



General Description:

MM-LNA-180500-46-5 is a Low Noise Amplifier that operates over the frequency range of 18.0 to 50.0 GHz. This model provides a typical gain of 46 dB and a typical noise figure of 5.0 dB. It provides an OP1dB of 13 dBm typical and operates on +12 VDC with a typical current draw of 600 mA.

Features:

- Ultra Wide Band: 18.0-50.0 GHz
- Gain: 46 dB
- 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		50	GHz
Gain	34	46		dB
Gain Flatness		±3.5	±4.0	dB
Noise Figure		5.0	6.0	dB
Output Power (P1dB)	12	13		dBm
Output IP3		25		dBm
Input VSWR		1.9	3.0	:1
Output VSWR		1.9	3.0	:1
DC Voltage		+12		V
DC Current		600		mA

Absolute Maximum Ratings:

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

Mechanical Specifications:

Parameter	Value
Length	30mm
Width	25.4mm
Height	10.2mm
RF Connector	2.4mm Female



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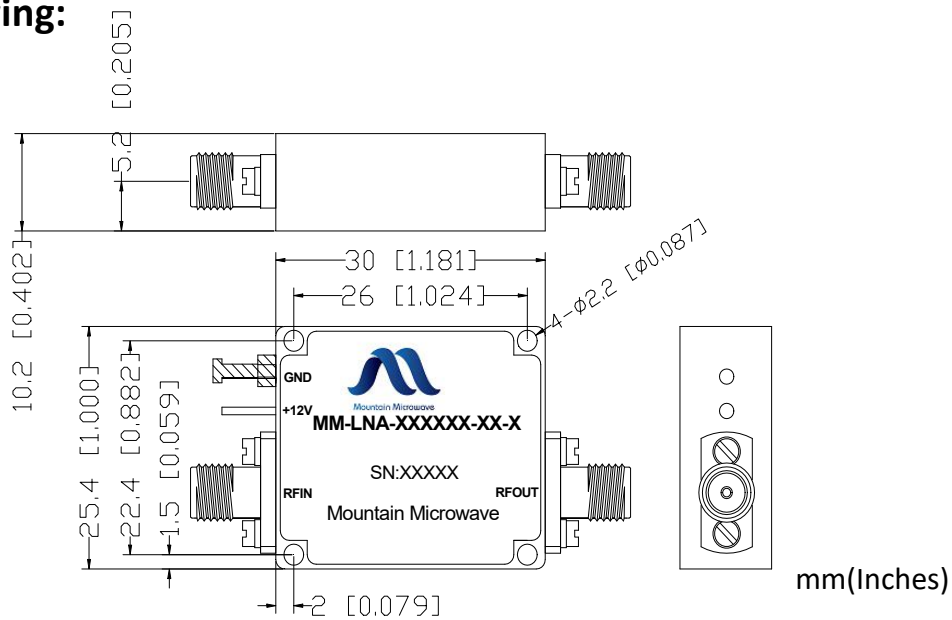
Mountain Microwave

Low Noise Amplifier

MM-LNA-180500-46-5

18 to 50 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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