

Low Noise Amplifier MM-LNA-003200-15-2 0.3 to 20 GHz

### **General Description:**

MM-LNA-003200-15-2 is a Low Noise Amplifier that operates over the frequency range of 0.3 to 20 GHz. This model provides a typical gain of 15 dB and a typical noise figure of 2.4 dB. It provides an OP1dB of 10dB typical and operates on +12 VDC witha typical current draw of 70mA.

#### **Features:**

• Ultra Wide Band: 0.3-20.0 GHz

Gain: 15 dB

50 Ohm input and output match

Internally regulated

Unconditionally stable

### **Applications:**

- Radar Systems
- Communication Systems
- Receivers Systems

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

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Parameter	Min	Тур	Max	Units
Frequency Range	0.3		20	GHz
Gain	11	15		dB
Gain Flatness		±3		dB
Noise Figure		2.4	3.8	dB
Output Power (P1dB)	10	11		dBm
Output IP3		20		dBm
Input VSWR		1.6	2.0	:1
Output VSWR		1.5	2.0	:1
DC Voltage		+12		V
DC Current		70		mA

# **Absolute Maximum Ratings:**

Condition	Value	
DC Voltage	+15V	
Maximum Input Power(CW)	+10 dBm	
ESD sensitivity (HBm)	Class 0, passed 150V	

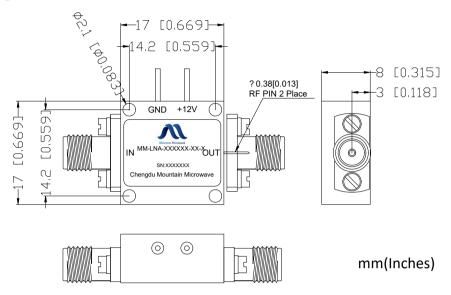
### **Mechanical Specifications:**

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



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## **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.