Low Noise Amplifier MM-LNA-005400-28-5 0.5 to 40 GHz

## **General Description:**

MM-LNA-005400-28-5 is a Low Noise Amplifier that operates over the frequency range of 0.5 to 40 GHz. This model provides a typical gain of 30 dB and a typical noise figure of 5.0 dB. It provides an OP1dB of 13 dB typical and operates on +12 VDC witha typical current draw of 350 mA.

#### **Features:**

Ultra Wide Band: 0.5-40.0 GHz

• Gain: 28 dB

50 Ohm input and output match

Internally regulated

Unconditionally stable

### **Applications:**

- Radar Systems
- Communication Systems
- Receivers Systems

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

Parameter	Value			Heite
	Min	Тур	Max	Units
Frequency Range	0.5		40	GHz
Gain	25	28		dB
Gain Flatness		±2.0	±2.5	dB
Noise Figure		5.0		dB
Output Power (P1dB)		17		dBm
Output IP3		30		dBm
Input VSWR		1.8	2.5	:1
Output VSWR		1.8	2.5	:1
DC Voltage		+12		V
DC Current		350		mA

### **Absolute Maximum Ratings:**

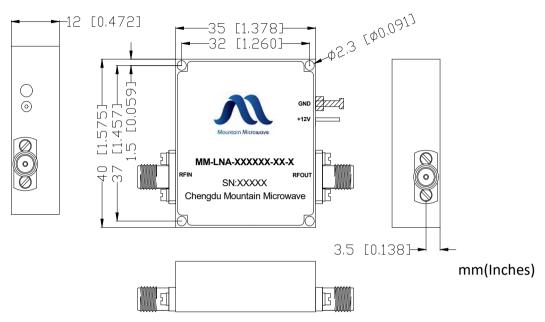
Condition	Value	
DC Voltage	+15V	
Maximum Input Power(CW)	-5 dBm	
ESD sensitivity (HBm)	Class 0, passed 150V	

## **Mechanical Specifications:**

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