

L4E78-PS



7/8 in EIA Flange Positive Stop™ for 1/2 in LDF4-50A cable

Product Classification

Product Type	Wireless and radiating connector
Product Brand	HELIAX®
Product Series	LDF4-50A

General Specifications

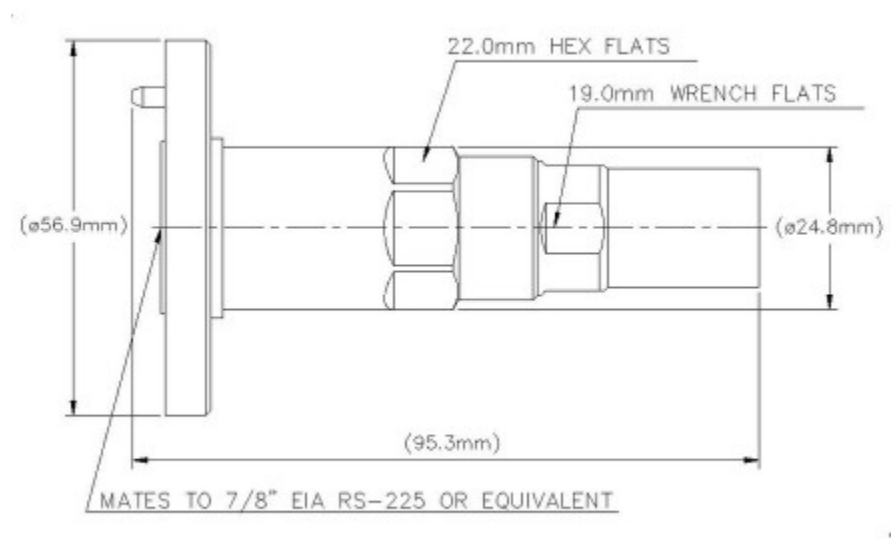
Body Style	Straight
Cable Family	LDF4-50A
Inner Contact Attachment Method	Captivated
Inner Contact Plating	Silver
Interface	7/8 in EIA Flange
Mounting Angle	Straight
Outer Contact Attachment Method	Ring-flare
Outer Contact Plating	Trimetal
Pressurizable	No

Dimensions

Length	90.42 mm 3.56 in
Diameter	56.9 mm 2.24 in
Nominal Size	1/2 in

Outline Drawing

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Electrical Specifications

Insertion Loss Coefficient, typical	0.05
Average Power at Frequency	2.3 kW @ 900 MHz
Cable Impedance	50 ohm
dc Test Voltage	6000 V
Inner Contact Resistance, maximum	1.5 mOhm
Insulation Resistance, minimum	5000 MOhm
Operating Frequency Band	0 – 5200 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)
45–1000 MHz	1.052	31.92
1010–2200 MHz	1.106	25.96
2210–3000 MHz	1.135	23.98
3010–4000 MHz	1.152	23.02

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4010–5000 MHz	1.173	21.98
5010–7000 MHz	1.222	20.01
7010–8000 MHz	1.33	17
8010–8800 MHz	1.79	11

Mechanical Specifications

Attachment Durability	25 cycles
Connector Retention Tensile Force	889.64 N 200 lbf
Connector Retention Torque	8.14 N-m 72.001 in lb
Coupling Nut Proof Torque	24.86 N-m 220.003 in lb
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-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	227.52 g 0.502 lb
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Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
ROHS	Compliant

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UK-ROHS

Compliant



* Footnotes

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

Immersion Depth Immersion at specified depth for 24 hours