

Waveguide Power Amplifier

MM-MPA-075110-13-15 75 to 110 GHz

General Description:

MM-MPA-075110-13-15 is a Waveguide Power Amplifier that operates over the frequency range of 75 to 110 GHz. This model provides a typical gain of 13 dB. It provides a Psat of 15 dB typical and operates on +7 VDC withat ypical current draw of 140 mA.

Features:

Ultra Wide Band: 75-110 GHz

Gain: 13 dBPsat: 15 dB

Internally regulated

• Unconditionally stable

Applications:

- Radar Systems
- Communication Systems
- Receivers Systems

Electrical Specifications (23° C):

Parameter	Value			I I I I I I I I I I I I I I I I I I I
	Min	Тур	Max	Units
Frequency Range	75		110	GHz
Gain		13		dB
Gain Flatness		-		dB
Psat		15		dBm
Output Power (P1dB)		-		dBm
Input VSWR		1.4		:1
Output VSWR		1.4		:1
RF Input Power		-		dBm
DC Voltage		+7		V
DC Current		140		mA

Absolute Maximum Ratings:

Condition	Value	
DC Voltage	+7 V	
Maximum Input Power(CW)	TBD	
ESD sensitivity (HBm)	Class 0, passed 150V	

Mechanical Specifications:

Parameter	Value	
Length	35 mm	
Width	30 mm	
Height	29 mm	
RF Connector	WR10/UG-387	

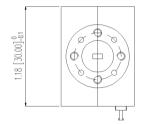


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Outline Drawing:

Mountain Microwave









mm(Inches)

Environmental Conditions:

Parameter	Standard	Description	
Operational Temperature		0°C~+50°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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