



General Description:

MM-BPA-180400-40-31 is a broadband Power amplifier with a typical small signal gain of 40 dB, a nominal Psat of +31 dBm across the frequency range of 18.0 to 40.0 GHz. The DC power requirement for the amplifier is +12 VDC/1.8 A.

Features:

- Ultra Wide Band: 18.0-40.0GHz
- Output Psat: 31 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	18.0		40.0	GHz
Gain	35	40		dB
Gain Flatness		±3.0		dB
Output P1dB	29	30		dBm
Output Psat		31		dBm
Noise Figure		5.5		dB
Input VSWR		2.0		:1
Output VSWR		2.0		:1
DC Voltage		+12		V
DC Current		1.8	2.2	A

Absolute Maximum Ratings:

Condition	Value
DC Voltage	+15 V
Maximum Input Power(CW)	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Mechanical Specifications:

Parameter	Value
Length	50 mm
Width	60 mm
Height	12 mm
RF Connector	2.92mm Female



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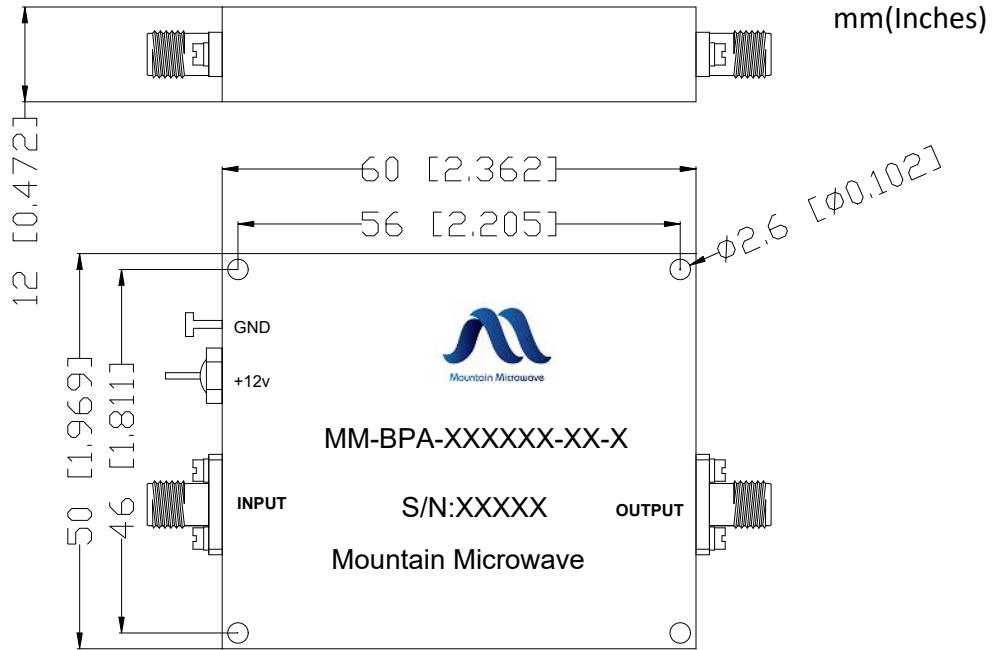
**Broadband Power Amplifier**

MM-BPA-180400-40-31

18.0-40.0 GHz, 31dBm

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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