



## L2TDM-PL

**7-16 DIN Male Positive Lock for 3/8 in LDF2-50 cable**

### Product Classification

|              |                                  |
|--------------|----------------------------------|
| Brand        | HELIAX®                          |
| Product Type | Wireless and radiating connector |

### General Specifications

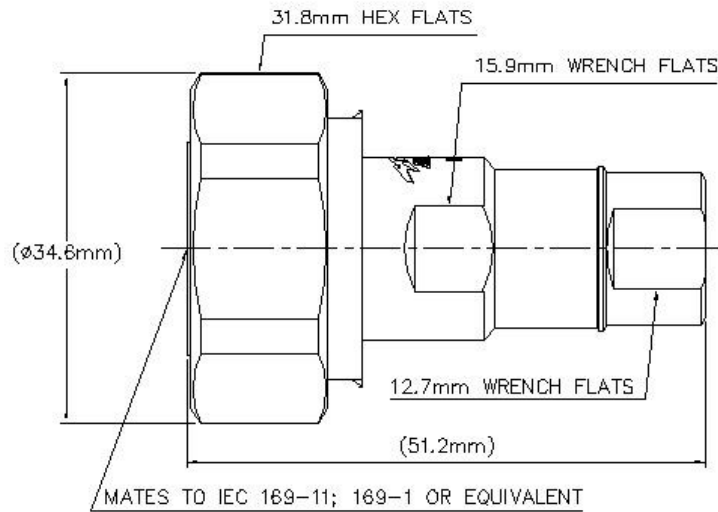
|                |               |
|----------------|---------------|
| Interface      | 7-16 DIN Male |
| Body Style     | Straight      |
| Brand          | HELIAX®       |
| Mounting Angle | Straight      |

### Electrical Specifications

|                                      |                      |
|--------------------------------------|----------------------|
| Connector Impedance                  | 50 ohm               |
| Operating Frequency Band             | 0 – 10000 MHz        |
| Cable Impedance                      | 50 ohm               |
| 3rd Order IMD, typical               | -107 dBm @ 910 MHz   |
| 3rd Order IMD Test Method            | Two +43 dBm carriers |
| RF Operating Voltage, maximum (vrms) | 894.00 V             |
| dc Test Voltage                      | 2500 V               |
| Outer Contact Resistance, maximum    | 1.50 mOhm            |
| Inner Contact Resistance, maximum    | 0.40 mOhm            |
| Insulation Resistance, minimum       | 10000 MOhm           |
| Average Power                        | 0.7 kW @ 900 MHz     |
| Peak Power, maximum                  | 15.60 kW             |
| Insertion Loss, typical              | 0.05 dB              |
| Shielding Effectiveness              | -110 dB              |

L2TDM-PL

## Outline Drawing



## Mechanical Specifications

|                                     |                           |
|-------------------------------------|---------------------------|
| Outer Contact Attachment Method     | Ring-flare                |
| Inner Contact Attachment Method     | Captivated                |
| Outer Contact Plating               | Trimetal                  |
| Inner Contact Plating               | Silver                    |
| Attachment Durability               | 25 cycles                 |
| Interface Durability                | 500 cycles                |
| Interface Durability Method         | IEC 61169-4:17            |
| Connector Retention Tensile Force   | 670 N   151 lbf           |
| Connector Retention Torque          | 2.70 N-m   1.99 ft lb     |
| Insertion Force                     | 200.00 N   44.96 lbf      |
| Insertion Force Method              | IEC 61169-1:15.2.4        |
| Pressurizable                       | No                        |
| Coupling Nut Proof Torque           | 35.00 N-m   25.81 ft lb   |
| Coupling Nut Retention Force        | 1000.00 N   224.81 lbf    |
| Coupling Nut Retention Force Method | MIL-C-39012C-3.25, 4.6.22 |

## Dimensions

|              |                    |
|--------------|--------------------|
| Nominal Size | 3/8 in             |
| Diameter     | 34.60 mm   1.36 in |
| Height       | 34.60 mm   1.36 in |
| Length       | 51.20 mm   2.02 in |
| Weight       | 102.12 g   0.23 lb |
| Width        | 34.60 mm   1.36 in |

## Environmental Specifications

L2TDM-PL

|                                 |                                       |
|---------------------------------|---------------------------------------|
| Operating Temperature           | -55 °C to +85 °C (-67 °F to +185 °F)  |
| Storage Temperature             | -65 °C to +125 °C (-85 °F to +257 °F) |
| Immersion Depth                 | 1 m                                   |
| Immersion Test Mating           | Mated                                 |
| Immersion Test Method           | IEC 60529:2001, IP68                  |
| Moisture Resistance Test Method | IEC 60068-2-3                         |
| Mechanical Shock Test Method    | IEC 60068-2-27                        |
| Thermal Shock Test Method       | IEC 60068-2-14                        |
| Vibration Test Method           | IEC 60068-2-6                         |
| Corrosion Test Method           | IEC 60068-2-11                        |

## Standard Conditions

|  |                 |
|--|-----------------|
| Attenuation, Ambient Temperature           | 20 °C   68 °F   |
| Average Power, Ambient Temperature         | 40 °C   104 °F  |
| Average Power, Inner Conductor Temperature | 100 °C   212 °F |

## Return Loss/VSWR

| Frequency Band | VSWR | Return Loss (dB) |
|----------------|------|------------------|
| 0–960 MHz      | 1.03 | 37.60            |
| 960–2200 MHz   | 1.06 | 31.00            |
| 2200–2700 MHz  | 1.07 | 30.00            |
| 2700–4000 MHz  | 1.08 | 28.00            |
| 4000–6000 MHz  | 1.09 | 27.50            |
| 6000–8000 MHz  | 1.09 | 27.50            |
| 8000–10000 MHz | 1.35 | 16.50            |

## Regulatory Compliance/Certifications

| Agency                     | Classification   |
|----------------------------|--|
| RoHS 2011/65/EU            | Compliant by Exemption   |
| China RoHS SJ/T 11364-2006 | Above Maximum Concentration Value (MCV)  |
| ISO 9001:2008              | Designed, manufactured and/or distributed under this quality management system |



## \* Footnotes

|                         |   |
|-------------------------|---|
| Immersion Depth         | Immersion at specified depth for 24 hours                               |
| Insertion Loss, typical | 0.05v <sup>-</sup> freq (GHz) (not applicable for elliptical waveguide) |