Low Noise Amplifier MM-LNA-060180-24-4 6 to 18 GHz

## **General Description:**

MM-LNA-060180-24-4 is a Low Noise Amplifier that operates over the frequency range of 6.0 to 18.0 GHz. This model provides a typical gain of 24 dB and a typical noise figure of 4.0 dB. It provides an OP1dB of 20 dBm typical and operates on +12 VDC witha typical current draw of 110 mA.

#### Features:

• Ultra Wide Band: 6.0-18.0 GHz

Gain: 24 dB

50 Ohm input and output match

Internally regulated

Unconditionally stable

## **Applications:**

- Radar Systems
- Communication Systems
- Receivers Systems

## **Electrical Specifications (23°C):**

Parameter	Value			Haita
	Min	Тур	Max	Units
Frequency Range	6		18	GHz
Gain	20	24		dB
Gain Flatness		±0.5	±1.0	dB
Noise Figure		4.0		dB
Output Power (P1dB)	20	21		dBm
Output IP3		30		dBm
Input VSWR		1.4	2.0	:1
Output VSWR		1.3	2.0	:1
DC Voltage		+12		V
DC Current		110	125	mA

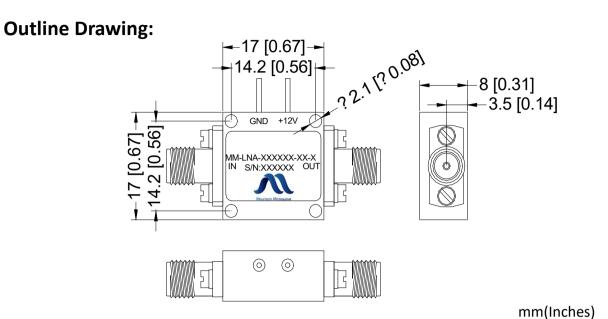
# **Absolute Maximum Ratings:**

Condition	Value	
DC Voltage	+15V	
Maximum Input Power(CW)	+5 dBm	
ESD sensitivity (HBm)	Class 0, passed 150V	

## **Mechanical Specifications:**

Parameter	Value	
Length	17 mm	
Width	17 mm	
Height	8 mm	
RF Connector	SMA Female	

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### **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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