Power, maximum	6.4 kW
RF Operating Voltage, maximum (vrms)	565 V
Shielding Effectiveness	-110 dB

## VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
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450–2200 MHz	1.07	30
2200–3000 MHz	1.07	30
3000–6000 MHz	1.18	21.67

## 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	449.98 N   101.16 lbf
Coupling Nut Retention Force Method	IEC 61169-16:9.3.11
Insertion Force	124.55 N   28 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
Immersion Depth	1 m
Immersion Test Mating	Mated
Immersion Test Method	IEC 60529:2001, IP68
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	43.83 g   0.097 lb
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## Regulatory Compliance/Certifications

# F1TNM-HC

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**Agency**

CHINA-ROHS

ISO 9001:2015

REACH-SVHC

ROHS



**Classification**

Below maximum concentration value

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

Compliant as per SVHC revision on [www.commscope.com/ProductCompliance](http://www.commscope.com/ProductCompliance)

Compliant

\* Footnotes

**Immersion Depth**

Immersion at specified depth for 24 hours