Mountain Microwave

Focus on the future

Waveguide Low Noise Amplifier

MM-MLN-110170-19-40

110 to 170 GHz

General Description:

MM-MLN-110170-19-40 is a Waveguide Low Noise Amplifier that operates over the frequency range of 110 to 170 GHz. This model provides a typical gain of 19 dB and a typical noise figure of 4.0 dB. It provides an OP1dB of 0 dB typical and operates on +7 VDC witha typical current draw of 30 mA.

Features:

- Ultra Wide Band: 110-170 GHz
- Gain: 19 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	15	19		dB
Gain Flatness		-		dB
Noise Figure		4.0		dB
Output Power (P1dB)		0		dBm
Psat		2		dBm
Input VSWR		-		:1
Output VSWR		-		:1
DC Voltage	+5-+7			V
DC Current		30		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	35 mm
Width	30 mm
Height	22 mm
RF Connector	WR06/UG-387

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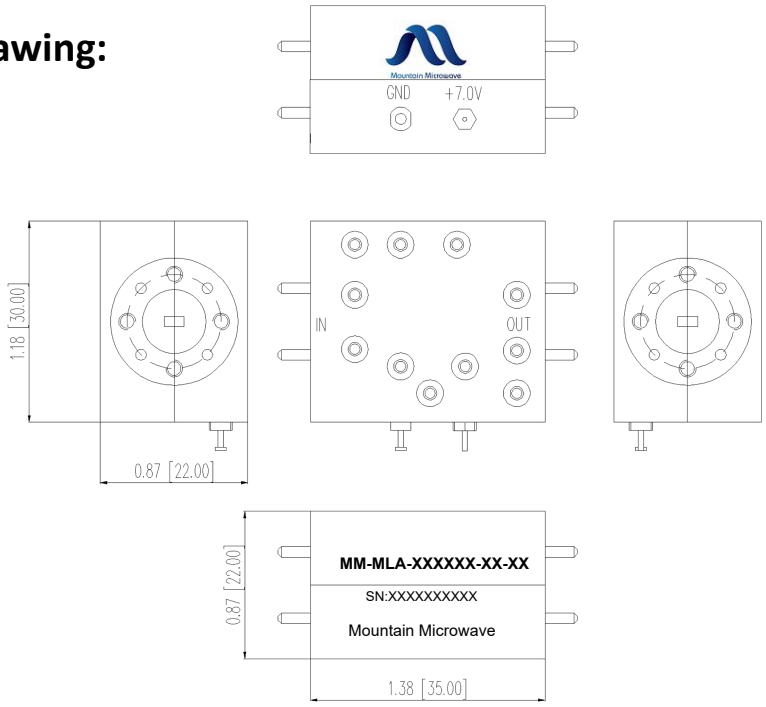
Outline Drawing:



mm(Inches)

Environmental Conditions:

Parameter	Standard	Description
Operational Temperature		-55℃~+85℃
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