I 47R



1-5/8 in EIA Flange for 1-5/8 in LDF7-50A cable

• This product is exclusively available through distribution partners

OBSOLETE

This product was discontinued on: February 9, 2009

Product Classification

Product TypeWireless and radiating connector

Product Brand HELIAX®

General Specifications

Body StyleStraightCable FamilyLDF7-50AInner Contact Attachment MethodTab-flareInner Contact PlatingUnplated

Interface 1-5/8 in EIA Flange

Mounting AngleStraightOuter Contact Attachment MethodSelf-flareOuter Contact PlatingUnplatedPressurizableNo

Dimensions

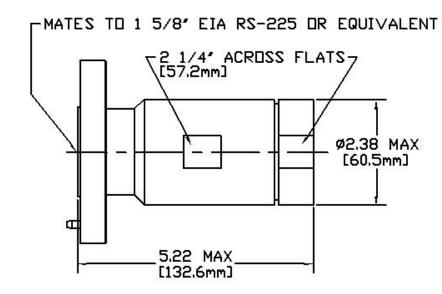
 Length
 129.54 mm | 5.1 in

 Diameter
 88.9 mm | 3.5 in

Nominal Size 1-5/8 in

Outline Drawing





Electrical Specifications

Insertion Loss Coefficient, typical 0.05

Average Power at Frequency 2.3 kW @ 900 MHz

Cable Impedance50 ohmConnector Impedance50 ohmdc Test Voltage6000 VInner Contact Resistance, maximum1.5 mOhm

Insulation Resistance, minimum 5000 MOhm

Operating Frequency Band 0 - 2500 MHz

Outer Contact Resistance, maximum 1.5 mOhm

Peak Power, maximum 90 kW

RF Operating Voltage, maximum (vrms) 2120 V

Shielding Effectiveness -110 dB

VSWR/Return Loss

Frequency Band VSWR Return Loss (dB)

45–2500 MHz 1.119 25.01

Mechanical Specifications

Attachment Durability 25 cycles

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L47R

Connector Retention Tensile Force 2,224.11 N | 500 lbf

Connector Retention Torque 13.56 N-m | 119.998 in lb

Interface Durability 50 cycles

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 $20 \, ^{\circ}\text{C} \mid 68 \, ^{\circ}\text{F}$ Average Power, Ambient Temperature $40 \, ^{\circ}\text{C} \mid 104 \, ^{\circ}\text{F}$

Corrosion Test Method MIL-STD-1344A, Method 1001.1, Test Condition A

Immersion Depth1 mImmersion Test MatingMated

Immersion Test Method IEC 60529:2001, IP68

Moisture Resistance Test Method MIL-STD-202, Method 106

Thermal Shock Test Method MIL-STD-202F, Method 107G, Test Condition A-1, Low Temperature -55 °C

Vibration Test Method MIL-STD-202, Method 204, Test Condition B

Water Jetting Test Mating Mated

Water Jetting Test Method IEC 60529:2001, IP66

Packaging and Weights

Weight, net 1,555.85 g | 3.43 lb

* Footnotes

Insertion Loss Coefficient, typical 0.05√ freq (GHz) (not applicable for elliptical waveguide)

Immersion Depth Immersion at specified depth for 24 hours

