F1TNM-HC



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

Product Classification

Product TypeWireless and radiating connector

Product Brand HELIAX®

General Specifications

Body StyleStraightCable FamilyFSJ1-50A

Inner Contact Attachment Method Captivated

Inner Contact PlatingSilverInterfaceN Male

Mounting Angle Straight

Outer Contact Attachment Method Self-clamping

Outer Contact Plating Trimetal

Pressurizable No

Pressurizable

Dimensions

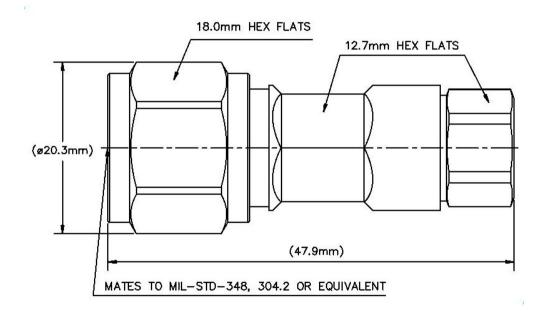
 Length
 1.89 in | 48.006 mm

 Diameter
 0.8 in | 20.32 mm

Nominal Size 1/4 in

Outline Drawing





Electrical Specifications

3rd Order IMD at Frequency -116 dBm @ 910 MHz

3rd Order IMD Test Method Two +43 dBm carriers

Attenuation, Ambient Temperature 20 °C | 68 °F

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 – 18000 MHz

Outer Contact Resistance, maximum 0.25 mOhm

COMMSCOPE®

F1TNM-HC

Peak Power, maximum6.4 kWRF Operating Voltage, maximum (vrms)565 VShielding Effectiveness-110 dB

VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
450–2200 MHz	1.07	30
2200–3000 MHz	1.07	30
3000–6000 MHz	1.18	21.67
6000–9000 MHz	1.38	15.94
9000–15000 MHz	1.43	15.05

Mechanical Specifications

Connector Retention Tensile Force 101 lbf | 449.27 N **Coupling Nut Proof Torque** 15.05 in lb | 1.7 N-m **Coupling Nut Proof Torque Method** IEC 61169-16:9.3.11 **Coupling Nut Retention Force** 101.16 lbf | 449.982 N **Coupling Nut Retention Force Method** IEC 61169-16:9.3.11 **Insertion Force** 28 lbf | 124.55 N **Insertion Force Method** IEC 61169-16:9.3.5 **Interface Durability** 500 cycles

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)

Average Power, Ambient Temperature40 °C | 104 °FAverage Power, Inner Conductor Temperature100 °C | 212 °FCorrosion Test MethodIEC 60068-2-11

Immersion Depth1 mImmersion Test MatingMated

Immersion Test Method IEC 60529:2001, IP68



F1TNM-HC

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

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



* Footnotes

Immersion Depth Immersion at specified depth for 24 hours

