

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



### Product Classification

<b>Brand</b>	HELIAX®
<b>Product Type</b>	Wireless and radiating connector

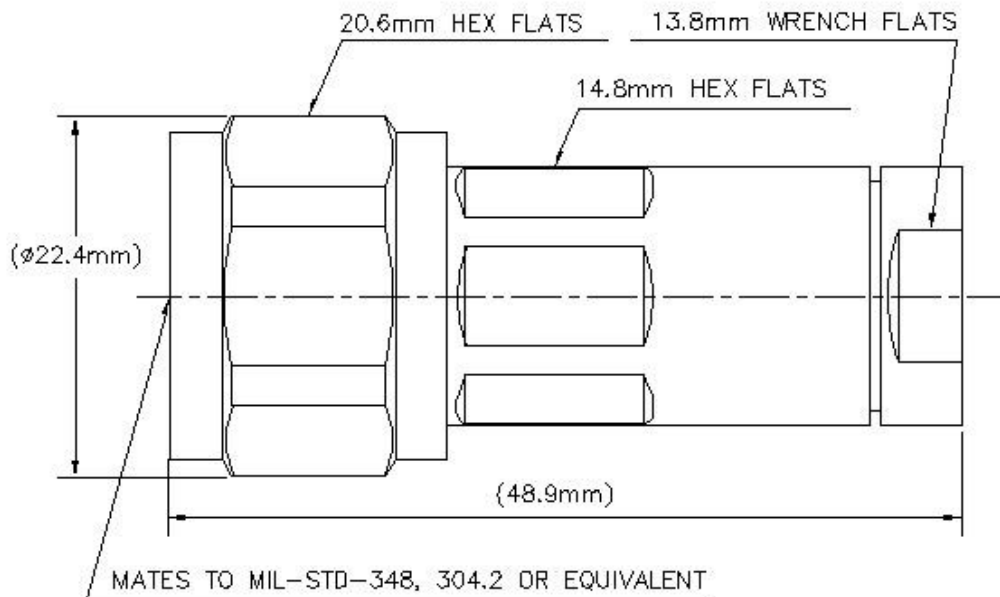
### General Specifications

<b>Interface</b>	N Male
<b>Body Style</b>	Straight
<b>Mounting Angle</b>	Straight

### Electrical Specifications

<b>Connector Impedance</b>	50 ohm
<b>Operating Frequency Band</b>	0 – 12000 MHz
<b>Average Power at Frequency</b>	0.6 kW @ 900 MHz
<b>Cable Impedance</b>	50 ohm
<b>3rd Order IMD, typical</b>	-107 dBm @ 910 MHz
<b>3rd Order IMD Test Method</b>	Two +43 dBm carriers
<b>RF Operating Voltage, maximum (vrms)</b>	707.00 V
<b>dc Test Voltage</b>	2200 V
<b>Outer Contact Resistance, maximum</b>	0.25 mOhm
<b>Inner Contact Resistance, maximum</b>	1.00 mOhm
<b>Insulation Resistance, minimum</b>	5000 MOhm
<b>Peak Power, maximum</b>	10.00 kW
<b>Insertion Loss, typical</b>	0.05 dB
<b>Shielding Effectiveness</b>	-110 dB

## Outline Drawing



## Mechanical Specifications

<b>Outer Contact Attachment Method</b>	Self-flare
<b>Inner Contact Attachment Method</b>	Captivated
<b>Outer Contact Plating</b>	Trimetal
<b>Inner Contact Plating</b>	Silver
<b>Attachment Durability</b>	25 cycles
<b>Interface Durability</b>	500 cycles
<b>Interface Durability Method</b>	IEC 61169-16:9.5
<b>Connector Retention Tensile Force</b>	450 N   101 lbf
<b>Insertion Force</b>	28.00 N   6.29 lbf
<b>Insertion Force Method</b>	IEC 61169-1:15.2.4
<b>Pressurizable</b>	No
<b>Coupling Nut Proof Torque</b>	1.70 N-m   1.25 ft lb
<b>Coupling Nut Retention Force</b>	450.00 N   101.16 lbf
<b>Coupling Nut Retention Force Method</b>	MIL-C-39012C-3.25, 4.6.22

## Dimensions

<b>Nominal Size</b>	1/4 in
<b>Diameter</b>	22.35 mm   0.88 in

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<b>Height</b>	22.35 mm   0.88 in
<b>Length</b>	48.88 mm   1.92 in
<b>Weight</b>	61.77 g   0.14 lb
<b>Width</b>	22.35 mm   0.88 in

## Environmental Specifications

<b>Operating Temperature</b>	-55 °C to +85 °C (-67 °F to +185 °F)
<b>Storage Temperature</b>	-65 °C to +125 °C (-85 °F to +257 °F)
<b>Immersion Depth</b>	1 m
<b>Immersion Test Mating</b>	Mated
<b>Immersion Test Method</b>	IEC 60529:2001, IP68
<b>Moisture Resistance Test Method</b>	IEC 60068-2-3
<b>Mechanical Shock Test Method</b>	IEC 60068-2-27
<b>Thermal Shock Test Method</b>	IEC 60068-2-14
<b>Vibration Test Method</b>	IEC 60068-2-6
<b>Corrosion Test Method</b>	IEC 60068-2-11

## Standard Conditions

<b>Attenuation, Ambient Temperature</b>	20 °C   68 °F
<b>Average Power, Ambient Temperature</b>	40 °C   104 °F
<b>Average Power, Inner Conductor Temperature</b>	100 °C   212 °F

## Return Loss/VSWR

<b>Frequency Band</b>	<b>VSWR</b>	<b>Return Loss (dB)</b>
0–960 MHz	1.02	38.40
960–2200 MHz	1.03	35.30
2200–2700 MHz	1.03	35.30
2700–4000 MHz	1.09	27.00
4000–6000 MHz	1.21	20.50
6000–8000 MHz	1.33	17.00
8000–10000 MHz	1.33	17.00
10000–12000 MHz	1.39	15.70

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
RoHS 2011/65/EU	Compliant by Exemption
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
China RoHS SJ/T 11364-2014	Above Maximum Concentration Value (MCV)



## \* Footnotes

<b>Immersion Depth</b>	Immersion at specified depth for 24 hours
<b>Insertion Loss, typical</b>	$0.05\sqrt{f}$ (GHz) (not applicable for elliptical waveguide)