Mountain Microwave

Focus on the future

Low Noise Amplifier

MM-LNA-010080-30-1

1 to 8 GHz

General Description:

MM-LNA-010080-30-1 is a Low Noise Amplifier that operates over the frequency range of 1.0 to 8.0 GHz. This model provides a typical gain of 30 dB and a typical noise figure of 1.5 dB. It provides an OP1dB of 16 dB typical and operates on +15 VDC witha typical current draw of 220 mA.

Features:

- Ultra Wide Band: 1.0-8.0 GHz
- Gain: 30 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	1		8	GHz
Gain	20	30		dB
Gain Flatness		±1.5	±2.0	dB
Noise Figure		1.5	2.0	dB
Output Power (P1dB)	15	16		dBm
Output IP3		26		dBm
Input VSWR		1.8	2.0	:1
Output VSWR		1.8	2.0	:1
DC Voltage		+15		V
DC Current		220		mA

Absolute Maximum Ratings:

Condition	Value
DC Voltage	+18V
Maximum Input Power(CW)	-10 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Mechanical Specifications:

Parameter	Value
Length	25.4 mm
Width	17 mm
Height	6 mm
RF Connector	SMA Female

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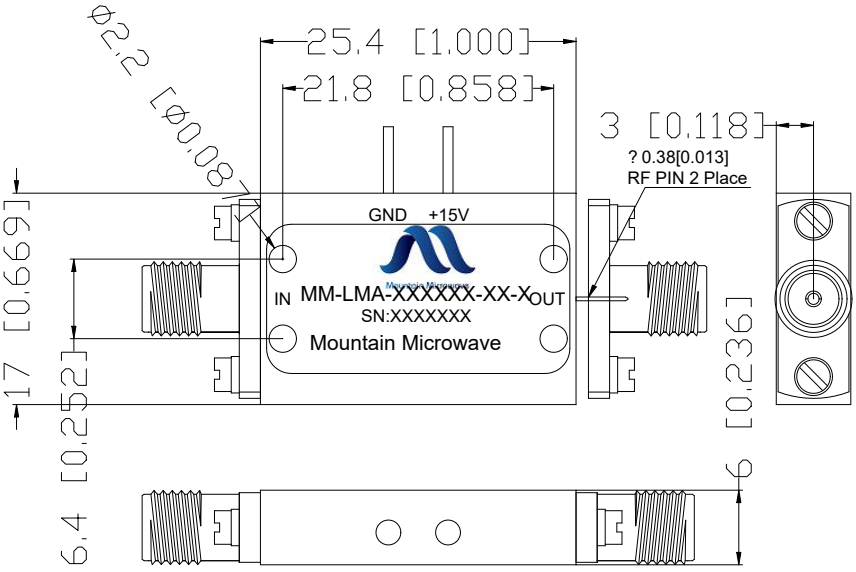
Outline Drawing:



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.