L1PNF

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

OBSOLETE

This product was discontinued on: May 18, 2019

Replaced By:

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

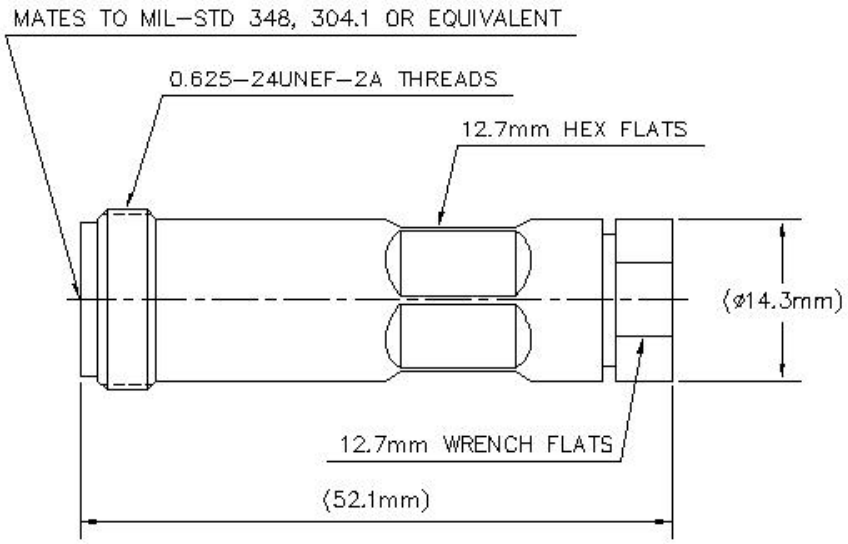
Body Style	Straight
Cable Family	LDF1-50
Inner Contact Attachment Method	Solder
Inner Contact Plating	Gold
Interface	N Female
Mounting Angle	Straight
Outer Contact Attachment Method	Self-flare
Outer Contact Plating	Silver
Pressurizable	No

Dimensions

Length	52.07 mm | 2.05 in
Diameter	21.84 mm | 0.86 in
Nominal Size	1/4 in

Outline Drawing

L1PNF



Electrical Specifications

3rd Order IMD at Frequency	-112 dBm @ 910 MHz
3rd Order IMD Test Method	Two +43 dBm carriers
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)
45–4100 MHz	1.119	25.01
4100–6200 MHz	1.152	23.02

6200–12000 MHz	1.33	17

Mechanical Specifications

Connector Retention Tensile Force	449.27 N | 101 lbf
Coupling Nut Proof Torque Method	IEC 61169-16:9.3.11
Coupling Nut Retention Force	445 N | 100.04 lbf
Coupling Nut Retention Force Method	IEC 61169-16:9.3.11
Insertion Force	124.55 N | 28 lbf
Insertion Force Method	IEC 61169-16:9.3.5
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	80 g | 0.176 lb

* Footnotes

Immersion Depth	Immersion at specified depth for 24 hours