

# A7TDM-PS

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

**OBSOLETE**

This product was discontinued on: October 5, 2008

**Replaced By:**

AL7DM-PS	7-16 DIN Male Positive Stop™ for 1-5/8 in cable
AL7DM-PSA	7-16 DIN Male Positive Stop™ for 1-5/8 in cable

## Product Classification

<b>Product Type</b>	Wireless and radiating connector
<b>Product Brand</b>	HELIAX®   Positive Stop™

## General Specifications

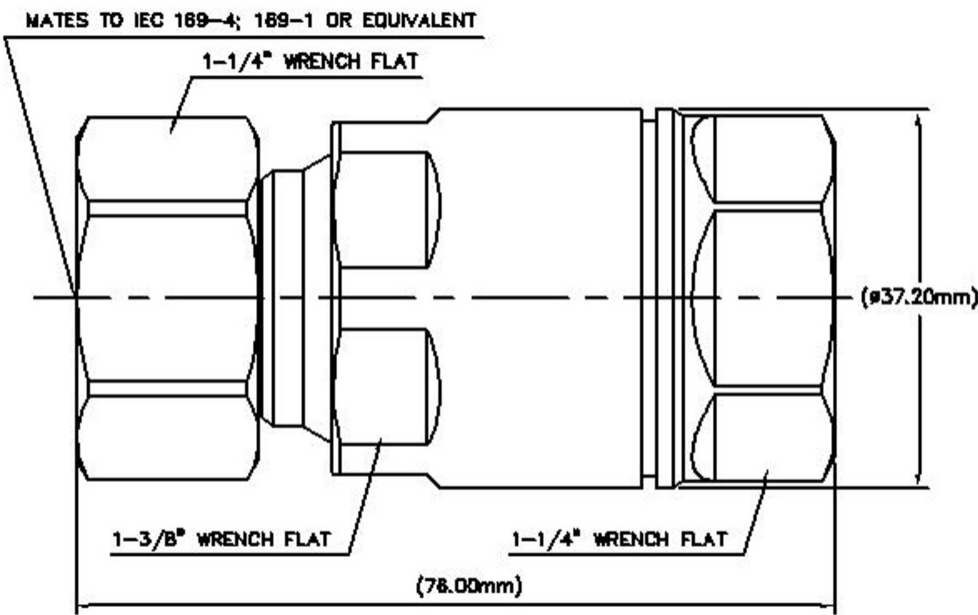
<b>Body Style</b>	Straight
<b>Cable Family</b>	AVA7-50
<b>Inner Contact Attachment Method</b>	Captivated
<b>Inner Contact Plating</b>	Silver
<b>Interface</b>	7-16 DIN Male
<b>Mounting Angle</b>	Straight
<b>Outer Contact Attachment Method</b>	Ring-flare
<b>Outer Contact Plating</b>	Trimetal
<b>Pressurizable</b>	No

## Dimensions

<b>Length</b>	98.04 mm   3.86 in
<b>Diameter</b>	62.74 mm   2.47 in
<b>Nominal Size</b>	1-5/8 in

## Outline Drawing

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## Electrical Specifications

3rd Order IMD at Frequency	-120 dBm @ 910 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 – 2500 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	1.022	39.27

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1010–2200 MHz	1.024	38.52
2210–2500 MHz	1.036	35.05

## Mechanical Specifications

Attachment Durability	25 cycles
Connector Retention Tensile Force	2,224.11 N   500 lbf
Connector Retention Torque	13.56 N-m   119.998 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 61169-4:9.5
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	IEC 60068-2-6
Water Jetting Test Mating	Unmated
Water Jetting Test Method	IEC 60529:2001, IP66

## Packaging and Weights

Weight, net	764 g   1.684 lb
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## Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system

### \* Footnotes

<b>Insertion Loss Coefficient, typical</b>	0.05√~freq (GHz) (not applicable for elliptical waveguide)
<b>Immersion Depth</b>	Immersion at specified depth for 24 hours