



General Description:

MM-BPA-010040-20-27 is a broadband Power amplifier with a typical small signal gain of 20 dB, a nominal Psat of +27 dBm across the frequency range of 1 to 4 GHz. The DC power requirement for the amplifier is +28 VDC/0.2 A.

Features:

- Ultra Wide Band: 1.0-4.0 GHz
- Output Psat: 27 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	1		4	GHz
Gain	15	20		dB
Gain Flatness		± 1.0	± 1.5	dB
Output P1dB	26	27		dBm
Output Psat		27		dBm
Input VSWR		1.5	2.0	:1
Output VSWR		1.5	2.0	:1
Second Harmonic		15		dB
Spurious		-70		dBc
DC Voltage		+28		V
DC Current		0.2	0.25	A

Absolute Maximum Ratings:

Condition	Value
DC Voltage	+28V
Maximum Input Power(CW)	+15 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Mechanical Specifications:

Parameter	Value
Length	70mm
Width	45 mm
Height	12 mm
RF Connector	SMA Female



Mountain Microwave

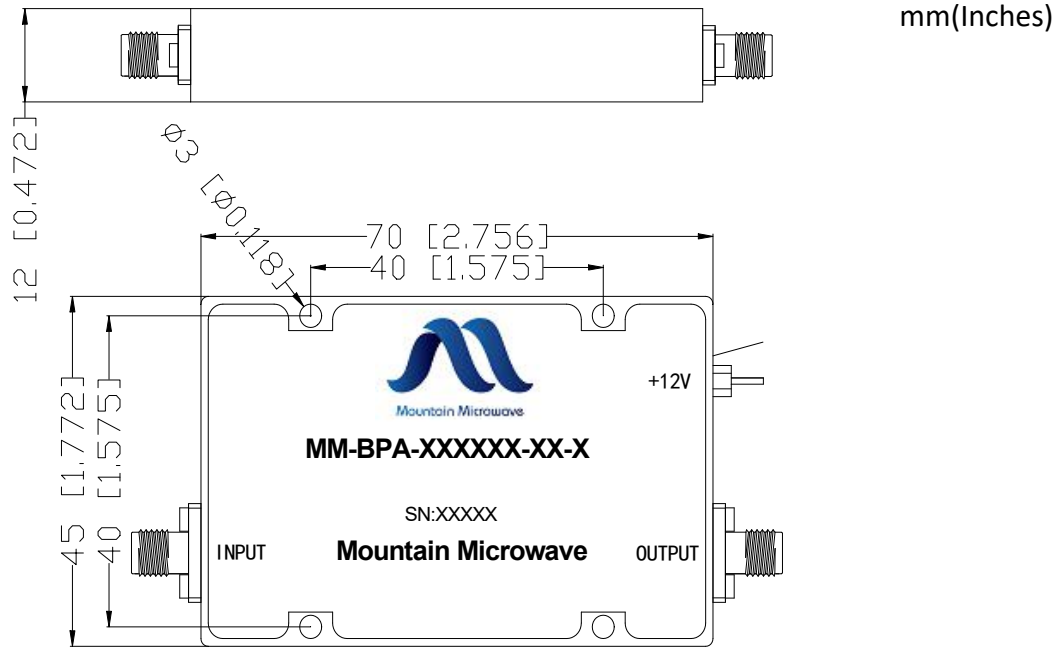
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Broadband Power Amplifier

MM-BPA-010040-20-27

1-4 GHz

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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