# AL5E78-PS



## 7/8 in EIA Positive Stop™ for 7/8 in AVA5-50 and AL5-50 cable

## **Product Classification**

BrandHELIAX® | Positive Stop™Product TypeWireless and radiating connector

# General Specifications

**Interface** 7/8 in EIA Flange

Body StyleStraightMounting AngleStraight

## **Electrical Specifications**

Connector Impedance 50 ohm

Operating Frequency Band 0 – 5000 MHz
Cable Impedance 50 ohm

3rd Order IMD, typical -116 dBm @ 910 MHz
3rd Order IMD Test Method Two +43 dBm carriers

RF Operating Voltage, maximum (vrms) 2120.00 V dc Test Voltage 6000 V

Outer Contact Resistance, maximum 1.50 mOhm
Inner Contact Resistance, maximum 1.50 mOhm
Insulation Resistance, minimum 5000 MOhm

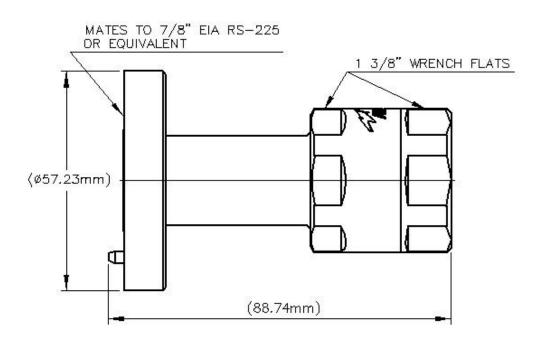
Average Power 2.3 kW @ 900 MHz

Peak Power, maximum90.00 kWInsertion Loss, typical0.05 dBShielding Effectiveness-130 dB

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# Outline Drawing



# Mechanical Specifications

Outer Contact Attachment Method Ring-flare
Inner Contact Attachment Method Captivated
Outer Contact Plating Trimetal
Inner Contact Plating Silver
Attachment Durability 25 cycles
Interface Durability 50 cycles

Connector Retention Tensile Force1335 N | 300 lbfConnector Retention Torque8.10 N-m | 71.69 in lbInsertion Force66.72 N | 15.00 lbfInsertion Force MethodIEC 61169-1:15.2.4

**Pressurizable** No

Coupling Nut Proof Torque 24.86 N-m | 220.00 in lb

### **Dimensions**

Nominal Size 7/8 in

 Diameter
 57.23 mm | 2.25 in

 Length
 88.74 mm | 3.49 in

 Weight
 340.21 g | 0.75 lb

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# AL5E78-PS

## **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)

Immersion Depth1 mImmersion Test MatingUnmated

Immersion Test Method IEC 60529:2001, IP68

Water Jetting Test Mating Unmated

Water Jetting Test Method IEC 60529:2001, IP66

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

Mechanical Shock Test Method MIL-STD-202, Method 213, Test Condition I

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

Vibration Test MethodMIL-STD-202F, Method 204D, Test Condition BCorrosion Test MethodMIL-STD-1344A, Method 1001.1, Test Condition A

#### Standard Conditions

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

#### Return Loss/VSWR

Frequency Band	VSWR	Return Loss (dB)
50-1000 MHz	1.04	35.00
1700-2200 MHz	1.04	35.00
2400–2700 MHz	1.07	30.00
3400-3600 MHz	1.12	25.00

## Regulatory Compliance/Certifications

#### Agency Classification

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

**Immersion Depth** Immersion at specified depth for 24 hours

**Insertion Loss, typical** 0.05v-freq (GHz) (not applicable for elliptical waveguide)

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