

# A7TNF-PS



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

**OBSOLETE**

This product was discontinued on: May 7, 2008

**Replaced By:**

AL7NF-PS	Type N Female Positive Stop™ for 1-5/8 in cable
AL7NF-PSA	Type N Female Positive Stop™ for 1-5/8 in cable
RAL7NF-PS	Type N Female 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	Gold
Interface	N Female
Mounting Angle	Straight
Outer Contact Attachment Method	Ring-flare
Outer Contact Plating	Trimetal
Pressurizable	No

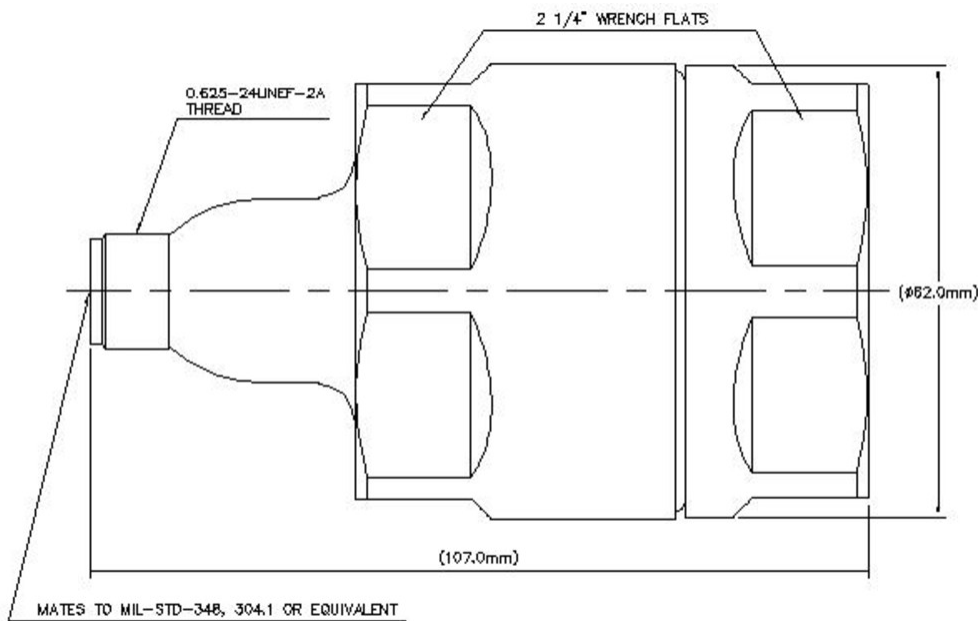
## Dimensions

Length	113.03 mm   4.45 in
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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

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## VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
50–1000 MHz	1.023	38.89
1010–2200 MHz	1.025	38.17
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
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
Water Jetting Test Mating	Unmated
Water Jetting Test Method	IEC 60529:2001, IP66

## Packaging and Weights

# A7TNF-PS

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**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

### \* 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