Mountain Microwave

Focus on the future

Waveguide Low Noise Amplifier

MM-MLN-060090-30-50

60 to 90 GHz

General Description:

MM-MLN-060090-30-50 is a Waveguide Low Noise Amplifier that operates over the frequency range of 60 to 90 GHz. This model provides a typical gain of 30 dB and a typical noise figure of 5.0 dB. It provides an OP1dB of 0 dB typical and operates on +5 VDC witha typical current draw of 340 mA.

Features:

- Ultra Wide Band: 60-90 GHz
- Gain: 30 dB
- Internally regulated
- Unconditionally stable

Applications:

- Radar Systems
- Communication Systems
- Receivers Systems

Electrical Specifications (23° C):

Parameter	Value			Units
	Min	Typ	Max	
Frequency Range	60		90	GHz
Gain		30		dB
Gain Flatness		-		dB
Noise Figure		5.0		dB
Output Power (P1dB)		-		dBm
Psat		15		dBm
Input Return Loss		6		dB
Output Return Loss		6		dB
DC Voltage		+5		V
DC Current		340		mA

Absolute Maximum Ratings:

Condition	Value
DC Voltage	+5V
Maximum Input Power(CW)	10 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Mechanical Specifications:

Parameter	Value
Length	45 mm
Width	30 mm
Height	22 mm
RF Connector	WR12/UG-387

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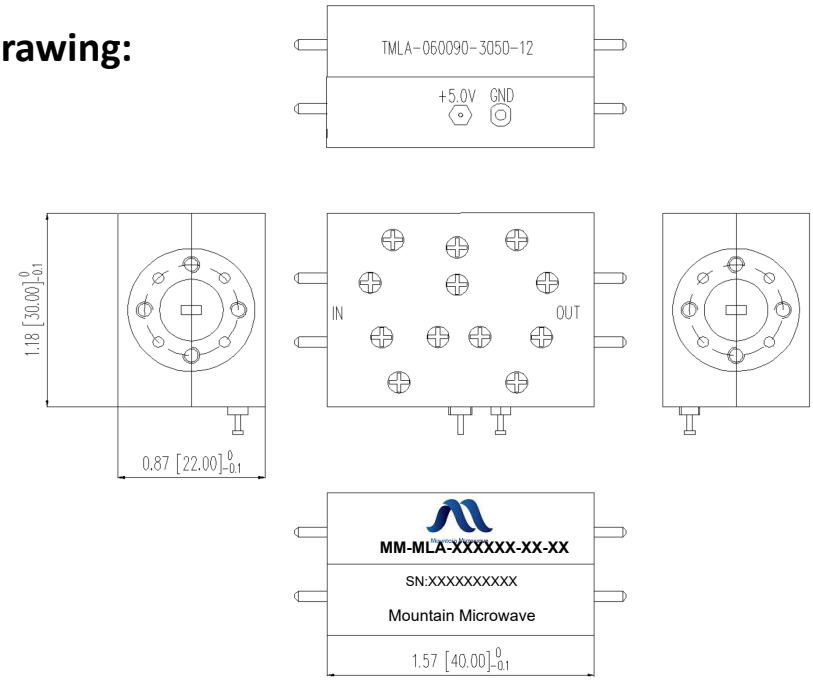
Outline Drawing:



mm(Inches)

Environmental Conditions:

Parameter	Standard	Description
Operational Temperature		0℃~+60℃
Storage Temperature		-45℃~+125℃
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℃
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. ver 2.0 0318