# Product Specifications





### AL7NF-PS

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

# **General Specifications**

Interface N Female
Body Style Straight

Brand HELIAX® | Positive Stop™

Mounting Angle Straight

#### **Electrical Specifications**

Connector Impedance 50 ohm

Operating Frequency Band 0 – 2700 MHz

Cable Impedance 50 ohm

3rd Order IMD, typical -116 dBm @ 910 MHz 3rd Order IMD Test Method Two +43 dBm carriers

RF Operating Voltage, maximum (vrms) 707.00 V
dc Test Voltage 2000 V
Outer Contact Resistance, maximum 0.30 mOhm
Inner Contact Resistance, maximum 2.00 mOhm
Insulation Resistance, minimum 5000 MOhm
Average Power 0.6 kW @ 900 MHz

Peak Power, maximum 10.00 kW Insertion Loss, typical 0.05 dB Shielding Effectiveness -130 dB

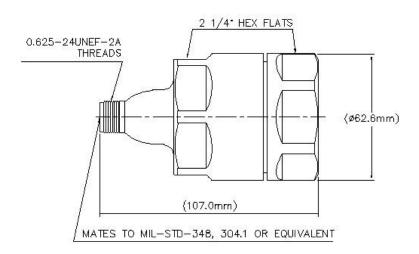
# Product Specifications



AL7NF-PS

### **Outline Drawing**

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# **Mechanical Specifications**

Outer Contact Attachment Method Ring-flare
Inner Contact Attachment Method Captivated
Outer Contact Plating Trimetal
Inner Contact Plating Gold
Attachment Durability 25 cycles
Interface Durability 500 cycles
Interface Durability Method IEC 61169-16:9.5

Connector Retention Tensile Force 2224 N | 500 lbf

Connector Retention Torque 13.56 N-m | 120.00 in lb

Insertion Force 66.72 N | 15.00 lbf

Insertion Force Method MIL-C-39012C-3.12, 4.6.9

Pressurizable No

#### **Dimensions**

Nominal Size 1-5/8 in

 Diameter
 62.84 mm | 2.47 in

 Length
 106.93 mm | 4.21 in

 Weight
 753.00 g | 1.66 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)

Immersion Depth 1 m
Immersion Test Matina Unmated

Immersion Test Method IEC 60529:2001, IP68

# Product Specifications



AL7NF-PS

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)
45-400 MHz	1.02	39.00
401-805 MHz	1.02	39.00
806-960 MHz	1.02	39.00
961-1709 MHz	1.03	36.00
1710-2170 MHz	1.04	35.00
2170-2399 MHz	1.07	30.00
2400-2700 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

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