

L1TNF-PL



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

Product Classification

| | |
|---------------|----------------------------------|
| Product Type | Wireless and radiating connector |
| Product Brand | HELIAX® |

General Specifications

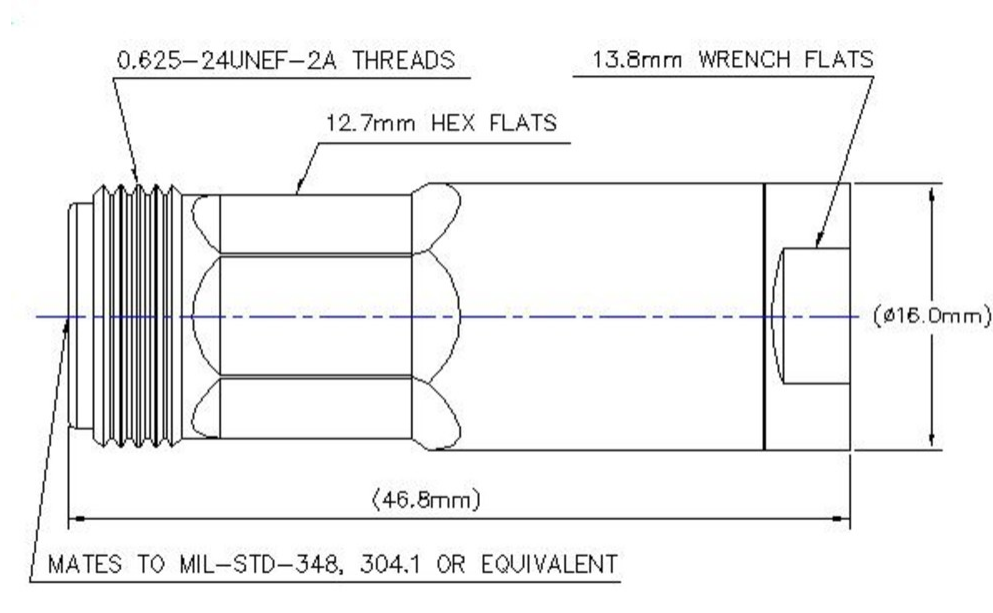
| | |
|---------------------------------|------------|
| Body Style | Straight |
| Cable Family | LDF1-50 |
| Inner Contact Attachment Method | Captivated |
| Inner Contact Plating | Silver |
| Interface | N Female |
| Mounting Angle | Straight |
| Outer Contact Attachment Method | Self-flare |
| Outer Contact Plating | Trimetal |
| Pressurizable | No |

Dimensions

| | |
|--------------|--------------------|
| Height | 16 mm 0.63 in |
| Width | 16 mm 0.63 in |
| Length | 46.74 mm 1.84 in |
| Diameter | 16 mm 0.63 in |
| Nominal Size | 1/4 in |

Outline Drawing

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Electrical Specifications

| | |
|--------------------------------------|----------------------|
| 3rd Order IMD at Frequency | -107 dBm @ 910 MHz |
| 3rd Order IMD Test Method | Two +43 dBm carriers |
| Insertion Loss, typical | 0.05 dB |
| Average Power at Frequency | 0.6 kW @ 900 MHz |
| Cable Impedance | 50 ohm |
| Connector Impedance | 50 ohm |
| dc Test Voltage | 2200 V |
| Inner Contact Resistance, maximum | 1 mOhm |
| Insulation Resistance, minimum | 5000 MOhm |
| Operating Frequency Band | 0 – 12000 MHz |
| Outer Contact Resistance, maximum | 0.25 mOhm |
| Peak Power, maximum | 10 kW |
| RF Operating Voltage, maximum (vrms) | 707 V |
| Shielding Effectiveness | -110 dB |

VSWR/Return Loss

| Frequency Band | VSWR | Return Loss (dB) |
|----------------|------|------------------|
| 0-960 MHz | 1.04 | 35.6 |

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| | | |
|-----------------|------|------|
| 960–2200 MHz | 1.06 | 31 |
| 2200–2700 MHz | 1.06 | 30.8 |
| 2700–4000 MHz | 1.07 | 30 |
| 4000–6000 MHz | 1.13 | 24.8 |
| 6000–8000 MHz | 1.28 | 18.4 |
| 8000–10000 MHz | 1.3 | 17.8 |
| 10000–12000 MHz | 1.31 | 17.6 |

Mechanical Specifications

| | |
|-----------------------------------|------------------------|
| Attachment Durability | 25 cycles |
| Connector Retention Tensile Force | 449.27 N 101 lbf |
| Coupling Nut Proof Torque | 1.7 N-m 15.046 in lb |
| Insertion Force | 27.98 N 6.29 lbf |
| Insertion Force Method | IEC 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 °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 | 44.92 g 0.099 lb |
|-------------|--------------------|

L1TNF-PL

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

| | |
|-------------------------|--|
| Insertion Loss, typical | 0.05v~freq (GHz) (not applicable for elliptical waveguide) |
| Immersion Depth | Immersion at specified depth for 24 hours |