

# AL7E78-PS

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7/8 in EIA Flange Positive Stop™ for 1-5/8 in AVA7-50, AL7-50 and LDF7-50A coaxial cable

## Product Classification

<b>Brand</b>	HELIAX®
<b>Product Type</b>	Wireless and radiating connector

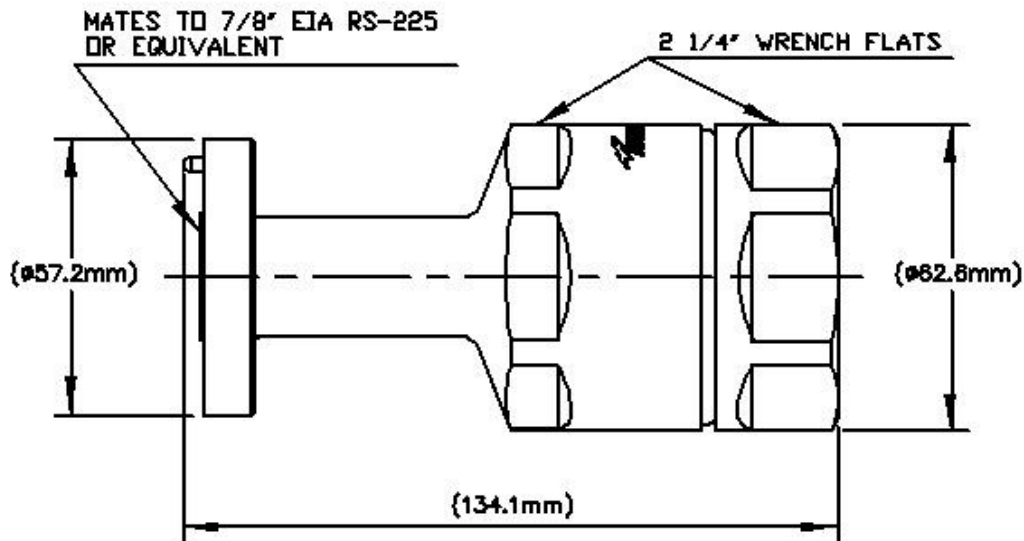
## General Specifications

<b>Interface</b>	7/8 in EIA Flange
<b>Body Style</b>	Straight
<b>Mounting Angle</b>	Straight

## Electrical Specifications

<b>Connector Impedance</b>	50 ohm
<b>Operating Frequency Band</b>	0 – 2500 MHz
<b>Cable Impedance</b>	50 ohm
<b>3rd Order IMD, typical</b>	-120 dBm @ 1800 MHz
<b>3rd Order IMD Test Method</b>	Two +43 dBm carriers
<b>RF Operating Voltage, maximum (vrms)</b>	2120.00 V
<b>dc Test Voltage</b>	6000 V
<b>Outer Contact Resistance, maximum</b>	1.50 mOhm
<b>Inner Contact Resistance, maximum</b>	1.50 mOhm
<b>Insulation Resistance, minimum</b>	5000 MOhm
<b>Average Power</b>	2.3 kW @ 900 MHz
<b>Peak Power, maximum</b>	90.00 kW
<b>Insertion Loss, typical</b>	0.05 dB
<b>Shielding Effectiveness</b>	-130 dB

## Outline Drawing



## Mechanical Specifications

<b>Outer Contact Attachment Method</b>	Ring-flare
<b>Inner Contact Attachment Method</b>	Captivated
<b>Outer Contact Plating</b>	Trimetal
<b>Inner Contact Plating</b>	Silver
<b>Attachment Durability</b>	25 cycles
<b>Interface Durability</b>	50 cycles
<b>Connector Retention Tensile Force</b>	2224 N   500 lbf
<b>Connector Retention Torque</b>	13.56 N-m   120.00 in lb
<b>Pressurizable</b>	No

## Dimensions

<b>Nominal Size</b>	1-5/8 in
<b>Diameter</b>	62.64 mm   2.47 in
<b>Length</b>	134.12 mm   5.28 in
<b>Weight</b>	1097.40 g   2.42 lb

## Environmental Specifications

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<b>Operating Temperature</b>	-55 °C to +85 °C (-67 °F to +185 °F)
<b>Storage Temperature</b>	-55 °C to +85 °C (-67 °F to +185 °F)
<b>Immersion Depth</b>	1 m
<b>Immersion Test Mating</b>	Mated
<b>Immersion Test Method</b>	IEC 60529:2001, IP68
<b>Water Jetting Test Mating</b>	Mated
<b>Water Jetting Test Method</b>	IEC 60529:2001, IP66
<b>Moisture Resistance Test Method</b>	MIL-STD-202, Method 106
<b>Mechanical Shock Test Method</b>	MIL-STD-202, Method 213, Test Condition I
<b>Thermal Shock Test Method</b>	MIL-STD-202F, Method 107G, Test Condition A-1, Low Temperature -55 °C
<b>Vibration Test Method</b>	MIL-STD-202, Method 204, Test Condition B
<b>Corrosion Test Method</b>	MIL-STD-1344A, Method 1001.1, Test Condition A

## Standard Conditions

<b>Attenuation, Ambient Temperature</b>	20 °C   68 °F
<b>Average Power, Ambient Temperature</b>	40 °C   104 °F

## Return Loss/VSWR

<b>Frequency Band</b>	<b>VSWR</b>	<b>Return Loss (dB)</b>
45–1000 MHz	1.04	35.00
1010–2200 MHz	1.04	35.00
2210–2500 MHz	1.07	30.00

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
RoHS 2011/65/EU	Compliant by Exemption
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
China RoHS SJ/T 11364-2014	Above Maximum Concentration Value (MCV)



## \* Footnotes

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