Mountain Microwave

Focus on the future

Broadband Power Amplifier

MM-BPA-170430-35-25

17.0-43.0 GHz, 25dBm

General Description:

MM-BPA-170430-35-25 is a broadband Power amplifier with a typical small signal gain of 35 dB, a nominal Psat of +25 dBm across the frequency range of 17.0 to 43.0 GHz. The DC power requirement for the amplifier is +12 VDC/0.5 A.

Features:

- Ultra Wide Band: 17.0-43.0GHz
- Output Psat: 25 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	17.0		43.0	GHz
Gain	30	35		dB
Gain Flatness		±2.5		dB
Output P1dB	23	24		dBm
Output Psat		25		dBm
Noise Figure		5.5		dB
Input VSWR		2.0		:1
Output VSWR		2.0		:1
DC Voltage		+12		V
DC Current		0.5	0.7	A

Absolute Maximum Ratings:

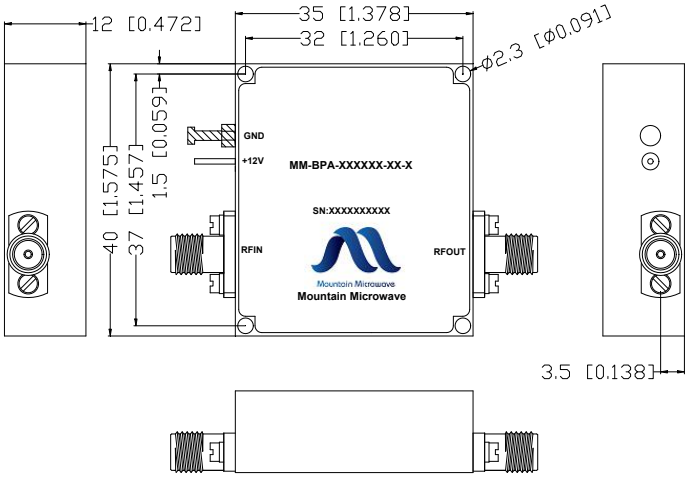
Condition	Value
DC Voltage	+15 V
Maximum Input Power(CW)	0 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Mechanical Specifications:

Parameter	Value
Length	40 mm
Width	35 mm
Height	12 mm
RF Connector	2.92mm Female

Outline Drawing:

mm(Inches)



Environmental Conditions:

Parameter	Standard	Description
Operational Temperature		-45℃~+85℃
Storage Temperature		-55℃~+125℃
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℃
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. ver 1.0 0618