

# AL7DM-PSA



7-16 DIN Male Positive Stop™ for 1-5/8 in cable

**Replaced By:**

AL7DM-PSB      7-16 DIN Male Positive Stop™ Black Series for 1-5/8 in AVA7-50 cable

## Product Classification

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

## General Specifications

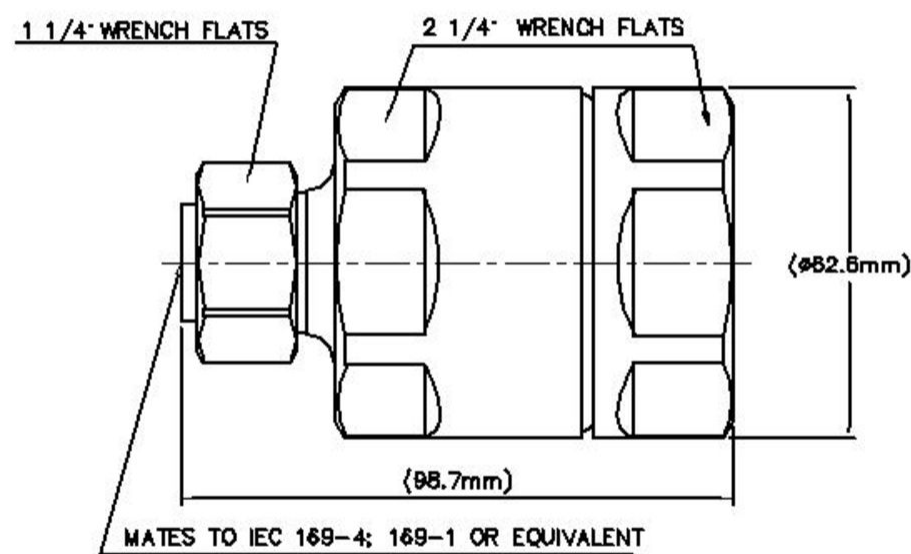
Body Style	Straight
Inner Contact Attachment Method	Captivated
Inner Contact Plating	Silver
Interface	7-16 DIN Male
Mounting Angle	Straight
Outer Contact Attachment Method	Ring-flare
Outer Contact Plating	Trimetal
Pressurizable	No

## Dimensions

Length	3.89 in   98.806 mm
Diameter	2.47 in   62.738 mm
Nominal Size	1-5/8 in

## Outline Drawing

# AL7DM-PSA



## Electrical Specifications

3rd Order IMD at Frequency	-120 dBm @ 910 MHz
3rd Order IMD Test Method	Two +43 dBm carriers
Insertion Loss, typical	0.05 dB
Attenuation, Ambient Temperature	20 °C   68 °F
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 – 2700 MHz

# AL7DM-PSA

---

<b>Outer Contact Resistance, maximum</b>	1.5 mOhm
<b>Peak Power, maximum</b>	40 kW
<b>RF Operating Voltage, maximum (vrms)</b>	1415 V
<b>Shielding Effectiveness</b>	-130 dB

## VSWR/Return Loss

<b>Frequency Band</b>	<b>VSWR</b>	<b>Return Loss (dB)</b>
<b>45–400 MHz</b>	1.03	39
<b>401–805 MHz</b>	1.03	39
<b>806–960 MHz</b>	1.03	39
<b>961–1709 MHz</b>	1.04	36
<b>1710–2170 MHz</b>	1.04	36
<b>2170–2399 MHz</b>	1.04	35
<b>2400–2700 MHz</b>	1.05	34

## Mechanical Specifications

<b>Attachment Durability</b>	25 cycles
<b>Connector Retention Tensile Force</b>	500 lbf   2,224.11 N
<b>Connector Retention Torque</b>	120 in lb   13.558 N-m
<b>Coupling Nut Proof Torque</b>	220 in lb   24.857 N-m
<b>Coupling Nut Retention Force</b>	225 lbf   1,000.85 N
<b>Coupling Nut Retention Force Method</b>	MIL-C-39012C-3.25, 4.6.22
<b>Insertion Force</b>	45 lbf   200.17 N
<b>Insertion Force Method</b>	IEC 61169-1:15.2.4
<b>Interface Durability</b>	500 cycles
<b>Interface Durability Method</b>	IEC 61169-4:9.5
<b>Mechanical Shock Test Method</b>	MIL-STD-202F, Method 213B, Test Condition C

## Environmental Specifications

<b>Operating Temperature</b>	-55 °C to +85 °C (-67 °F to +185 °F)
<b>Storage Temperature</b>	-55 °C to +85 °C (-67 °F to +185 °F)
<b>Average Power, Ambient Temperature</b>	40 °C   104 °F
<b>Corrosion Test Method</b>	MIL-STD-1344A, Method 1001.1, Test Condition A
<b>Immersion Depth</b>	1 m

# AL7DM-PSA

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

Weight, net	775 g   1.709 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 <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
ROHS	Compliant



## \* Footnotes

Immersion Depth	Immersion at specified depth for 24 hours
Insertion Loss, typical	0.05√freq (GHz) (not applicable for elliptical waveguide)