

AL5DM-PS



7-16 DIN Male Positive Stop™ for 7/8 in AL5-50 and AVA5-50 cable

OBSOLETE

This product was discontinued on: May 2, 2012

Product Classification

Product Type	Wireless and radiating connector
Product Brand	HELIAX® Positive Stop™

General Specifications

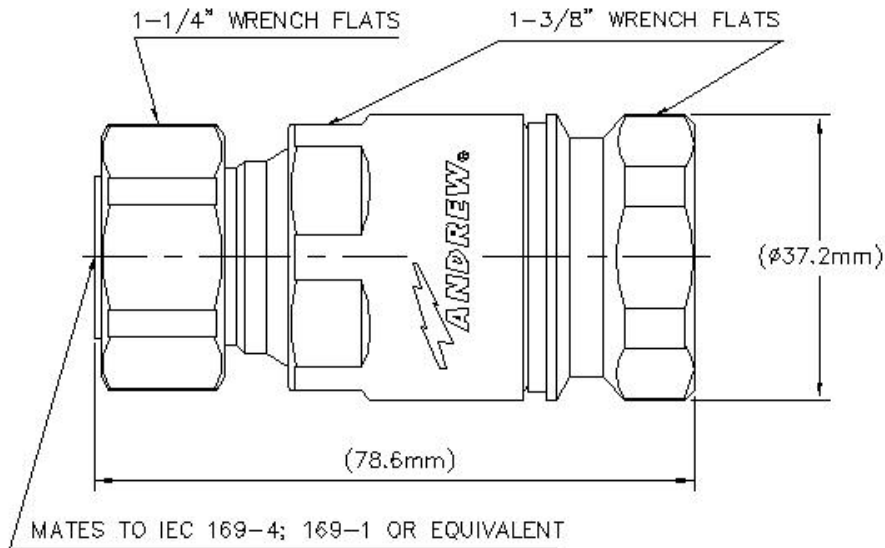
Body Style	Straight
Cable Family	AL5-50 AVA5-50
Inner Contact Attachment Method	Captivated
Inner Contact Plating	Silver
Interface	7-16 DIN Male
Mounting Angle	Straight
Outer Contact Attachment Method	Ring-flare
Outer Contact Plating	Trimetal
Pressurizable	No

Dimensions

Length	78.49 mm 3.09 in
Diameter	37.34 mm 1.47 in
Nominal Size	7/8 in

Outline Drawing

AL5DM-PS



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	0.4 mOhm
Insulation Resistance, minimum	5000 MOhm
Operating Frequency Band	0 – 5200 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)
45–1000 MHz	1.023	38.89

AL5DM-PS

1010–2200 MHz	1.027	37.51
2210–3000 MHz	1.034	35.54
3010–5200 MHz	1.083	27.99

Mechanical Specifications

Attachment Durability	25 cycles
Connector Retention Tensile Force	1,334.47 N 300 lbf
Connector Retention Torque	8.14 N-m 72.001 in lb
Coupling Nut Proof Torque	24.86 N-m 220.003 in lb
Coupling Nut Retention Force	1,000.85 N 225 lbf
Coupling Nut Retention Force Method	MIL-C-39012C-3.25, 4.6.22
Insertion Force	200.17 N 45 lbf
Insertion Force Method	IEC 61169-1:15.2.4
Interface Durability	500 cycles
Interface Durability Method	IEC 61169-4:9.5
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

AL5DM-PS

Weight, net

259 g | 0.571 lb

Regulatory Compliance/Certifications

Agency

ISO 9001:2015

Classification

Designed, manufactured and/or distributed under this quality management system



* Footnotes

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

Immersion Depth Immersion at specified depth for 24 hours