



7-16 DIN Male Low PIM for 1-5/8 in RCT RADIAX® Radiating cable

## Product Classification

<b>Brand</b>	RADIAX®
<b>Product Type</b>	Wireless and radiating connector

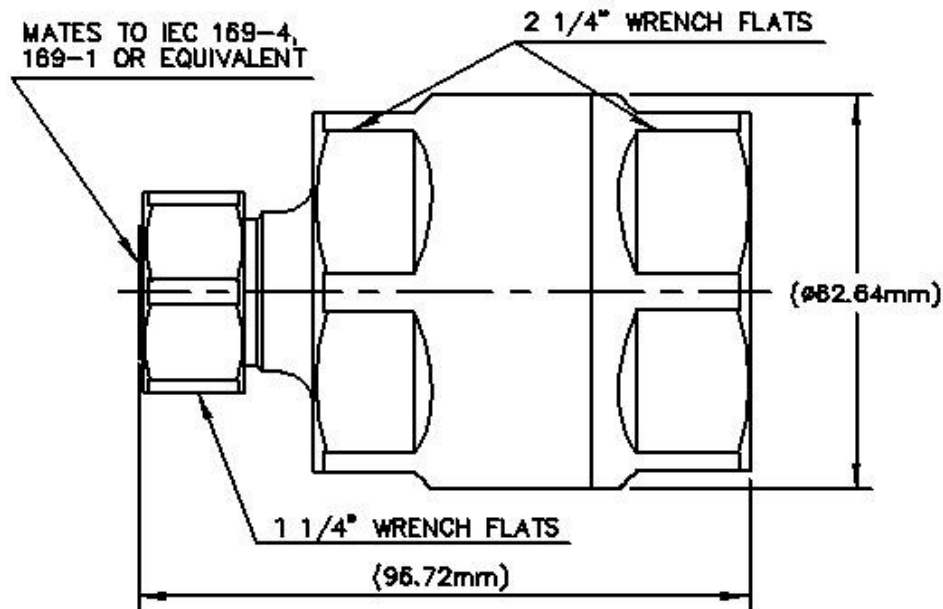
## General Specifications

<b>Interface</b>	7-16 DIN Male
<b>Body Style</b>	Straight
<b>Mounting Angle</b>	Straight

## Electrical Specifications

<b>Connector Impedance</b>	50 ohm
<b>Operating Frequency Band</b>	0 – 2700 MHz
<b>Average Power at Frequency</b>	3.0 kW @ 900 MHz
<b>Cable Impedance</b>	50 ohm
<b>3rd Order IMD, typical</b>	-107 dBm @ 910 MHz
<b>3rd Order IMD Test Method</b>	Two +43 dBm carriers
<b>RF Operating Voltage, maximum (vrms)</b>	1415.00 V
<b>dc Test Voltage</b>	4000 V
<b>Outer Contact Resistance, maximum</b>	1.50 mOhm
<b>Inner Contact Resistance, maximum</b>	0.80 mOhm
<b>Insulation Resistance, minimum</b>	5000 MOhm
<b>Peak Power, maximum</b>	40.00 kW
<b>Insertion Loss, typical</b>	0.05 dB

## Outline Drawing



## Mechanical Specifications

<b>Outer Contact Attachment Method</b>	Clamp
<b>Inner Contact Attachment Method</b>	Thread-in stub
<b>Outer Contact Plating</b>	Trimetal
<b>Inner Contact Plating</b>	Silver
<b>Attachment Durability</b>	25 cycles
<b>Interface Durability</b>	500 cycles
<b>Interface Durability Method</b>	IEC 61169-4:9.5
<b>Connector Retention Tensile Force</b>	890 N   200 lbf
<b>Connector Retention Torque</b>	4.52 N-m   40.00 in lb
<b>Insertion Force</b>	200.17 N   45.00 lbf
<b>Insertion Force Method</b>	IEC 61169-1:15.2.4
<b>Pressurizable</b>	No
<b>Coupling Nut Proof Torque</b>	24.86 N-m   220.00 in lb
<b>Coupling Nut Retention Force</b>	1000.85 N   225.00 lbf
<b>Coupling Nut Retention Force Method</b>	MIL-C-39012C-3.25, 4.6.22

## Dimensions

**Nominal Size** 1-5/8 in

# R7PDM

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<b>Diameter</b>	62.99 mm   2.48 in
<b>Length</b>	107.01 mm   4.21 in
<b>Weight</b>	847.47 g   1.87 lb

## Environmental Specifications

<b>Operating Temperature</b>	-55 °C to +85 °C (-67 °F to +185 °F)
<b>Storage Temperature</b>	-55 °C to +85 °C (-67 °F to +185 °F)
<b>Mechanical Shock Test Method</b>	MIL-STD-202F, Method 213B, Test Condition C
<b>Thermal Shock Test Method</b>	MIL-STD-202F, Method 107G, Test Condition A-1, Low Temperature -55 °C
<b>Corrosion Test Method</b>	MIL-STD-1344A, Method 1001.1, Test Condition A

## Standard Conditions

<b>Attenuation, Ambient Temperature</b>	20 °C   68 °F
<b>Average Power, Ambient Temperature</b>	40 °C   104 °F

## Return Loss/VSWR

<b>Frequency Band</b>	<b>VSWR</b>	<b>Return Loss (dB)</b>
50–1000 MHz	1.03	36.00
1010–2000 MHz	1.07	30.00
2010–2400 MHz	1.08	28.00

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
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)