

# L4PNF-RC



Type N Female RingFlare™ for 1/2 in LDF4-50A cable

## OBSOLETE

This product was discontinued on: June 16, 2010

### Replaced By:

L4TNF-PS	Type N Female Positive Stop™ for 1/2 in LDF4-50A cable
L4TNF-PSA	Type N Female Positive Stop™ for 1/2 in AL4RPV-50, LDF4-50A, HL4RPV-50 cable

## Product Classification

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

## General Specifications

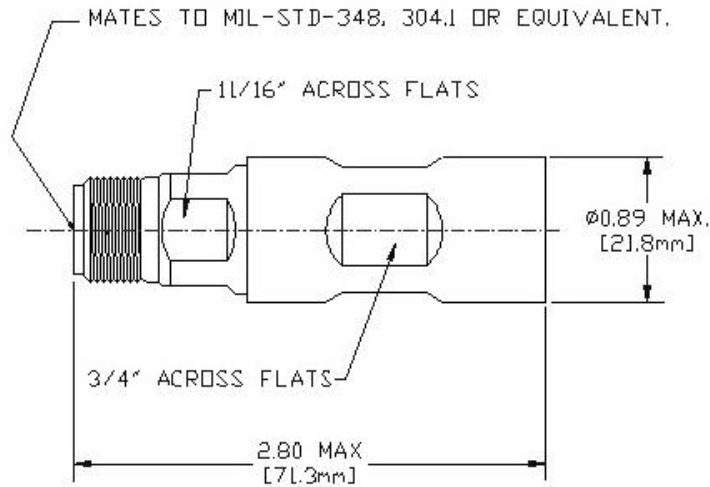
<b>Body Style</b>	Straight
<b>Cable Family</b>	LDF4-50A
<b>Inner Contact Attachment Method</b>	Captivated
<b>Inner Contact Plating</b>	Gold
<b>Interface</b>	N Female
<b>Mounting Angle</b>	Straight
<b>Outer Contact Attachment Method</b>	Ring-flare
<b>Outer Contact Plating</b>	Trimetal
<b>Pressurizable</b>	No

## Dimensions

<b>Length</b>	71.12 mm   2.8 in
<b>Diameter</b>	22.1 mm   0.87 in
<b>Nominal Size</b>	1/2 in

## Outline Drawing

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## Electrical Specifications

<b>3rd Order IMD at Frequency</b>	-120 dBm @ 910 MHz
<b>3rd Order IMD Test Method</b>	Two +43 dBm carriers
<b>Insertion Loss Coefficient, typical</b>	0.05
<b>Average Power at Frequency</b>	0.6 kW @ 900 MHz
<b>Cable Impedance</b>	50 ohm
<b>Connector Impedance</b>	50 ohm
<b>dc Test Voltage</b>	2000 V
<b>Inner Contact Resistance, maximum</b>	2 mOhm
<b>Insulation Resistance, minimum</b>	5000 MOhm
<b>Operating Frequency Band</b>	0 – 8800 MHz
<b>Outer Contact Resistance, maximum</b>	0.3 mOhm
<b>Peak Power, maximum</b>	10 kW
<b>RF Operating Voltage, maximum (vrms)</b>	707 V
<b>Shielding Effectiveness</b>	-110 dB

## VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
45–1000 MHz	1.032	36.06

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<b>1000–2500 MHz</b>	1.058	31
<b>2500–5000 MHz</b>	1.094	26.96
<b>5000–7000 MHz</b>	1.135	23.98
<b>7000–8000 MHz</b>	1.196	20.99
<b>8000–8800 MHz</b>	1.33	17

## Mechanical Specifications

<b>Attachment Durability</b>	25 cycles
<b>Connector Retention Tensile Force</b>	889.64 N   200 lbf
<b>Connector Retention Torque</b>	5.42 N-m   47.998 in lb
<b>Insertion Force</b>	66.72 N   15 lbf
<b>Insertion Force Method</b>	MIL-C-39012C-3.12, 4.6.9
<b>Interface Durability</b>	50 cycles
<b>Interface Durability Method</b>	IEC 61169-16:9.5
<b>Mechanical Shock Test Method</b>	MIL-STD-202, Method 213, Test Condition I

## Environmental Specifications

<b>Operating Temperature</b>	-55 °C to +85 °C (-67 °F to +185 °F)
<b>Storage Temperature</b>	-55 °C to +85 °C (-67 °F to +185 °F)
<b>Attenuation, Ambient Temperature</b>	20 °C   68 °F
<b>Average Power, Ambient Temperature</b>	40 °C   104 °F
<b>Corrosion Test Method</b>	MIL-STD-1344A, Method 1001.1, Test Condition A
<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>	MIL-STD-202F, Method 106F
<b>Thermal Shock Test Method</b>	MIL-STD-202F, Method 107G, Test Condition A-1, Low Temperature -55 °C
<b>Vibration Test Method</b>	MIL-STD-202F, Method 204D, Test Condition B
<b>Water Jetting Test Mating</b>	Mated
<b>Water Jetting Test Method</b>	IEC 60529:2001, IP66

## Packaging and Weights

<b>Weight, net</b>	92 g   0.203 lb
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## \* Footnotes

**Insertion Loss Coefficient, typical**  $0.05\sqrt{\text{freq}}$  (GHz) (not applicable for elliptical waveguide)

**Immersion Depth** Immersion at specified depth for 24 hours