A7TNM-PS

Type N Male Positive Stop™ for 1-5/8 in AVA7-50 cable

OBSOLETE

This product was discontinued on: August 21, 2008

Replaced By:

AL7NM-PS	Type N Male Positive Stop™ for 1-5/8 in cable
AL7NM-PSA	Type N Male Positive Stop™ for 1-5/8 in cable
AL7NM-PSB	Type N Male Positive Stop™ Black Series for 1-5/8 in cable
RAL7NM-PS	Type N Male Positive Stop™ for 1-5/8 in RXL RADIAX® Radiating Cable

Product Classification

Product Type	Wireless and radiating connector
Product Brand	HELIAX® | Positive Stop™

General Specifications

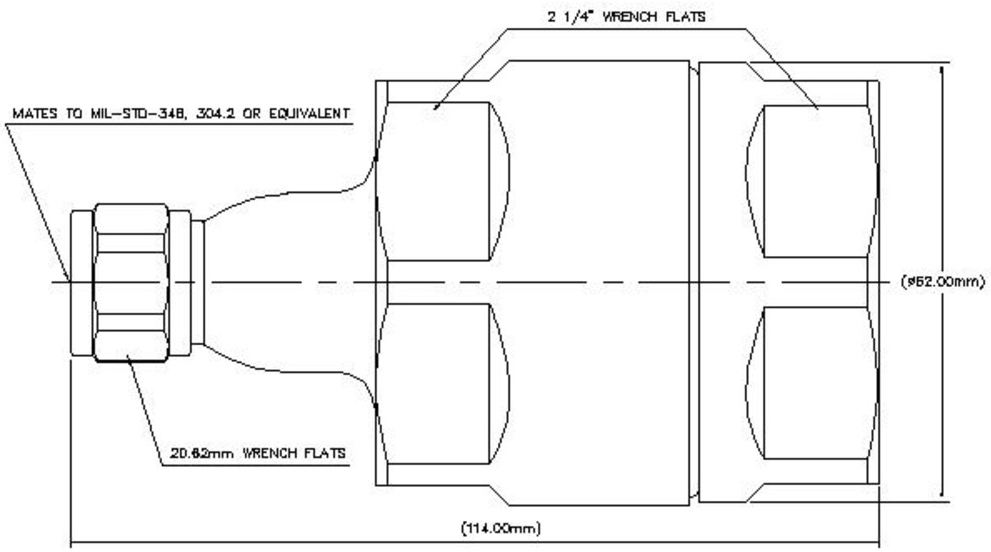
Body Style	Straight
Cable Family	AVA7-50
Inner Contact Attachment Method	Captivated
Inner Contact Plating	Silver
Interface	N Male
Mounting Angle	Straight
Outer Contact Attachment Method	Ring-flare
Outer Contact Plating	Trimetal
Pressurizable	No

Dimensions

A7TNM-PS

Length	114.05 mm | 4.49 in
Diameter	62.74 mm | 2.47 in
Nominal Size	1-5/8 in

Outline Drawing



Electrical Specifications

3rd Order IMD at Frequency	-116 dBm @ 910 MHz
3rd Order IMD Test Method	Two +43 dBm carriers
Insertion Loss Coefficient, typical	0.05
Average Power at Frequency	0.6 kW @ 900 MHz
Cable Impedance	50 ohm
Connector Impedance	50 ohm
dc Test Voltage	2000 V
Inner Contact Resistance, maximum	2 mOhm
Insulation Resistance, minimum	5000 MOhm
Operating Frequency Band	0 – 2500 MHz
Outer Contact Resistance, maximum	0.3 mOhm
Peak Power, maximum	10 kW
RF Operating Voltage, maximum (vrms)	707 V

Shielding Effectiveness	-130 dB

VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
45–1000 MHz	1.022	39.27
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	4.52 N-m | 39.997 in lb
Coupling Nut Retention Force	444.82 N | 100 lbf
Coupling Nut Retention Force Method	MIL-C-39012C-3.25, 4.6.22
Insertion Force	66.72 N | 15 lbf
Insertion Force Method	MIL-C-39012C-3.12, 4.6.9
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 °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

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Water Jetting Test Mating	Unmated
Water Jetting Test Method	IEC 60529:2001, IP66

Packaging and Weights

Weight, net	754 g | 1.662 lb

Regulatory Compliance/Certifications

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

Included Products

AL7NM-PSA – Type N Male Positive Stop™ for 1-5/8 in cable

* Footnotes

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