



General Description:

MM-BPA-040080-13-30 is a broadband Power amplifier with a typical small signal gain of 13 dB, a nominal Psat of +30 dBm across the frequency range of 4.0 to 8.0 GHz. The DC power requirement for the amplifier is +15 VDC/0.4 A.

Features:

- Ultra Wide Band: 4.0-8.0GHz
- Output Psat: 30 dBm
- 50 Ohm input and output match
- Internally regulated
- Unconditionally stable

Applications:

- Radar Systems
- Communication Systems
- Receivers Systems

Electrical Specifications (23° C):

Parameter	Value			Units
	Min	Typ	Max	
Frequency Range	4.0		8.0	GHz
Gain	12	13		dB
Gain Flatness		±0.5	±1.0	dB
Output P1dB	27	29		dBm
Output Psat		30		dBm
Spurious		-70		dBc
Input VSWR		1.5	2.0	:1
Output VSWR		1.6	2.0	:1
DC Voltage		+15		V
DC Current		0.4	0.5	A

Absolute Maximum Ratings:

Condition	Value
DC Voltage	+16V
Maximum Input Power(CW)	+12 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Mechanical Specifications:

Parameter	Value
Length	40 mm
Width	35 mm
Height	12 mm
RF Connector	SMA Female



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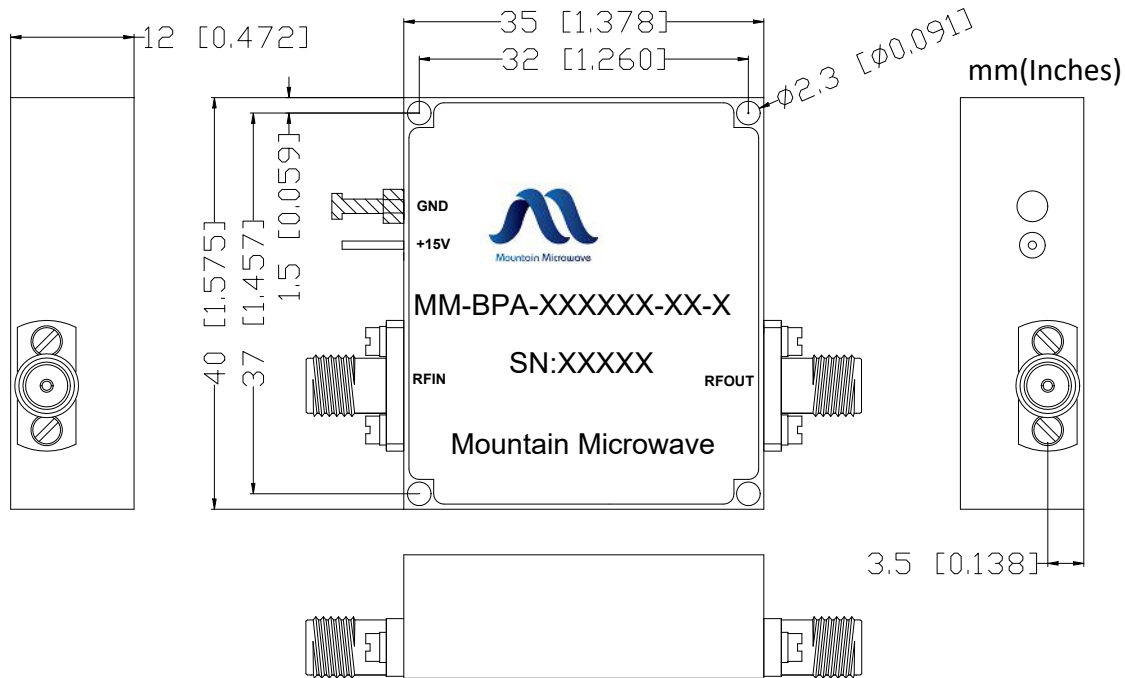
**Broadband Power Amplifier**

MM-BPA-040080-13-30

4.0-8.0 GHz, 1 W

Mountain Microwave

**Outline Drawing:**



**Environmental Conditions:**

Parameter	Standard	Description
Operational Temperature		-45°C~+85°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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