

L1TDF-PL



7-16 DIN Female 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

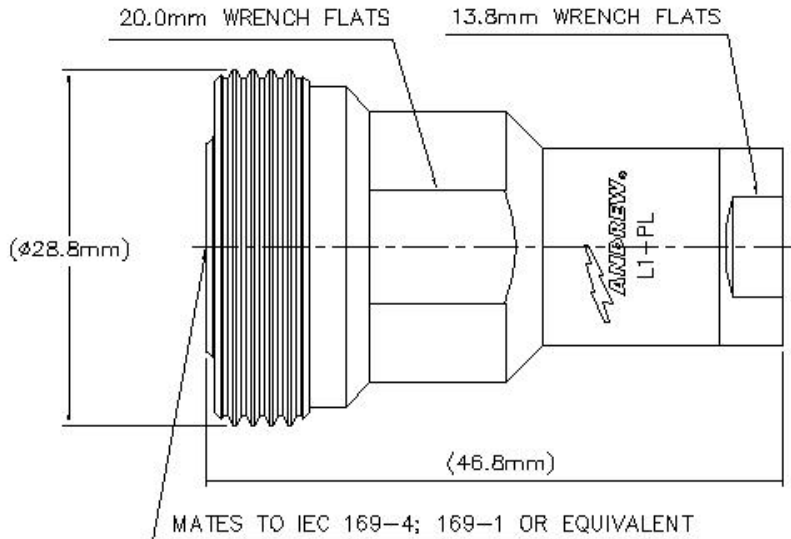
Body Style	Straight
Cable Family	LDF1-50
Inner Contact Attachment Method	Captivated
Inner Contact Plating	Silver
Interface	7-16 DIN Female
Mounting Angle	Straight
Outer Contact Attachment Method	Self-flare
Outer Contact Plating	Trimetal
Pressurizable	No

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

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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 Coefficient, typical	0.05
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	0.4 mOhm
Insulation Resistance, minimum	10000 MOhm
Operating Frequency Band	0 – 6000 MHz
Outer Contact Resistance, maximum	1.5 mOhm
Peak Power, maximum	12.1 kW
RF Operating Voltage, maximum (vrms)	778 V
Shielding Effectiveness	-110 dB

VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
824–2200 MHz	1.041	33.94

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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 Force	449.27 N 101 lbf
Coupling Nut Proof Torque	35 N-m 309.776 in lb
Insertion Force	199.99 N 44.96 lbf
Insertion Force Method	IEC 61169-1:15.2.4
Interface Durability	500 cycles
Interface Durability Method	IEC 61169-4:17
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	87.02 g 0.192 lb
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Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value

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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