

## 7-16 DIN Female for 1/2 in LDF4-50A cable

### **OBSOLETE**

This product was discontinued on: December 31, 2010

#### Replaced By:

L4TDF-PSA

7-16 DIN 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®

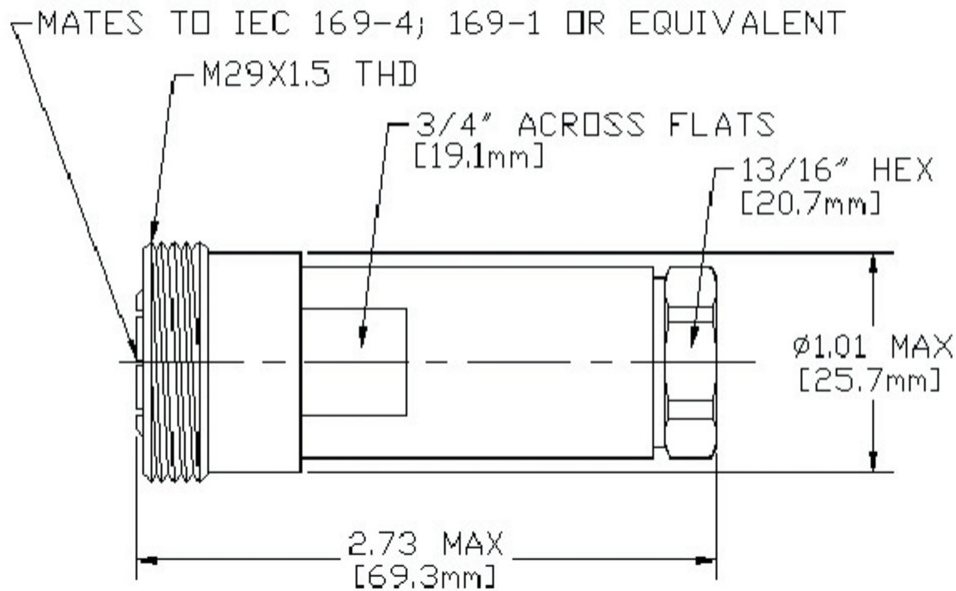
## General Specifications

<b>Body Style</b>	Straight
<b>Cable Family</b>	LDF4-50A
<b>Inner Contact Attachment Method</b>	Solder
<b>Inner Contact Plating</b>	Silver
<b>Interface</b>	7-16 DIN Female
<b>Mounting Angle</b>	Straight
<b>Outer Contact Attachment Method</b>	Self-flare
<b>Outer Contact Plating</b>	Silver
<b>Pressurizable</b>	No

## Dimensions

<b>Length</b>	68.58 mm   2.7 in
<b>Diameter</b>	27.94 mm   1.1 in
<b>Nominal Size</b>	1/2 in

## Outline Drawing



## 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>	1.1 kW @ 900 MHz
<b>Cable Impedance</b>	50 ohm
<b>Connector Impedance</b>	50 ohm
<b>dc Test Voltage</b>	4000 V
<b>Inner Contact Resistance, maximum</b>	0.8 mOhm
<b>Insulation Resistance, minimum</b>	5000 MOhm
<b>Operating Frequency Band</b>	0 – 3500 MHz
<b>Outer Contact Resistance, maximum</b>	1.5 mOhm
<b>Peak Power, maximum</b>	40 kW
<b>RF Operating Voltage, maximum (vrms)</b>	1415 V
<b>Shielding Effectiveness</b>	-110 dB

## VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
0–8800 MHz	1.036	35.05
880–1800 MHz	1.052	31.92
1800–2600 MHz	1.083	27.99
2600–3500 MHz	1.106	25.96

## 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>Coupling Nut Retention Force</b>	1000 N   224.81 lbf
<b>Coupling Nut Retention Force Method</b>	MIL-C-39012C-3.25, 4.6.22
<b>Interface Durability</b>	50 cycles
<b>Interface Durability Method</b>	IEC 61169-4:9.5

## Environmental Specifications

<b>Operating Temperature</b>	-40 °C to +85 °C (-40 °F to +185 °F)
<b>Storage Temperature</b>	-40 °C to +85 °C (-40 °F to +185 °F)
<b>Attenuation, Ambient Temperature</b>	20 °C   68 °F
<b>Average Power, Ambient Temperature</b>	40 °C   104 °F
<b>Vibration Test Method</b>	IEC 60068-2-6

## Packaging and Weights

<b>Weight, net</b>	185 g   0.408 lb
--------------------	------------------

## \* Footnotes

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