



Mountain Microwave

General Description:

MM-BPA-018040-45-44 is a broadband Power amplifier with a typical small signal gain of 45 dB, a nominal Psat of +44 dBm across the frequency range of 1.8 to 4.0 GHz. The DC power requirement for the amplifier is +28 VDC/2 A.

Features:

- Ultra Wide Band: 1.8-4.0 GHz
- Output Psat: 44 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	1.8		4.0	GHz
Gain	45			dB
Gain Flatness		±1.5	±2.0	dB
Output P1dB	42	43		dBm
Output Psat	43	44		dBm
Input VSWR		1.4	2.0	:1
Output VSWR		1.3	2.0	:1
Spurious	-80			dBc
Output IP3		49		dBm
DC Voltage		+12		V
DC Current		2	3.5	A

Absolute Maximum Ratings:

Condition	Value
DC Voltage	+15 V
Maximum Input Power(CW)	+12 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Mechanical Specifications:

Parameter	Value
Length	177.8mm
Width	82.55mm
Height	50.8 mm
Input Connector	SMA Female
Output Connector	N Female



Focus on the future

Broadband Power Amplifier

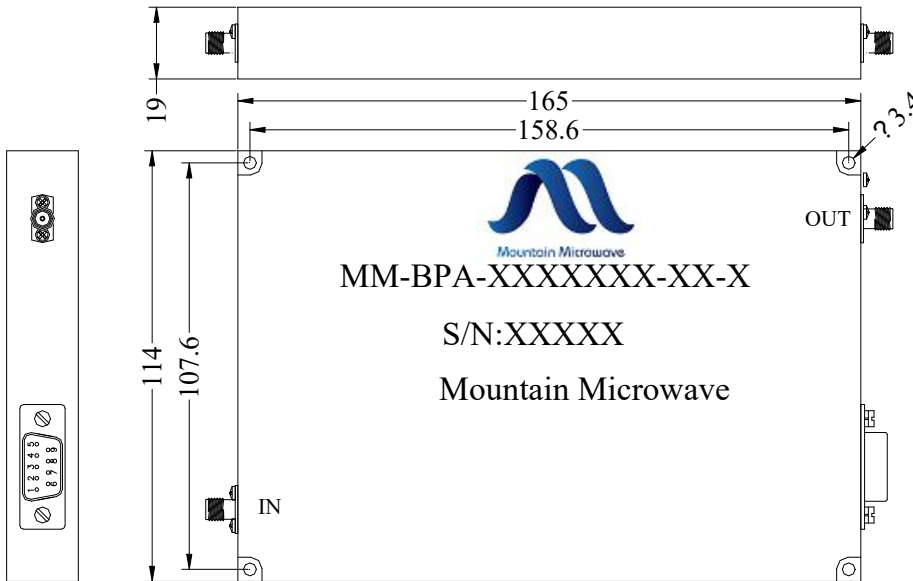
MM-BPA-018040-45-44

1.8-4.0GHz, 25W

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Outline Drawing:

mm(Inches)



Pin#	Pin Function
1,2	Vdc
3,4	GND
5	Enable: TTL "High" Disable: TTL "Low"
6,7,8,9	NC

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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