

Waveguide Power Amplifier

MM-MPA-090094-20-27 90 to 94 GHz

General Description:

MM-MPA-090094-20-27 is a Waveguide Power Amplifier that operates over the frequency range of 90 to 94 GHz. This model provides a typical gain of 20 dB. It provides a Psat of 27 dB typical and operates on +20 VDC witha typical current draw of 580 mA.

Features:

Ultra Wide Band: 90-94 GHz

Gain: 20 dBPsat: 27 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	20	22		dB
Gain Flatness		-		dB
Psat	27	28	29	dBm
Output Power (P1dB)		-		dBm
Input VSWR		2.0		:1
Output VSWR		2.0		:1
DC Voltage		+20		V
DC Current		580		mA

Absolute Maximum Ratings:

Condition	Value	
DC Voltage	+20 V	
Maximum Input Power(CW)	TBD	
ESD sensitivity (HBm)	Class 0, passed 150V	

Mechanical Specifications:

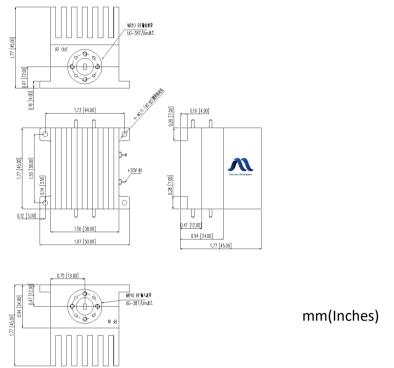
Parameter	Value	
Length	50 mm	
Width	45 mm	
Height	45 mm	
RF Connector	WR10/UG-387	

Focus on the future

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Outline Drawing:



Environmental Conditions:

Parameter	Standard	Description	
Operational Temperature		-10°C~+55°C	
Storage Temperature		-55°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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