

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

Product Classification

Product TypeWireless and radiating connector

Product Brand HELIAX® | Positive Stop™

Product Series AVA6-50 | AVA6RK-50

Ordering Note ANDREW® standard product in Europe, the Middle East, and Africa | ANDREW®

standard product in the United States and Canada

General Specifications

Body StyleStraightCable FamilyAVA6-50Inner Contact Attachment MethodCaptivated

Inner Contact Plating Silver

Interface 7-16 DIN Male

Mounting AngleStraightOuter Contact Attachment MethodRing-flareOuter Contact PlatingTrimetalPressurizableNo

Dimensions

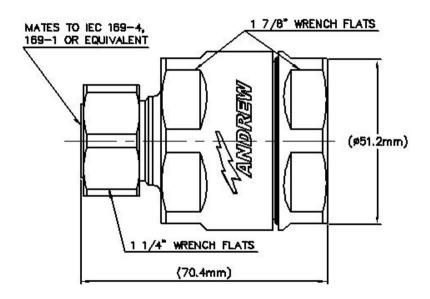
 Length
 70.36 mm | 2.77 in

 Diameter
 51.31 mm | 2.02 in

Nominal Size 1-1/4 in

Outline Drawing





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 m0hm Insulation Resistance, minimum 5000 MOhm **Operating Frequency Band** 0 - 4000 MHz **Outer Contact Resistance, maximum** 1.5 m0hm Peak Power, maximum 40 kW RF Operating Voltage, maximum (vrms) 1415 V

VSWR/Return Loss

Shielding Effectiveness

Frequency Band VSWR Return Loss (dB)

50–1000 MHz 1.036 35.05



-130 dB

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 Force1,779.29 N | 400 lbfConnector Retention Torque10.85 N-m | 96.004 in lbCoupling Nut Proof Torque24.86 N-m | 220.003 in lbCoupling Nut Retention Force1,000.85 N | 225 lbf

Coupling Nut Retention Force Method MIL-C-39012C-3.25, 4.6.22

Insertion Force200.17 N | 45 lbfInsertion Force MethodIEC 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 $20 \, ^{\circ}\text{C} \mid 68 \, ^{\circ}\text{F}$ Average Power, Ambient Temperature $40 \, ^{\circ}\text{C} \mid 104 \, ^{\circ}\text{F}$

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.andrew.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

