#### 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                              | חנ   |  |  |  |
| Product Type  | Wireless and radiating connector   |  |  |  |
| Product Brand                                       | HELIAX®  |  |  |  |
| General Specificatio                                | NS   |  |  |  |
| Body Style  | Straight   |  |  |  |
| Cable Family  | LDF4-50A   |  |  |  |
| Inner Contact Attachment Met                        | thod Solder  |  |  |  |
| Inner Contact Plating                               | Silver   |  |  |  |
| Interface   | 7-16 DIN Female  |  |  |  |
| Mounting Angle                                      | Straight   |  |  |  |

# Outline Drawing

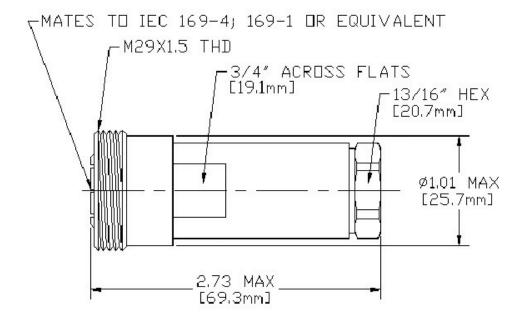
**Nominal Size** 

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1/2 in





### **Electrical Specifications**

| 3rd Order IMD at Frequency           | -120 dBm @ 910 MHz   |
|--------------------------------------|----------------------|
| 3rd Order IMD Test Method            | Two +43 dBm carriers |
| Insertion Loss Coefficient, typical  | 0.05                 |
| Average Power at Frequency           | 1.1 kW @ 900 MHz     |
| Cable Impedance                      | 50 ohm               |
| Connector Impedance                  | 50 ohm               |
| dc Test Voltage                      | 4000 V               |
| Inner Contact Resistance, maximum    | 0.8 mOhm             |
| Insulation Resistance, minimum       | 5000 MOhm            |
| Operating Frequency Band             | 0 – 3500 MHz         |
| Outer Contact Resistance, maximum    | 1.5 mOhm             |
| Peak Power, maximum                  | 40 kW                |
| RF Operating Voltage, maximum (vrms) | 1415 V               |
| Shielding Effectiveness              | -110 dB              |
|                                      |                      |

### VSWR/Return Loss

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| 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

| Attachment Durability               | 25 cycles                 |
|-------------------------------------|---------------------------|
| Connector Retention Tensile Force   | 889.64 N   200 lbf        |
| Connector Retention Torque          | 5.42 N-m   47.998 in lb   |
| Coupling Nut Retention Force        | 1000 N   224.81 lbf       |
| Coupling Nut Retention Force Method | MIL-C-39012C-3.25, 4.6.22 |
| Interface Durability                | 50 cycles                 |
| Interface Durability Method         | IEC 61169-4:9.5           |

### **Environmental Specifications**

| Operating Temperature              | -40 °C to +85 °C (-40 °F to +185 °F) |
|------------------------------------|--------------------------------------|
| Storage Temperature                | -40 °C to +85 °C (-40 °F to +185 °F) |
| Attenuation, Ambient Temperature   | 20 °C   68 °F                        |
| Average Power, Ambient Temperature | 40 °C   104 °F                       |
| Vibration Test Method              | IEC 60068-2-6                        |
| Packaging and Weights              |                                      |
| Weight, net                        | 185 g   0.408 lb                     |

# Weight, net

### \* Footnotes

**Insertion Loss Coefficient, typical** 0.05√<sup>-</sup>freq (GHz) (not applicable for elliptical waveguide)

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