



General Description:

MM-LNA-020400-31-4 is a Low Noise Amplifier that operates over the frequency range of 2.0 to 40.0 GHz. This model provides a typical gain of 31 dB and a typical noise figure of 4.5 dB. It provides an OP1dB of 17dBm typical and operates on +12 VDC with a typical current draw of 400 mA.

Features:

- Ultra Wide Band: 2.0-40.0 GHz
- Gain: 31 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	2		40	GHz
Gain	27	31		dB
Gain Flatness		± 2.5		dB
Noise Figure		4.5	6.0	dB
Output Power (P1dB)	16	18		dBm
Output IP3		30		dBm
Input VSWR		2.0	2.3	:1
Output VSWR		2.0	2.3	:1
DC Voltage		+12		V
DC Current		400		mA

Absolute Maximum Ratings:

Condition	Value
DC Voltage	+15V
Maximum Input Power(CW)	-8 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Mechanical Specifications:

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



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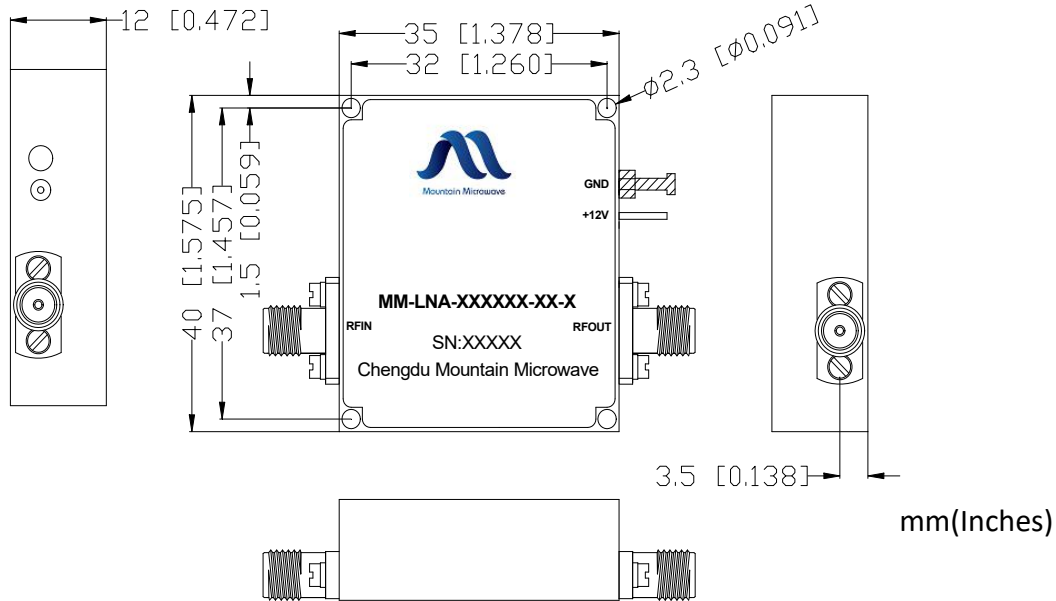
Mountain Microwave

Low Noise Amplifier

MM-LNA-020400-31-4

2 to 40 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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