

Type N Male Positive Lock for 1/4 in LDF1-50 cable

Product Classification

Product Type Wireless and radiating connector

Product Brand HELIAX®
Product Series LDF1-50

General Specifications

Body StyleStraightCable FamilyLDF1-50Inner Contact Attachment MethodCaptivated

Inner Contact Plating Gold
Interface N Male
Mounting Angle Straight
Outer Contact Attachment Method Self-flare
Outer Contact Plating Trimetal
Pressurizable No

Dimensions

 Height
 22.35 mm | 0.88 in

 Width
 22.35 mm | 0.88 in

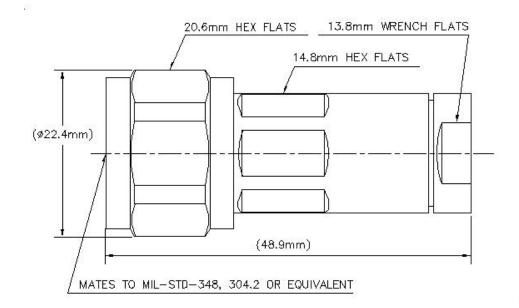
 Length
 48.77 mm | 1.92 in

 Diameter
 22.35 mm | 0.88 in

Nominal Size 1/4 in

Outline Drawing





Electrical Specifications

3rd Order IMD at Frequency -107 dBm @ 910 MHz **3rd Order IMD Test Method** Two +43 dBm carriers

Insertion Loss Coefficient, typical 0.05

Average Power at Frequency 0.6 kW @ 900 MHz

Cable Impedance 50 ohm **Connector Impedance** 50 ohm 2200 V dc Test Voltage Inner Contact Resistance, maximum 1 m0hm Insulation Resistance, minimum 5000 MOhm 0 - 12000 MHz

Outer Contact Resistance, maximum 0.25 m0hm

Peak Power, maximum 10 kW RF Operating Voltage, maximum (vrms) 707 V **Shielding Effectiveness** -110 dB

VSWR/Return Loss

Operating Frequency Band

VSWR Frequency Band Return Loss (dB)

0-960 MHz 1.024 38.52

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960-2200 MHz	1.035	35.29
2200-2700 MHz	1.035	35.29
2700-4000 MHz	1.094	26.96
4000-6000 MHz	1.21	20.5
6000-8000 MHz	1.33	17
8000-10000 MHz	1.33	17
10000-12000 MHz	1.4	15.7

Mechanical Specifications

Attachment Durability 25 cycles

Connector Retention Tensile Force449.27 N | 101 lbfCoupling Nut Proof Torque1.7 N-m | 15.046 in lbCoupling Nut Retention Force449.98 N | 101.16 lbfCoupling Nut Retention Force MethodMIL-C-39012C-3.25, 4.6.22

Insertion Force27.98 N | 6.29 lbfInsertion Force MethodIEC 61169-1:15.2.4

Interface Durability 500 cycles

Interface Durability Method IEC 61169-16:9.5

Mechanical Shock Test Method IEC 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

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Packaging and Weights

Weight, net 61.77 g | 0.136 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 UK-ROHS Compliant



* Footnotes

Insertion Loss Coefficient, typical 0.05√ freq (GHz) (not applicable for elliptical waveguide)

Immersion Depth Immersion at specified depth for 24 hours

