Suzhou Talent Microwave,Inc
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Low Noise Amplifier

WR-5.1/170-200GHz/4.0dB NF/20dB Gain Model: TMLA-170200-2040-05

TMLA-170200-2040-05 is a G-Band low noise amplifier with a typical small signal gain of 20 dB and a nominal noise figure of 4.0 dB across the frequency range of 170 to 200 GHz. The DC power requirement for the amplifier is +6 VDC/30 mA. The input and output port configuration offers an inline structure with WR-5.1 waveguides and UG-387/U-M anti-cocking flanges.

Features:

- Frequency range:170-200GHz
- Gain: 20dB Typ
- Noise Figure: 4.0dB Typ
- Unconditional stability

Applications:

- Passive Imaging
- 5G Systems

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	170		200	GHz
Small Signal Gain		20		dB
Noise Figure		4.0		dB
DC Voltage		6		V DC
DC Supply Current		30		mA

Mechanical Specifications:

Parameter	Value	Units
Input Connector	WR-5.1/ UG-387/U	
Output Connector	WR-5.1/ UG-387/U	
Power Supply Pin	Solder Pin	
Size	35*30*22	mm

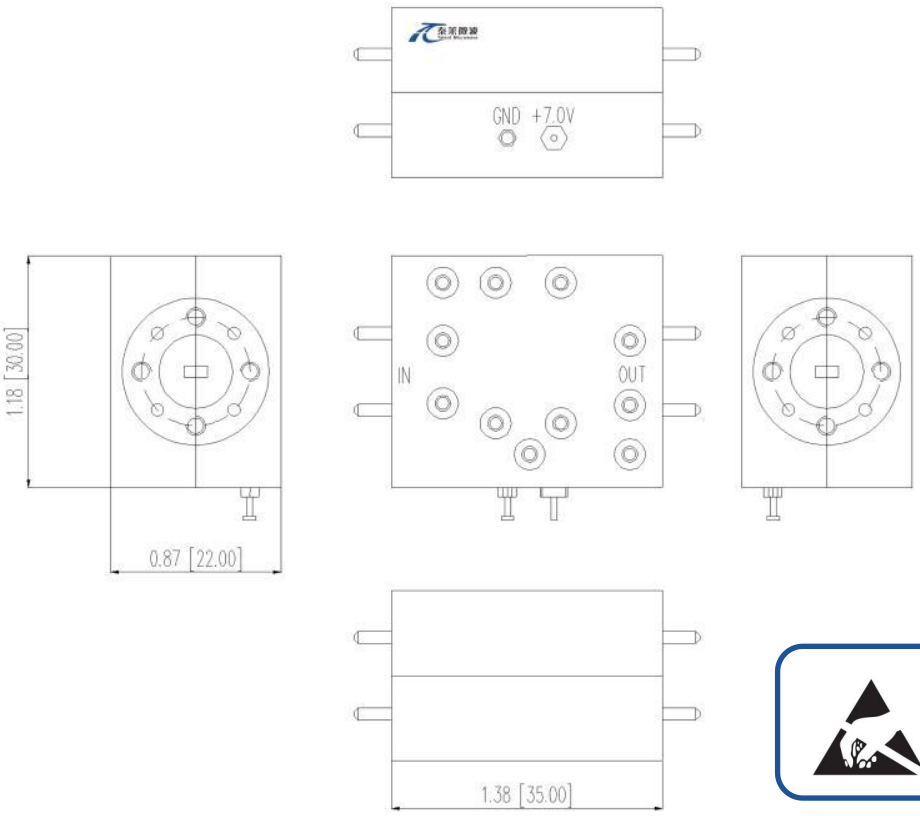
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Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	TBD
RF Input Power	TBD
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-170200-2040-05	Low Noise Amplifier,170-200GHz, Noise Figure:4.0dB, Gain:20dB, +6V DC,WR-5.1	Rev.1.0