Suzhou Talent Microwave,Inc
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Low Noise Amplifier

WR-15/50-70GHz/2.2dB NF/37dB Gain Model: TMLA-050070-3722-15

TMLA-050070-3722-15 is a V-Band low noise amplifier with a typical small signal gain of 37 dB and a nominal noise figure of 2.2 dB across the frequency range of 50 to 70 GHz. The DC power requirement for the amplifier is +5 VDC /58 mA. The input and output port configuration offers an inline structure with WR-15 waveguides and UG-385/U-M anti-cocking flanges.

Features:

- Frequency range:50-70GHz
- Gain: 37dB Typ
- Noise Figure: 2.2dB Typ
- Unconditional stability

Applications:

- Passive Imaging
- 5G Systems

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	50		70	GHz
Small Signal Gain	33	37		dB
Noise Figure		2.2	2.8	dB
Output P1dB		-5		dBm
Input VSWR		2		:1
Output VSWR		2		:1
DC Voltage		5		V DC
DC Supply Current		58		mA

Mechanical Specifications:

Parameter	Value	Units
Input Connector	WR-15/ UG-385/U	
Output Connector	WR-15/ UG-385/U	
Power Supply Pin	Solder Pin	
Size	50*30*22	mm

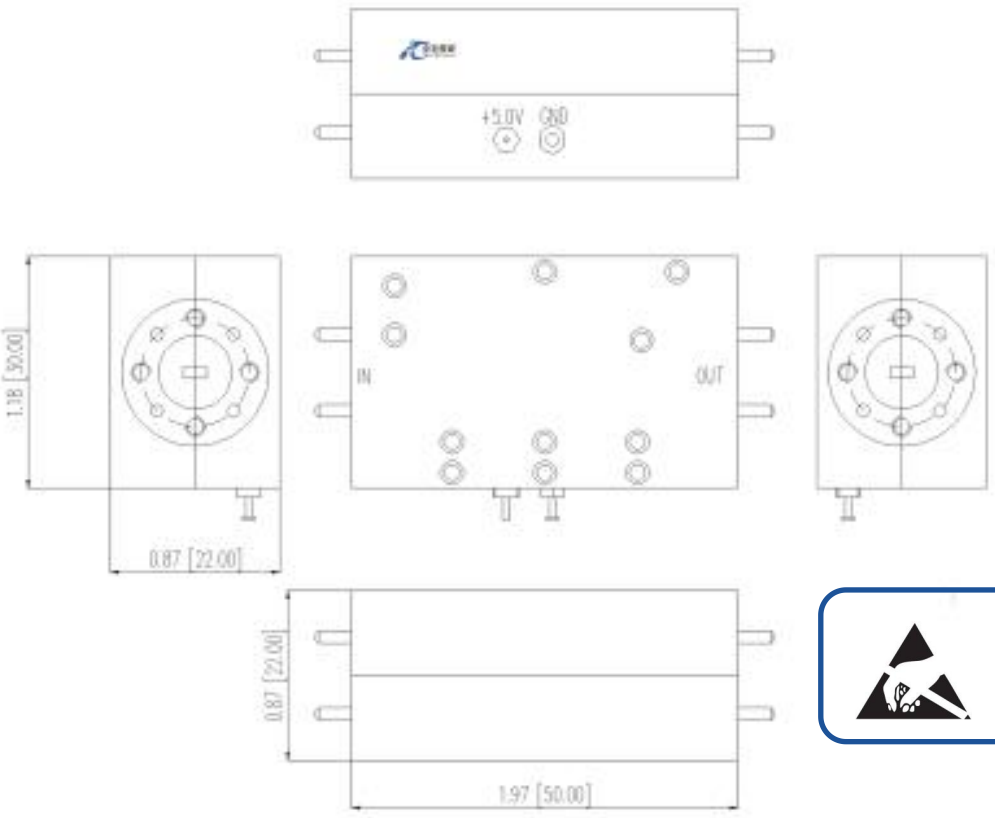
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Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+6 V
RF Input Power	10 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm; Tolerance:±0.1mm



ESD Protection: Strictly adhere to ESD precautions to prevent electrostatic damage.

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Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature	-40		+75	℃
Non-operating Temperature	-55		+85	℃
Relative humidity		95		%
Altitude	50,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

Base Number	Description	Revision
TMLA-050070-3722-15	Low Noise Amplifier,50-70GHz, Noise Figure:2.2dB, Gain:37dB, +5V DC,WR-15	Rev.1.1