F1TNM-HC



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

Product Classification

Product Type Wireless and radiating connector

Product BrandHELIAX®Product SeriesFSJ1-50A

General Specifications

Body StyleStraightCable FamilyFSJ1-50AInner Contact Attachment MethodCaptivated

Inner Contact PlatingSilverInterfaceN MaleMounting AngleStraight

Outer Contact Attachment Method Self-clamping

Outer Contact PlatingTrimetalPressurizableNo

Dimensions

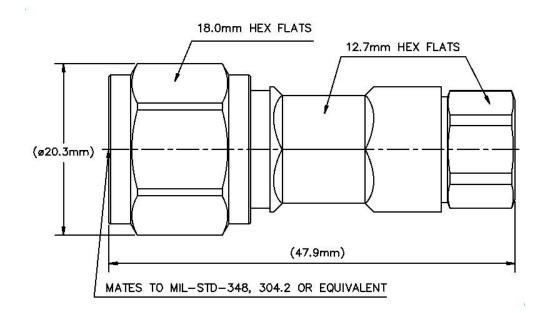
 Length
 48.01 mm | 1.89 in

 Diameter
 20.32 mm | 0.8 in

Nominal Size 1/4 in

Outline Drawing





Electrical Specifications

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

3rd Order IMD Test MethodTwo +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	1.065	30.04
2200-3000 MHz	1.065	30.04
3000-6000 MHz	1.18	21.67

Mechanical Specifications

Connector Retention Tensile Force449.27 N | 101 lbfCoupling Nut Proof Torque1.7 N-m | 15.046 in lbCoupling Nut Proof Torque MethodIEC 61169-16:9.3.11Coupling Nut Retention Force449.98 N | 101.16 lbfCoupling Nut Retention Force MethodIEC 61169-16:9.3.11Insertion Force124.55 N | 28 lbfInsertion Force MethodIEC 61169-16:9.3.5

Interface Durability500 cyclesInterface Durability MethodIEC 61169-4:17Mechanical Shock Test MethodIEC 60068-2-27

Environmental Specifications

Operating Temperature $-55 \,^{\circ}\text{C}$ to $+85 \,^{\circ}\text{C}$ (-67 $^{\circ}\text{F}$ to $+185 \,^{\circ}\text{F}$)Storage Temperature $-65 \,^{\circ}\text{C}$ to $+125 \,^{\circ}\text{C}$ (-85 $^{\circ}\text{F}$ to $+257 \,^{\circ}\text{F}$)

Attenuation, Ambient Temperature20 °C | 68 °FAverage 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

Moisture Resistance Test MethodIEC 60068-2-3Thermal Shock Test MethodIEC 60068-2-14Vibration Test MethodIEC 60068-2-6

Packaging and Weights

Weight, net 43.83 g | 0.097 lb

Regulatory Compliance/Certifications

COMMSCOPE®

F1TNM-HC

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



* Footnotes

Immersion Depth Immersion at specified depth for 24 hours

