



#### **Product Classification**

**Product Type**Wireless and radiating connector

Product Brand HELIAX®
Product Series LDF1-50

### General Specifications

Body Style Straight

Cable Family LDF1-50

Inner Contact Attachment Method Captivated

Inner Contact Plating Silver

**Interface** 7-16 DIN Female

Mounting AngleStraightOuter Contact Attachment MethodSelf-flareOuter Contact PlatingTrimetalPressurizableNo

#### **Dimensions**

 Height
 28.96 mm | 1.14 in

 Width
 28.96 mm | 1.14 in

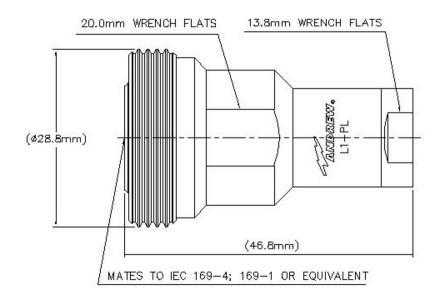
 Length
 46.74 mm | 1.84 in

 Diameter
 28.96 mm | 1.14 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 Impedance50 ohmConnector Impedance50 ohmdc Test Voltage2200 VInner Contact Resistance, maximum0.4 mOhm

**Operating Frequency Band** 0 - 6000 MHz

Outer Contact Resistance, maximum1.5 mOhmPeak Power, maximum12.1 kWRF Operating Voltage, maximum (vrms)778 V

**Shielding Effectiveness** -110 dB

## VSWR/Return Loss

Insulation Resistance, minimum

Frequency Band VSWR Return Loss (dB)

**824–2200 MHz** 1.041 33.94



10000 MOhm

# L1TDF-PL

Insertion Force Method

2200-2700 MHz	1.041	33.94
3000-4000 MHz	1.036	35.05
4000-6000 MHz	1.173	21.98

### Mechanical Specifications

Attachment Durability 25 cycles

Connector Retention Tensile Force449.27 N | 101 lbfCoupling Nut Proof Torque35 N-m | 309.776 in lbInsertion Force199.99 N | 44.96 lbf

**Interface Durability** 500 cycles

Interface Durability Method IEC 61169-4:17

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  $+257 \,^{\circ}\text{F}$ )

IEC 61169-1:15.2.4

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** 87.02 g | 0.192 lb

### Regulatory Compliance/Certifications

Agency Classification

CHINA-ROHS Below maximum concentration value



# L1TDF-PL

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system

REACH-SVHC Compliant as per SVHC revision on www.andrew.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

