

# **Waveguide Power Amplifier**

MM-MPA-090094-30-36 90 to 94 GHz

#### **General Description:**

MM-MPA-090094-30-36 is a Waveguide Power Amplifier that operates over the frequency range of 90 to 94 GHz. This model provides a typical gain of 30 dB. It provides a Psat of 36 dB typical and operates on +24 VDC witha typical current draw of 3600 mA.

#### **Features:**

Ultra Wide Band: 90-94 GHz

Gain: 30 dBPsat: 36 dB

• Internally regulated

• Unconditionally stable

# **Applications:**

- Radar Systems
- Communication Systems
- Receivers Systems

# **Electrical Specifications (23° C):**

Parameter	Value			Unito
	Min	Тур	Max	Units
Frequency Range	90		94	GHz
Gain	28	30		dB
Gain Flatness		-		dB
Psat	35	36		dBm
Output Power (P1dB)		-		dBm
Input VSWR		2.0		:1
Output VSWR		-		:1
DC Voltage		+24		V
DC Current		3600		mA

# **Absolute Maximum Ratings:**

Condition	Value	
DC Voltage	+24 V	
Maximum Input Power(CW)	TBD	
ESD sensitivity (HBm)	Class 0, passed 150V	

#### **Mechanical Specifications:**

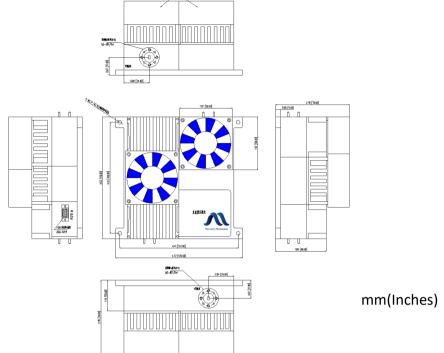
Parameter	Value	
Length	115 mm	
Width	120 mm	
Height	70 mm	
RF Connector	WR10/UG-387	



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# **Outline Drawing:**



#### **Environmental Conditions:**

Parameter	Standard	Description	
Operational Temperature		-10°C~+55°C	
Storage Temperature		-45°C~+125°C	
Random Vibration	MIL-STD-883K, Method 2026, Cond. IB	50 - 2000 Hz, 7.3 Grms	
Humidity	MIL-STD-202, Method 103B, Cond. B	100% RH at 35c, 95%RH at 40°C	
Altitude	MIL-STD-883K, Method 1001, Cond. C	50,000 feet	

#### **Caution:**

- Exceeding absolute maximum ratings shown will damage the device.
- The device is static sensitive. Always follow ESD rules when working with the device.
- Heat Sink required during operation.

Please note, all information contained in this data sheet is subject to change without notice.

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