

AL5E78-PS



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

Product Classification

Product Type	Wireless and radiating connector
Product Brand	HELIAX® Positive Stop™
Product Series	AVA5-50 AVA5RK-50

General Specifications

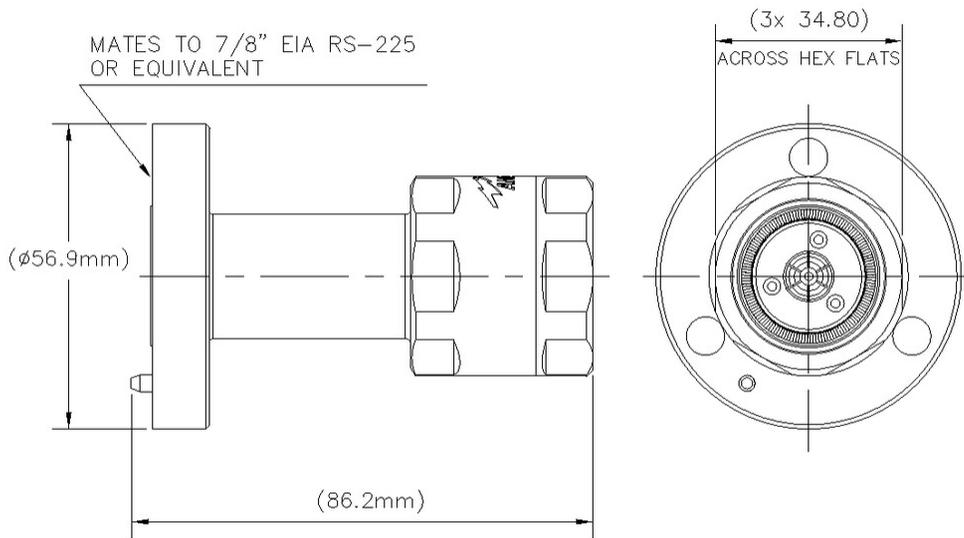
Body Style	Straight
Cable Family	AL5-50 AVA5-50
Inner Contact Attachment Method	Captivated
Inner Contact Plating	Silver
Interface	7/8 in EIA Flange
Mounting Angle	Straight
Outer Contact Attachment Method	Ring-flare
Outer Contact Plating	Trimetal
Pressurizable	No

Dimensions

Length	88.65 mm 3.49 in
Diameter	57.15 mm 2.25 in
Nominal Size	7/8 in

Outline Drawing

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Electrical Specifications

3rd Order IMD at Frequency	-116 dBm @ 910 MHz
3rd Order IMD Test Method	Two +43 dBm carriers
Insertion Loss Coefficient, typical	0.05
Average Power at Frequency	2.3 kW @ 900 MHz
Cable Impedance	50 ohm
Connector Impedance	50 ohm
dc Test Voltage	6000 V
Inner Contact Resistance, maximum	1.5 mOhm
Insulation Resistance, minimum	5000 MOhm
Operating Frequency Band	0 – 5000 MHz
Outer Contact Resistance, maximum	1.5 mOhm
Peak Power, maximum	90 kW
RF Operating Voltage, maximum (vrms)	2120 V
Shielding Effectiveness	-130 dB

VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
50–1000 MHz	1.036	35.05

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1700–2200 MHz	1.036	35.05
2400–2700 MHz	1.065	30.04
3400–3600 MHz	1.119	25.01

Mechanical Specifications

Attachment Durability	25 cycles
Connector Retention Tensile Force	1,334.47 N 300 lbf
Connector Retention Torque	8.1 N-m 71.691 in lb
Coupling Nut Proof Torque	24.86 N-m 220.003 in lb
Insertion Force	66.72 N 15 lbf
Insertion Force Method	IEC 61169-1:15.2.4
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 °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	MIL-STD-202F, Method 204D, Test Condition B
Water Jetting Test Mating	Unmated
Water Jetting Test Method	IEC 60529:2001, IP66

Packaging and Weights

Weight, net	340.21 g 0.75 lb
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Regulatory Compliance/Certifications

Agency	Classification
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CHINA-ROHS	Above maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
ROHS	Compliant/Exempted
UK-ROHS	Compliant/Exempted



* Footnotes

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

Immersion Depth Immersion at specified depth for 24 hours