

AL6DM-PSA



7-16 DIN Male Positive Stop™ for 1-1/4 in AVA6-50 cable

Product Classification

Product Type	Wireless and radiating connector
Product Brand	HELIAX® Positive Stop™
Product Series	AVA6-50 AVA6RK-50
Ordering Note	CommScope® standard product in Europe, the Middle East, and Africa CommScope® standard product in the United States and Canada

General Specifications

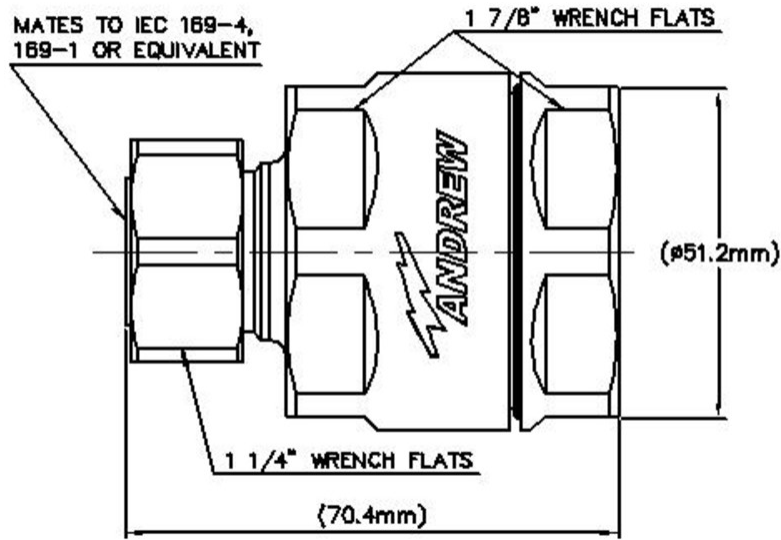
Body Style	Straight
Cable Family	AVA6-50
Inner Contact Attachment Method	Captivated
Inner Contact Plating	Silver
Interface	7-16 DIN Male
Mounting Angle	Straight
Outer Contact Attachment Method	Ring-flare
Outer Contact Plating	Trimetal
Pressurizable	No

Dimensions

Length	70.36 mm 2.77 in
Diameter	51.31 mm 2.02 in
Nominal Size	1-1/4 in

Outline Drawing

AL6DM-PSA



Electrical Specifications

3rd Order IMD at Frequency	-116 dBm @ 1800 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	0.8 mOhm
Insulation Resistance, minimum	5000 MOhm
Operating Frequency Band	0 – 4000 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)
50–1000 MHz	1.036	35.05

AL6DM-PSA

1010–2200 MHz	1.052	31.92
2210–2700 MHz	1.07	29.42
2710–3300 MHz	1.106	25.96

Mechanical Specifications

Attachment Durability	25 cycles
Connector Retention Tensile Force	1,779.29 N 400 lbf
Connector Retention Torque	10.85 N-m 96.004 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 61169-16:9.5
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	MIL-STD-202F, Method 204D, Test Condition B
Water Jetting Test Mating	Unmated
Water Jetting Test Method	IEC 60529:2001, IP66

Packaging and Weights

AL6DM-PSA

Weight, net

405 g | 0.893 lb

Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on www.commscope.com/ProductCompliance
ROHS	Compliant
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