## AL6DF-PSA



### 7-16 DIN Female 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 ANDREW® standard product in Europe, the Middle East, and Africa

General Specifications

Body Style Straight

Cable Family AVA6-50

Inner Contact Attachment Method Captivated

Inner Contact Plating Silver

**Interface** 7-16 DIN Female

Mounting Angle Straight

Outer Contact Attachment Method Ring-flare

Outer Contact Plating Trimetal

**Pressurizable** No

**Dimensions** 

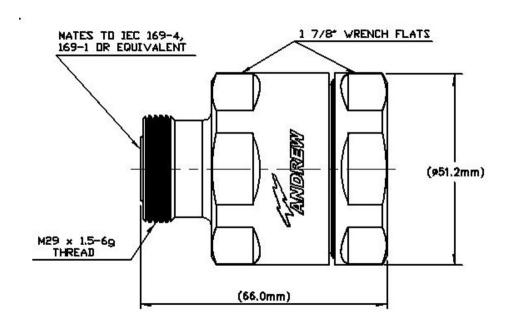
**Length** 66.04 mm | 2.6 in

**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 Impedance50 ohmConnector Impedance50 ohmdc Test Voltage4000 VInner Contact Resistance, maximum0.8 mOhmInsulation Resistance, minimum5000 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)

**45–1000 MHz** 1.036 35.05

ANDREW® an Amphenol company

# AL6DF-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 lb

Insertion Force200.17 N | 45 lbfInsertion Force MethodIEC 61169-1:15.2.4

**Interface Durability** 50 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

**Weight, net** 362 g | 0.798 lb

Regulatory Compliance/Certifications

Agency Classification



# AL6DF-PSA

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

