



Mountain Microwave

General Description:

MM-BPA-120180-36-33 is a broadband Power amplifier with a typical small signal gain of 36 dB, a nominal Psat of +33 dBm across the frequency range of 12.0 to 18.0 GHz. The DC power requirement for the amplifier is +12 VDC/1.5 A.

Features:

- Ultra Wide Band: 12.0-18.0 GHz
- Output Psat: 33 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	12.0		18.0	GHz
Gain	33	36		dB
Gain Flatness		± 1.5		dB
Output P1dB	31			dBm
Output Psat	33	34		dBm
Spurious		-60		dBc
Input VSWR		1.8		:1
Output VSWR		1.8		:1
DC Voltage		+12		V
DC Current		1.5	2.0	A

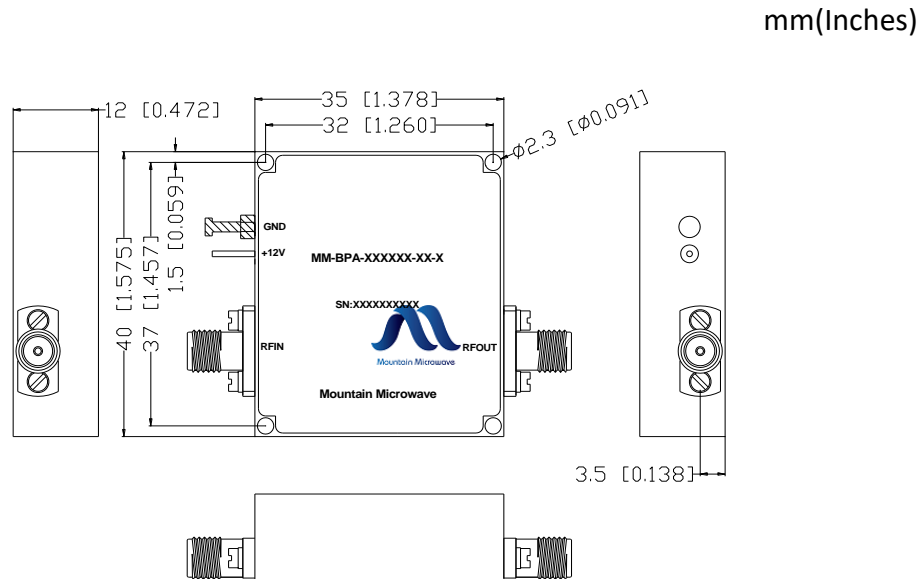
Absolute Maximum Ratings:

Condition	Value
DC Voltage	+13 V
Maximum Input Power(CW)	10 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

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.