

R7PNF



Type N Female Low PIM Positive Stop™ for 1-5/8 in RCT RADIAX®
Radiating cable

Product Classification

Brand	RADIAX®
Product Type	Wireless and radiating connector

General Specifications

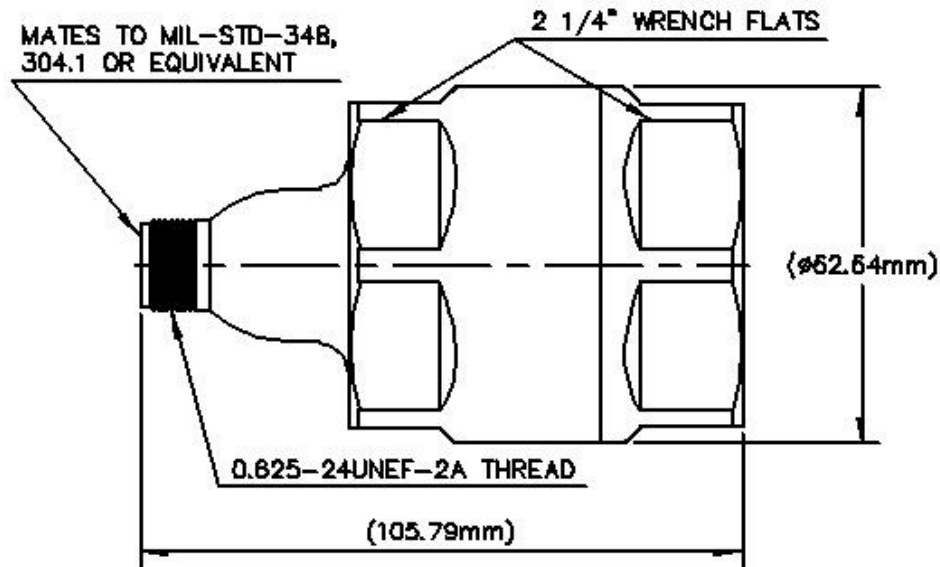
Interface	N Female
Body Style	Straight
Mounting Angle	Straight

Electrical Specifications

Connector Impedance	50 ohm
Operating Frequency Band	0 – 2700 MHz
Average Power at Frequency	0.6 kW @ 900 MHz
Cable Impedance	50 ohm
3rd Order IMD, typical	-107 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
Peak Power, maximum	10.00 kW
Insertion Loss, typical	0.05 dB

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Outline Drawing



Mechanical Specifications

Outer Contact Attachment Method	Clamp
Inner Contact Attachment Method	Thread-in stub
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	890 N 200 lbf
Connector Retention Torque	4.52 N-m 40.00 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	62.64 mm 2.47 in
Length	105.79 mm 4.16 in
Weight	833.95 g 1.84 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)
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
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)
50–1000 MHz	1.07	30.00
1010–2200 MHz	1.07	30.00
2210–2700 MHz	1.08	28.00

Regulatory Compliance/Certifications

Agency	Classification
RoHS 2011/65/EU	Compliant by Exemption
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
China RoHS SJ/T 11364-2014	Above Maximum Concentration Value (MCV)



* Footnotes

Insertion Loss, typical $0.05\sqrt{\text{freq (GHz)}}$ (not applicable for elliptical waveguide)