



**Focus on the future** **Waveguide Low Noise Amplifier**  
 MM-MLN-050075-34-45  
 50 to 75 GHz

**General Description:**

MM-MLN-050075-34-45 is a Waveguide Low Noise Amplifier that operates over the frequency range of 50 to 75 GHz. This model provides a typical gain of 34 dB and a typical noise figure of 4.5 dB. It provides an OP1dB of 8 dB typical and operates on +12 VDC with a typical current draw of 120 mA.

**Features:**

- Ultra Wide Band: 50-75 GHz
- Gain: 34 dB
- Internally regulated
- Unconditionally stable

**Applications:**

- Radar Systems
- Communication Systems
- Receivers Systems

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

Parameter	Value			Units
	Min	Typ	Max	
Frequency Range	50		75	GHz
Gain		34		dB
Gain Flatness		-		dB
Noise Figure		4.5		dB
Output Power (P1dB)		8		dBm
Input VSWR		2.5		:1
Output VSWR		2.5		:1
DC Voltage		+12		V
DC Current		120		mA

**Absolute Maximum Ratings:**

Condition	Value
DC Voltage	+12V
Maximum Input Power(CW)	-10 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

**Mechanical Specifications:**

Parameter	Value
Length	39 mm
Width	30 mm
Height	21 mm
RF Connector	WR15/UG-385



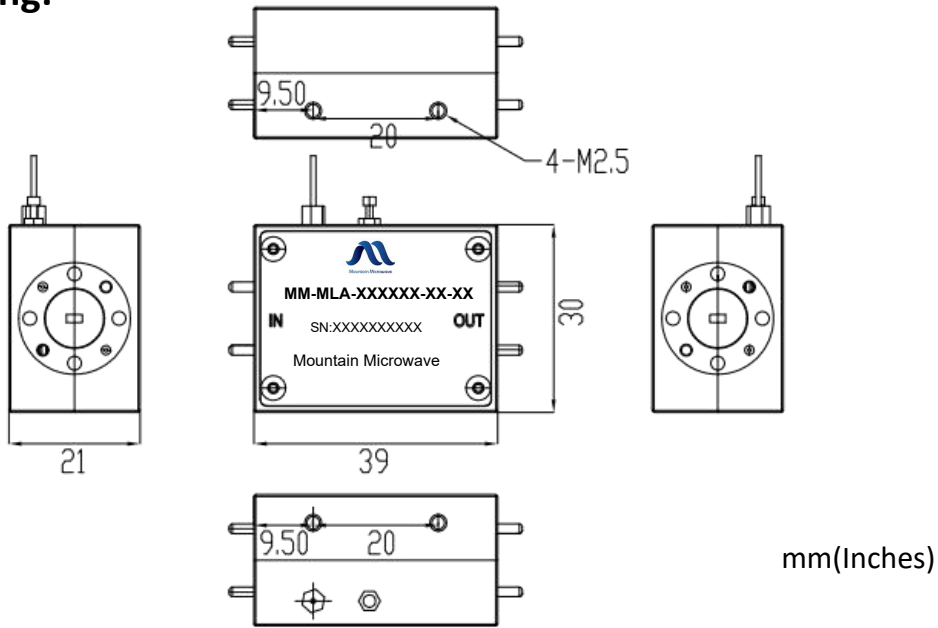
Mountain Microwave

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## Outline Drawing:



## Environmental Conditions:

Parameter	Standard	Description
Operational Temperature		-10°C~+65°C
Storage Temperature		-25°C~+75°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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