Mountain Microwave

Focus on the future

Waveguide Low Noise Amplifier

MM-MLN-050070-37-22

50 to 70 GHz

General Description:

MM-MLN-050070-37-22 is a Waveguide Low Noise Amplifier that operates over the frequency range of 50 to 70 GHz. This model provides a typical gain of 37 dB and a typical noise figure of 2.2 dB. It provides an OP1dB of -5 dB typical and operates on +5 VDC witha typical current draw of 58 mA.

Features:

- Ultra Wide Band: 50-70 GHz
- Gain: 37 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		70	GHz
Gain	33	37		dB
Gain Flatness		-		dB
Noise Figure		2.2	2.8	dB
Output Power (P1dB)		-5		dBm
Psat		-		dBm
Input VSWR		2.0		:1
Output VSWR		2.0		:1
DC Voltage		+5		V
DC Current		58		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	50 mm
Width	30 mm
Height	22 mm
RF Connector	WR15/UG-387

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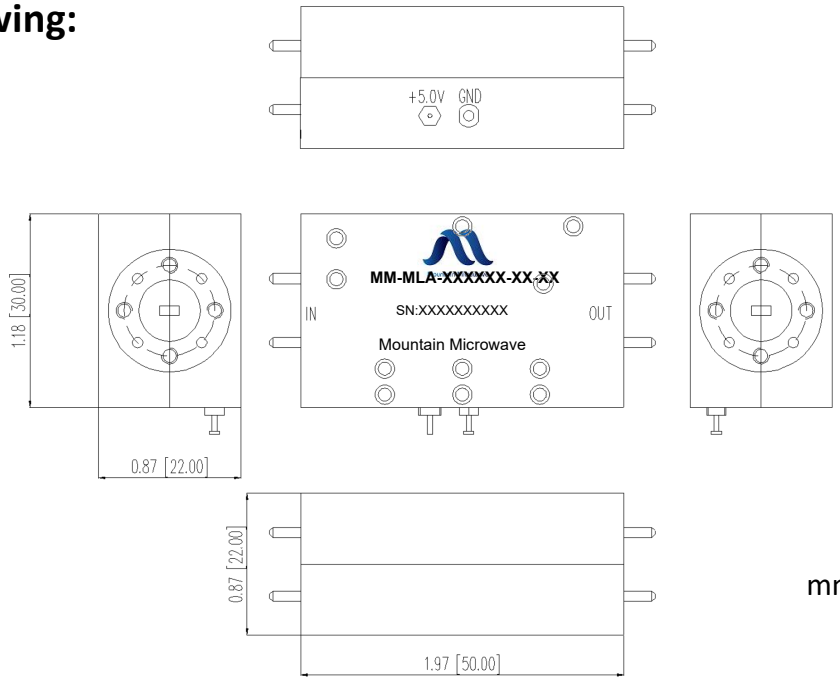
Outline Drawing:



mm(Inches)

Environmental Conditions:

Parameter	Standard	Description
Operational Temperature		0℃~+65℃
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.

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