



Mountain Microwave

# Focus on the future Waveguide Low Noise Amplifier

MM-MLN-110170-35-60

110 to 170 GHz

## General Description:

MM-MLN-110170-35-60 is a Waveguide Low Noise Amplifier that operates over the frequency range of 110 to 170 GHz. This model provides a typical gain of 33 dB and a typical noise figure of 4.8 dB. It provides an OP1dB of 0 dB typical and operates on +7 VDC with a typical current draw of 53 mA.

## Features:

- Ultra Wide Band: 110-170 GHz
- Gain: 33 dB
- Internally regulated
- Unconditionally stable

## Applications:

- Radar Systems
- Communication Systems
- Receivers Systems

## Electrical Specifications (23° C):

Parameter	Value			Units
	Min	Typ	Max	
Frequency Range	110		170	GHz
Gain		33		dB
Gain Flatness		-		dB
Noise Figure		4.8		dB
Output Power (P1dB)		0		dBm
Psat		2		dBm
Input VSWR		2.5		:1
Output VSWR		2.0		:1
DC Voltage		+7		V
DC Current		53		mA

## Absolute Maximum Ratings:

Condition	Value
DC Voltage	+7V
Maximum Input Power(CW)	10 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

## Mechanical Specifications:

Parameter	Value
Length	50 mm
Width	30 mm
Height	22 mm
RF Connector	WR06/UG-387



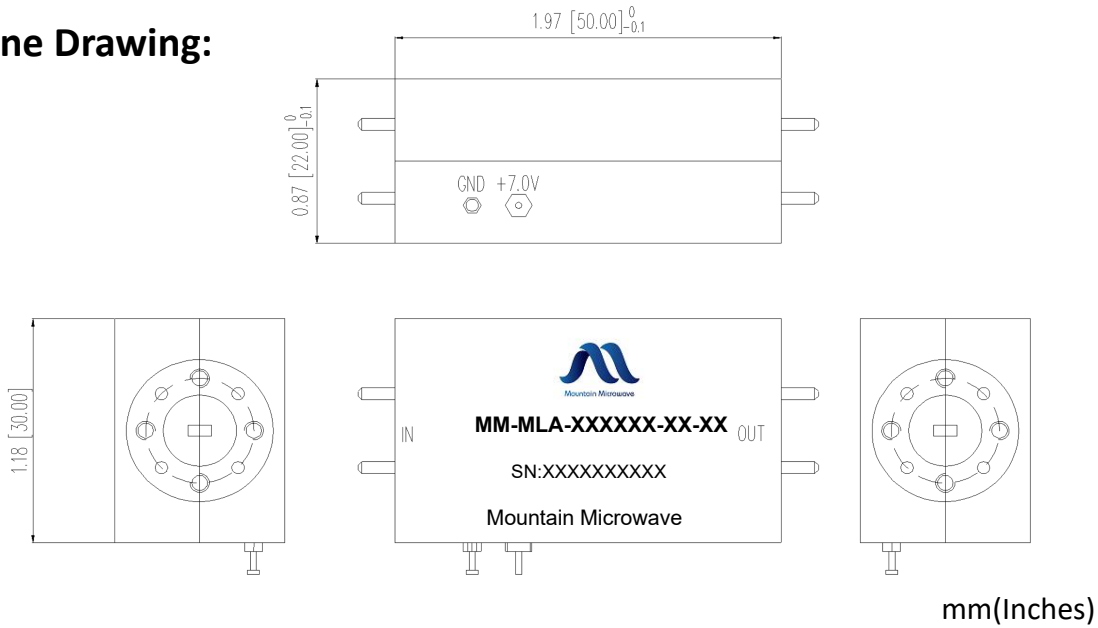
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## Outline Drawing:



## Environmental Conditions:

Parameter	Standard	Description
Operational Temperature		-55°C~+85°C
Storage Temperature		-45°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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