

Low Noise Amplifier

WR-3.4/310-330GHz/9dB NF/25dB Gain

Model: TMLA-310330-3090-3.4

TMLA-310330-3090-3.4 is a low noise amplifier with a typical small signal gain of 25 dB and a nominal noise figure of 9 dB across the frequency range of 310 to 330 GHz. The DC power requirement for the amplifier is +12 VDC /80 mA. The input and output port configuration offers an inline structure with WR-3.4 waveguides and UG-387/U-M anti-cocking flanges.

Features:

- Frequency range: 310-330GHz
- Gain: 25dB Typ
- Noise Figure: 9dB Typ
- Unconditional stability

Applications:

- Passive Imaging
- 5G Systems

电气特性 Electrical Characteristics:

参数 Parameter	Min	Typ	Max	单位 Units
频率范围 Frequency range	310		330	GHz
小信号增益 Small Signal Gain		25		dB
噪声系数 Noise Figure		9		dB
直流电压 DC Voltage		12		V DC
直流电流 DC Supply Current		80		mA

机械特性 Mechanical Specifications:

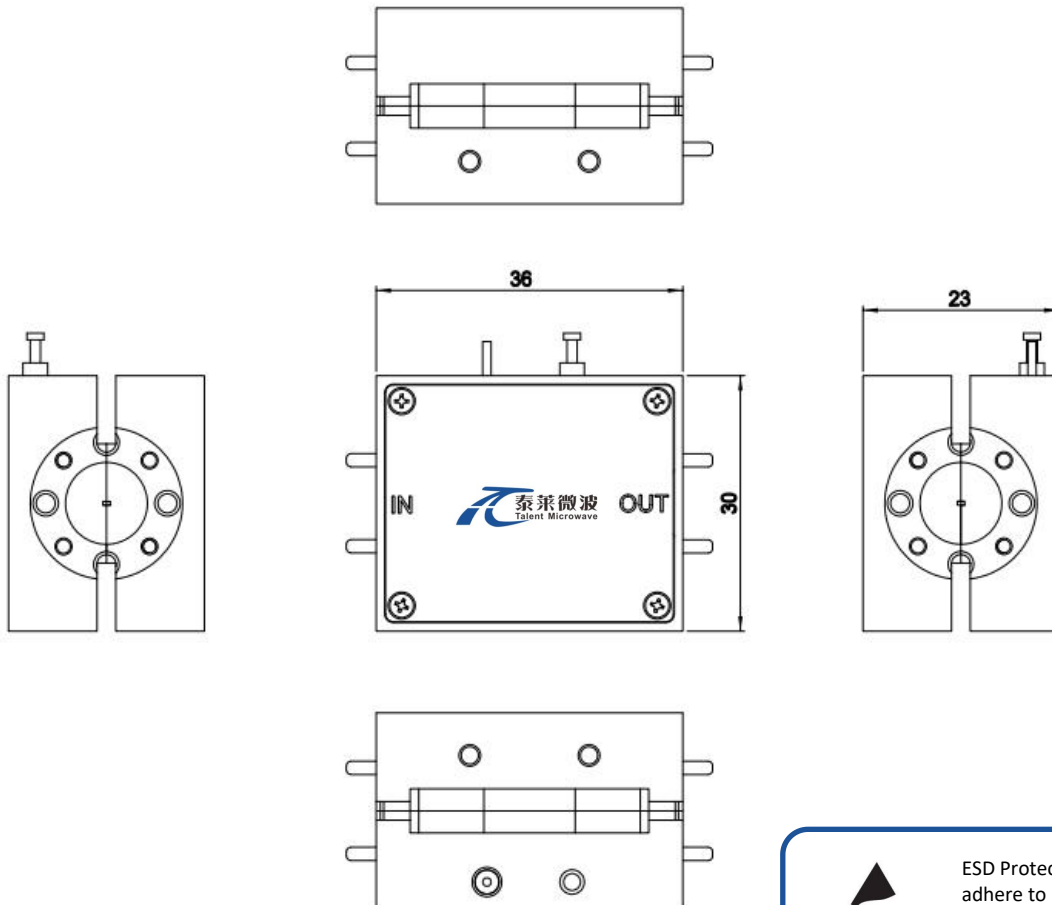
参数 Parameter	指标 Value	单位 Units
输入接口 Input Connector	WR-3.4/ UG-387/U	
输出接口 Output Connector	WR-3.4/ UG-387/U	
供电引脚 Power Supply Pin	Solder Pin	
尺寸 Size	36*30*23	mm

绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+15 V
输入功率 RF Input Power	+10 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

外形图 Outline Drawing:

Unit:mm; Tolerance:±0.1mm



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

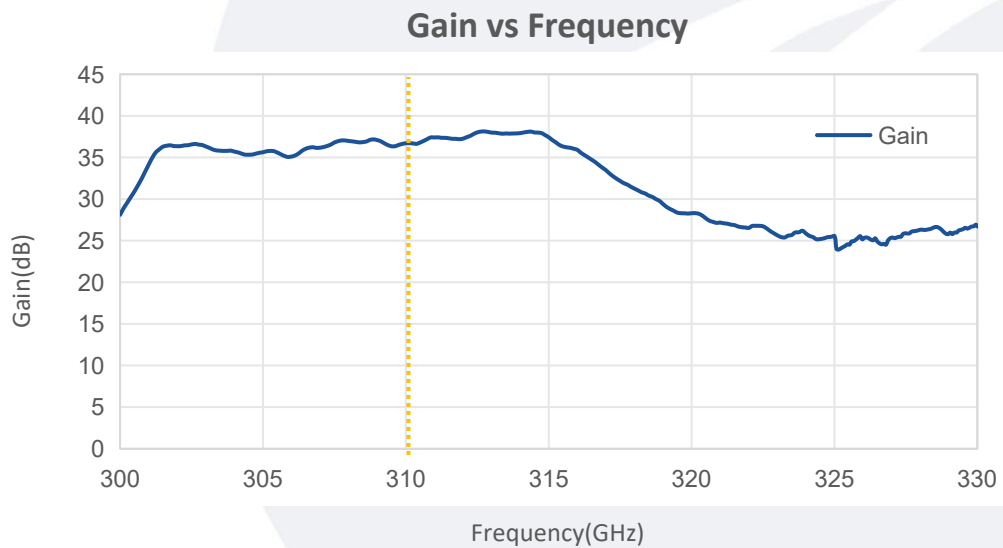
温度环境 Environmental Conditions:

参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature	-10		+65	℃
存储温度 Non-operating Temperature	-45		+85	℃
相对湿度 Relative humidity		95		%
海拔 Altitude	10,000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

订货信息 Ordering Information:

标准型号 Base Number	描述 Description	版本号 Revision
TMLA-310330-3090-3.4	Low Noise Amplifier,310-330GHz, Noise Figure:9dB, Gain:25dB, +12V DC, WR-3.4	Rev.1.0

典型曲线 Typical Performance Data:



Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.