

Type N Male Right Angle for 1/2 in LDF4-50A cable

OBSOLETE This product was discontinued on: May 18, 2019

#### Product Classification

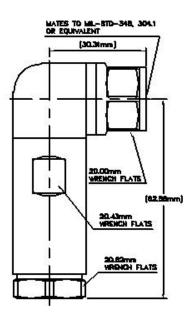
| Product Type                    | Wireless and radiating connector |
|---------------------------------|----------------------------------|
| Product Brand                   | HELIAX®                          |
| General Specifications          |                                  |
| Body Style                      | Right angle                      |
| Cable Family                    | LDF4-50A                         |
| Inner Contact Attachment Method | Captivated                       |
| Inner Contact Plating           | Gold                             |
| Interface                       | N Male                           |
| Mounting Angle                  | Right angle                      |
| Outer Contact Attachment Method | Ring-flare                       |
| Outer Contact Plating           | Trimetal                         |
| Pressurizable                   | No                               |
| Dimensions                      |                                  |
| Width                           | 22.86 mm   0.9 in                |
| Length                          | 73.66 mm   2.9 in                |
| Right Angle Length              | 41.66 mm   1.64 in               |
| Diameter                        | 22.86 mm   0.9 in                |
| Nominal Size                    | 1/2 in                           |

Page 1 of 4

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## Outline Drawing



### **Electrical Specifications**

| Insertion Loss Coefficient, typical  | 0.05             |
|--------------------------------------|------------------|
| Average Power at Frequency           | 0.6 kW @ 900 MHz |
| Cable Impedance                      | 50 ohm           |
| Connector Impedance                  | 50 ohm           |
| dc Test Voltage                      | 2000 V           |
| Inner Contact Resistance, maximum    | 2 mOhm           |
| Insulation Resistance, minimum       | 5000 MOhm        |
| Operating Frequency Band             | 0 – 8800 MHz     |
| Outer Contact Resistance, maximum    | 0.3 m0hm         |
| Peak Power, maximum                  | 10 kW            |
| RF Operating Voltage, maximum (vrms) | 707 V            |
| Shielding Effectiveness              | -130 dB          |

### VSWR/Return Loss

| Frequency Band | VSWR  | Return Loss (dB) |
|----------------|-------|------------------|
| 0–1000 MHz     | 1.065 | 30.04            |
| 1000–2170 MHz  | 1.119 | 25.01            |

Page 2 of 4

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## 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 Proof Torque           | 4.52 N-m   39.997 in lb                   |
| Coupling Nut Retention Force        | 444.82 N   100 lbf                        |
| Coupling Nut Retention Force Method | MIL-C-39012C-3.25, 4.6.22                 |
| Insertion Force                     | 66.72 N   15 lbf                          |
| Insertion Force Method              | MIL-C-39012C-3.12, 4.6.9                  |
| Interface Durability                | 500 cycles                                |
| Interface Durability Method         | IEC 61169-16:9.5                          |
| Mechanical Shock Test Method        | MIL-STD-202, Method 213, Test Condition I |

#### **Environmental Specifications**

| Operating Temperature              | -55 °C to +85 °C (-67 °F to +185 °F)                                  |
|------------------------------------|---|
| Storage Temperature                | -55 °C to +85 °C (-67 °F to +185 °F)                                  |
| Attenuation, Ambient Temperature   | 20 °C   68 °F   |
| Average Power, Ambient Temperature | 40 °C   104 °F  |
| Corrosion Test Method              | MIL-STD-1344A, Method 1001.1, Test Condition A                        |
| Immersion Depth                    | 1 m   |
| Immersion Test Mating              | Mated   |
| Immersion Test Method              | IEC 60529:2001, IP68  |
| Moisture Resistance Test Method    | MIL-STD-202F, Method 106F   |
| Thermal Shock Test Method          | MIL-STD-202F, Method 107G, Test Condition A-1, Low Temperature -55 °C |
| Vibration Test Method              | IEC 60068-2-6   |
| Water Jetting Test Mating          | Mated   |
| Water Jetting Test Method          | IEC 60529:2001, IP66  |
| Dackaging and Moights              |   |

#### Packaging and Weights

Weight, net

204.49 g | 0.451 lb

### \* Footnotes

Page 3 of 4

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

**Immersion Depth** 

Immersion at specified depth for 24 hours

Page 4 of 4

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