Mountain Microwave

Focus on the future

Waveguide Power Amplifier

MM-MPA-088117-18-23

88 to 117 GHz

General Description:

MM-MPA-088117-18-23 is a Waveguide Power Amplifier that operates over the frequency range of 88 to 117 GHz. This model provides a typical gain of 18 dB . It provides a Psat of 23 dB typical and operates on +18 VDC witha typical current draw of 260 mA.

Features:

- Ultra Wide Band: 88-117 GHz
- Gain: 18 dB
- Psat: 23 dB
- Internally regulated
- Unconditionally stable

Applications:

- Radar Systems
- Communication Systems
- Receivers Systems

Electrical Specifications (23° C):

Parameter	Value			Units
	Min	Typ	Max	
Frequency Range	88		117	GHz
Gain		18		dB
Gain Flatness		-		dB
Psat		23		dBm
Output Power (P1dB)		-		dBm
Input VSWR		1.5		:1
Output VSWR		1.2		:1
DC Voltage		+18		V
DC Current		260		mA

Absolute Maximum Ratings:

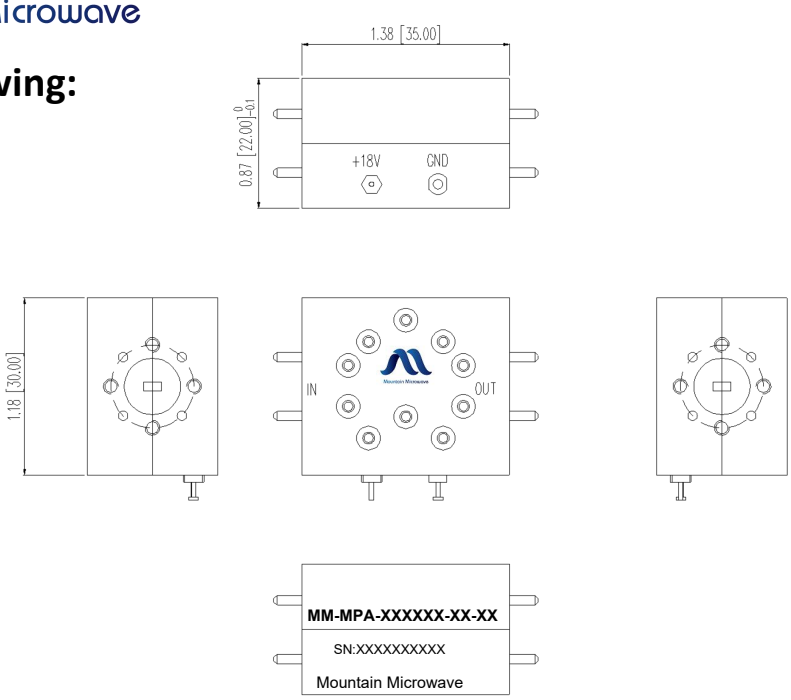
Condition	Value
DC Voltage	+18 V
Maximum Input Power(CW)	TBD
ESD sensitivity (HBm)	Class 0, passed 150V

Mechanical Specifications:

Parameter	Value
Length	35 mm
Width	30 mm
Height	22 mm
RF Connector	WR8/UG-387

Waveguide Power Amplifier
MM-MPA-085100-20-26
85 to 100 GHz

Outline Drawing:



mm(Inches)

Environmental Conditions:

Parameter	Standard	Description
Operational Temperature		-25℃~+50℃
Storage Temperature		-45℃~+125℃
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.

Please note, all information contained in this data sheet is subject to change without notice. ver 2.0 0318