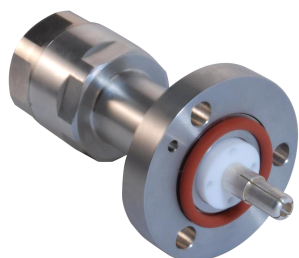


7/8 in EIA for 7/8 in AVA5-50 and AVA5-50FX



## Product Classification

**Product Type** Wireless and radiating connector

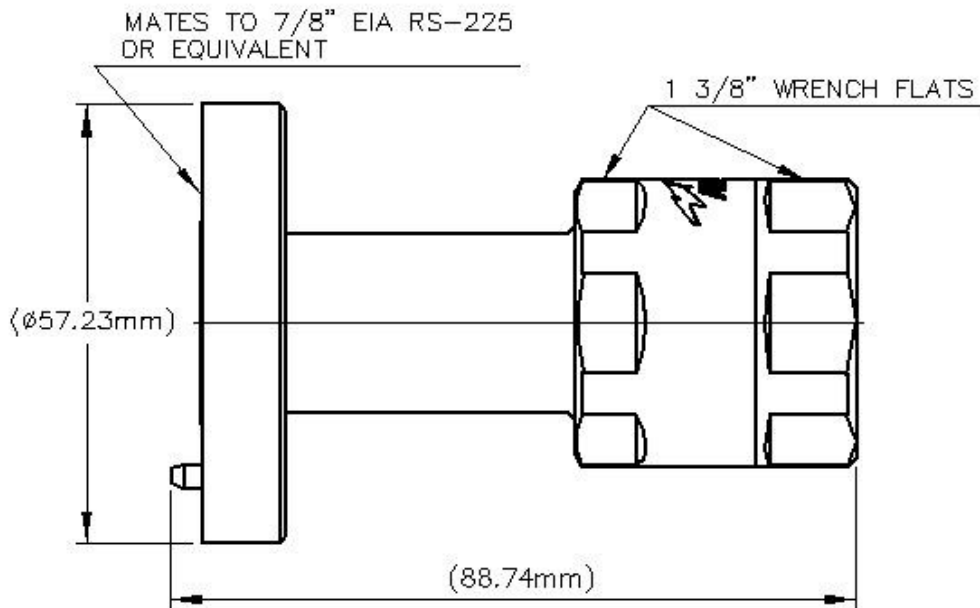
## General Specifications

**Interface** 7/8 in EIA Flange  
**Body Style** Straight  
**Mounting Angle** Straight

## Electrical Specifications

**Connector Impedance** 50 ohm  
**Operating Frequency Band** 0 – 5000 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)** 2120.00 V  
**dc Test Voltage** 6000 V  
**Outer Contact Resistance, maximum** 1.50 mOhm  
**Inner Contact Resistance, maximum** 1.50 mOhm  
**Insulation Resistance, minimum** 5000 MOhm  
**Average Power** 2.3 kW @ 900 MHz  
**Peak Power, maximum** 90.00 kW  
**Insertion Loss, typical** 0.05 dB  
**Shielding Effectiveness** -130 dB

## Outline Drawing



## Mechanical Specifications

<b>Outer Contact Attachment Method</b>	Ring-flare
<b>Inner Contact Attachment Method</b>	Captivated
<b>Outer Contact Plating</b>	Trimetal
<b>Inner Contact Plating</b>	Silver
<b>Attachment Durability</b>	25 cycles
<b>Interface Durability</b>	50 cycles
<b>Connector Retention Tensile Force</b>	1335 N   300 lbf
<b>Connector Retention Torque</b>	8.10 N-m   71.69 in lb
<b>Insertion Force</b>	66.72 N   15.00 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

## Dimensions

<b>Nominal Size</b>	7/8 in
<b>Diameter</b>	57.23 mm   2.25 in
<b>Length</b>	88.74 mm   3.49 in
<b>Weight</b>	378.00 g   0.83 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>Immersion Depth</b>	1 m
<b>Immersion Test Mating</b>	Unmated
<b>Immersion Test Method</b>	IEC 60529:2001, IP68
<b>Water Jetting Test Mating</b>	Unmated
<b>Water Jetting Test Method</b>	IEC 60529:2001, IP66
<b>Moisture Resistance Test Method</b>	MIL-STD-202F, Method 106F
<b>Mechanical Shock Test Method</b>	MIL-STD-202, Method 213, Test Condition I
<b>Thermal Shock Test Method</b>	MIL-STD-202F, Method 107G, Test Condition A-1, Low Temperature -55 °C
<b>Vibration Test Method</b>	MIL-STD-202F, Method 204D, Test Condition B
<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

Frequency Band	VSWR	Return Loss (dB)
50–1000 MHz	1.04	35.00
1700–2200 MHz	1.04	35.00
2400–2700 MHz	1.07	30.00
3400–3600 MHz	1.12	25.00

## 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

<b>Immersion Depth</b>	Immersion at specified depth for 24 hours
<b>Insertion Loss, typical</b>	0.05v/freq (GHz) (not applicable for elliptical waveguide)