Product Specifications





AL5DM-PSA

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

General Specifications

Interface 7-16 DIN Male

Body Style Straight

Brand HELIAX® | Positive Stop™

Mounting Angle Straight

Electrical Specifications

Connector Impedance 50 ohm
Operating Frequency Band 0 - 5200 MHz

Cable Impedance 50 ohm

3rd Order IMD, typical -120 dBm @ 910 MHz 3rd Order IMD Test Method Two +43 dBm carriers

RF Operating Voltage, maximum (vrms) 1415.00 V dc Test Voltage 4000 V
Outer Contact Resistance, maximum 1.50 mOhm
Inner Contact Resistance, maximum 0.40 mOhm
Insulation Resistance, minimum 5000 MOhm

Average Power 3.0 kW @ 900 MHz

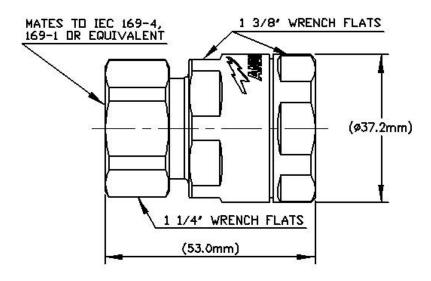
Peak Power, maximum 40.00 kW Insertion Loss, typical 0.05 dB Shielding Effectiveness -130 dB

Product Specifications



AL5DM-PSA

Outline Drawing



Mechanical Specifications

Outer Contact Attachment Method Ring-flare Captivated Inner Contact Attachment Method **Outer Contact Plating** Trimetal Inner Contact Plating Silver Attachment Durability 25 cycles Interface Durability 500 cycles Interface Durability Method IEC 61169-4:9.5 1334 N | 300 lbf Connector Retention Tensile Force Connector Retention Torque 8.13 N-m | 72.00 in lb 200.17 N | 45.00 lbf Insertion Force

Pressurizable No

Coupling Nut Proof Torque 24.86 N-m | 220.00 in lb Coupling Nut Retention Force 1000.85 N | 225.00 lbf Coupling Nut Retention Force Method MIL-C-39012C-3.25, 4.6.22

Dimensions

Insertion Force Method

Nominal Size 7/8 in

 Diameter
 37.20 mm | 1.46 in

 Length
 52.95 mm | 2.08 in

 Weight
 198.00 g | 0.44 lb

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)

IEC 61169-1:15.2.4

Product Specifications



AL5DM-PSA

Immersion Depth 1 m

Immersion Test Mating Unmated

IEC 60529:2001, IP68 Immersion Test Method

Water Jetting Test Mating Unmated

Water Jetting Test Method IEC 60529:2001, IP66 Moisture Resistance Test Method MIL-STD-202F, Method 106F

Mechanical Shock Test Method MIL-STD-202F, Method 213B, Test Condition C

Thermal Shock Test Method MIL-STD-202F, Method 107G, Test Condition A-1, Low Temperature -55 °C

Vibration Test Method IEC 60068-2-6

Corrosion Test Method MIL-STD-1344A, Method 1001.1, Test Condition A

Standard Conditions

Attenuation, Ambient Temperature 20 °C | 68 °F Average Power, Ambient Temperature 40 °C | 104 °F

Return Loss/VSWR

Frequency Band	VSWR	Return Loss (dB)	
45-1000 MHz	1.02	39.00	
1010-2200 MHz	1.03	37.50	
2210-3000 MHz	1.03	35.60	
3010-5200 MHz	1.08	28.00	

Regulatory Compliance/Certifications

Agency

RoHS 2011/65/EU

China RoHS SJ/T 11364-2006

ISO 9001:2008

Classification

Compliant by Exemption

Above Maximum Concentration Value (MCV)

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





* Footnotes

Immersion Depth Immersion at specified depth for 24 hours

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