Mountain Microwave

Focus on the future

Waveguide Power Amplifier

MM-MPA-210230-13-20

210 to 230 GHz

General Description:

MM-MPA-210230-13-20 is a Waveguide Power Amplifier that operates over the frequency range of 210 to 230 GHz. This model provides a typical gain of 13 dB . It provides a Psat of 20 dB typical and operates on +8 VDC witha typical current draw of 1350 mA.

Features:

- Ultra Wide Band: 210-230 GHz
- Gain: 13 dB
- Psat: 20 dB
- Internally regulated
- Unconditionally stable

Applications:

- Radar Systems
- Communication Systems
- Receivers Systems

Electrical Specifications (23° C):

Parameter	Value			Units
	Min	Typ	Max	
Frequency Range	210		230	GHz
Gain	9.5	13.5	17	dB
Gain Flatness		-		dB
Psat	19	20	20.3	dBm
Output Power (P1dB)		-		dBm
Input VSWR		1.5		:1
Output VSWR		2.3		:1
DC Voltage	+5-8			V
DC Current		1350		mA

Absolute Maximum Ratings:

Condition	Value
DC Voltage	+5-8 V
Maximum Input Power(CW)	TBD
ESD sensitivity (HBm)	Class 0, passed 150V

Mechanical Specifications:

Parameter	Value
Length	73 mm
Width	70 mm
Height	22 mm
RF Connector	WR04/UG-387

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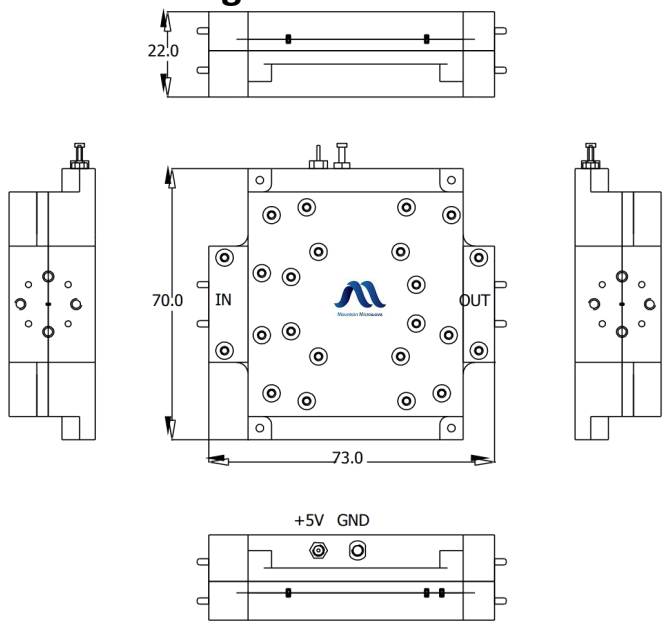
Outline Drawing:



编号	符号	功能描述
1	IN	射频信号输入端，WR4波导口
2	OUT	射频信号输出端，WR4波导口
3	+5V	电源端
4	GND	接地端

mm(Inches)

Environmental Conditions:

Parameter	Standard	Description
Operational Temperature		0℃~+25℃
Storage Temperature		0℃~+50℃
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℃
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.

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