

L7PDF-RPC

7-16 DIN Female OnePiece™ for 1-5/8 in LDF7-50A cable

OBSOLETE

Replaced By:

AL7DF-PS	7-16 DIN Female Positive Stop™ for 1-5/8 in cable
AL7DF-PSA	7-16 DIN Female Positive Stop™ for 1-5/8 in cable

Product Classification

Product Type	Wireless and radiating connector
Product Brand	HELIAX® OnePiece™

General Specifications

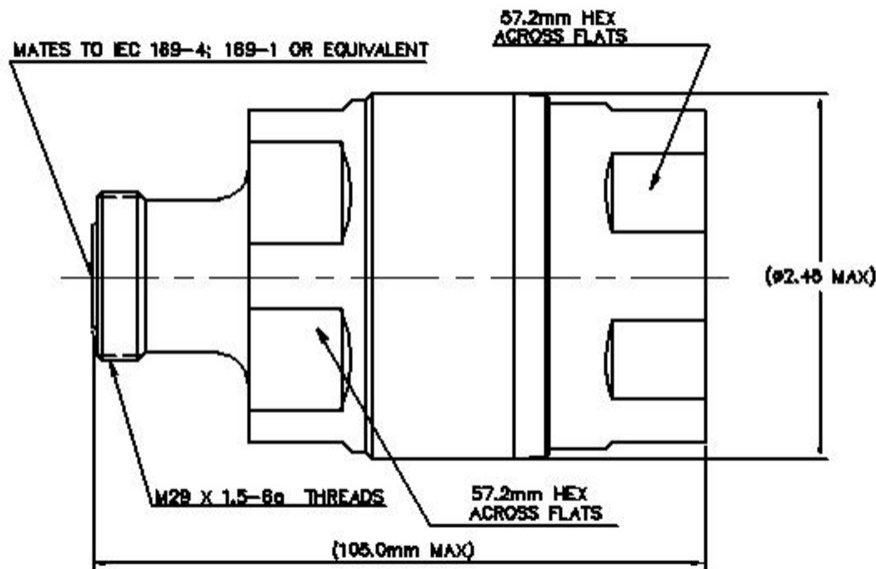
Body Style	Straight
Cable Family	LDF7-50A
Inner Contact Attachment Method	Captivated
Inner Contact Plating	Silver
Interface	7-16 DIN Female
Mounting Angle	Straight
Outer Contact Attachment Method	Ball clamp
Outer Contact Plating	Trimetal
Pressurizable	No

Dimensions

Length	103.89 mm 4.09 in
Diameter	61.98 mm 2.44 in
Nominal Size	1-5/8 in

Outline Drawing

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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	3.0 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 – 2500 MHz
Outer Contact Resistance, maximum	1.5 mOhm
Peak Power, maximum	40 kW
RF Operating Voltage, maximum (vrms)	1415 V
Shielding Effectiveness	-130 dB

VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
40–1000 MHz	1.029	36.9

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1010–2200 MHz	1.032	36.06
2200–2500 MHz	1.058	31

Mechanical Specifications

Attachment Durability	25 cycles
Connector Retention Tensile Force	2,224.11 N 500 lbf
Connector Retention Torque	13.56 N-m 119.998 in lb
Insertion Force	200.17 N 45 lbf
Insertion Force Method	IEC 61169-1:15.2.4
Interface Durability	50 cycles
Interface Durability Method	IEC 61169-16:9.5
Mechanical Shock Test Method	MIL-STD-202F, Method 213B, Test Condition C

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	Unmated
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	Unmated
Water Jetting Test Method	IEC 60529:2001, IP66

Packaging and Weights

Weight, net	680.4 g 1.5 lb
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* Footnotes

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

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Immersion Depth

Immersion at specified depth for 24 hours