泰莱微波 Talent Microwave
Suzhou Talent Microwave,Inc
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Low Noise Amplifier

WR-4.3/195-230GHz/6.8dB NF/22dB Gain Model: TMLA-195230-2568-04

TMLA-195230-2568-04 is a Y-Band low noise amplifier with a typical small signal gain of 22 dB and a nominal noise figure of 6.8 dB across the frequency range of 195 to 230 GHz. The DC power requirement for the amplifier is +5 VDC/40 mA. The input and output port configuration offers an inline structure with WR-4.3 waveguides and UG-387/U-M anti-cocking flanges.

Features:

- Frequency range:195-230GHz
- Gain: 22dB Typ
- Noise Figure: 6.8dB 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	195		230	GHz
小信号增益 Small Signal Gain		22		dB
噪声系数 Noise Figure		6.8		dB
输入驻波 Input VSWR		2		:1
输出驻波 Output VSWR		2.5		:1
直流电压 DC Voltage		5		V DC
直流电流 DC Supply Current		40		mA

机械特性 Mechanical Specifications:

参数 Parameter	指标 Value	单位 Units
输入接口 Input Connector	WR-4.3/ UG-387/U	
输出接口 Output Connector	WR-4.3/ UG-387/U	
供电引脚 Power Supply Pin	Solder Pin	
尺寸 Size	35*30*23	mm

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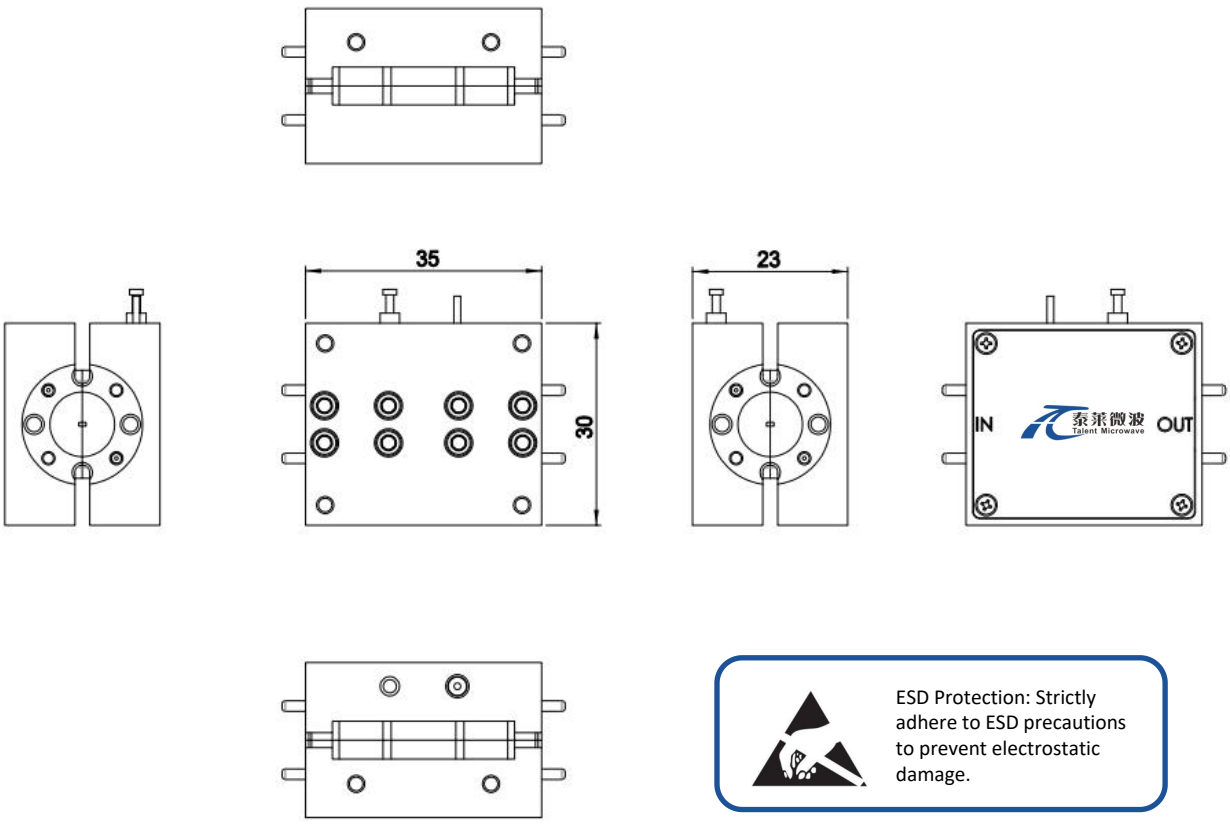
绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+6 V
输入功率 RF Input Power	TBD
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.

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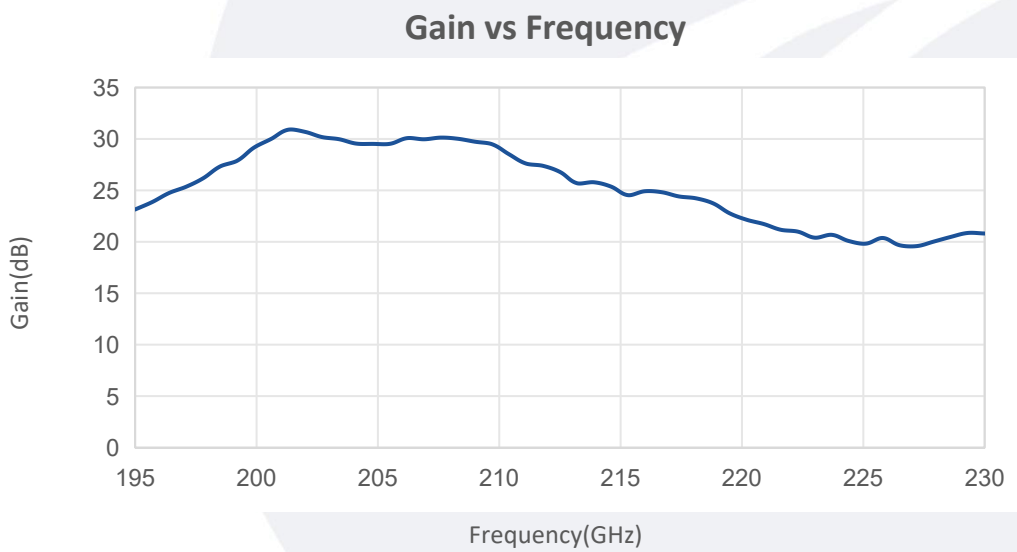
温度环境 Environmental Conditions:

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-195230-2568-04	Low Noise Amplifier,195-230GHz, Noise Figure:6.8dB, Gain:22dB,+5V DC,WR-4.3	Rev.1.1

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.

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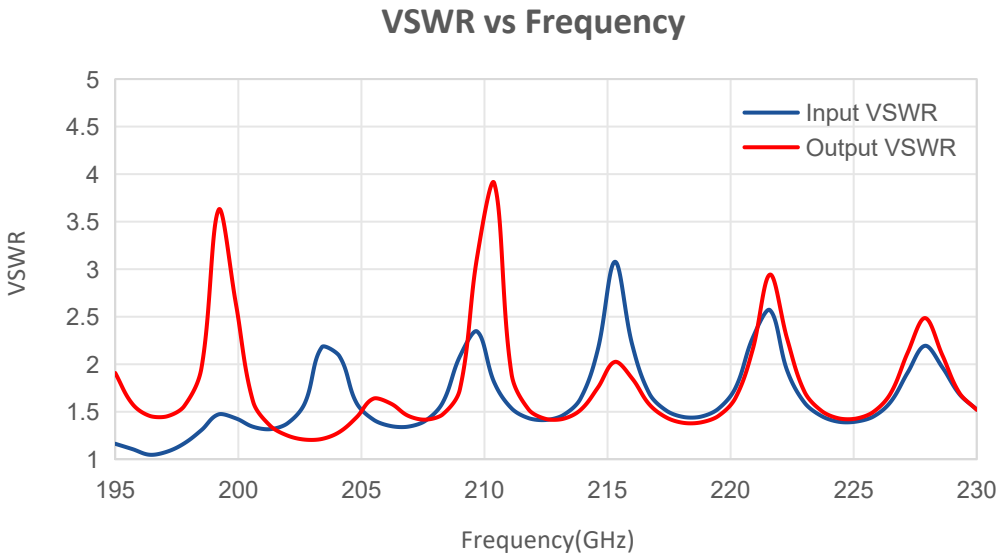

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