

Low Noise Amplifier

WR-03/219-270GHz /8.0dB NF/15dB Gain**Model: TMLA-219270-1580-03**

TMLA-219270-1580-03 is a low noise amplifier with a typical small signal gain of 15 dB and a nominal noise figure of 8.0 dB across the frequency range of 219 to 270 GHz. The DC power requirement for the amplifier is +12 VDC/36 mA. The input and output port configuration offers an inline structure with WR-03 waveguides and UG-387/U-M anti-cocking flanges.

Features:

- Frequency range:219-270GHz
- Gain: 15dB Typ
- Noise Figure: 8.0dB 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	219		270	GHz
增益 Gain		15		dB
噪声系数 Noise Figure		8.0		dB
直流电压 DC Voltage		+12		V DC
直流供电 DC power supply		38		mA

机械特性 Mechanical Specifications:

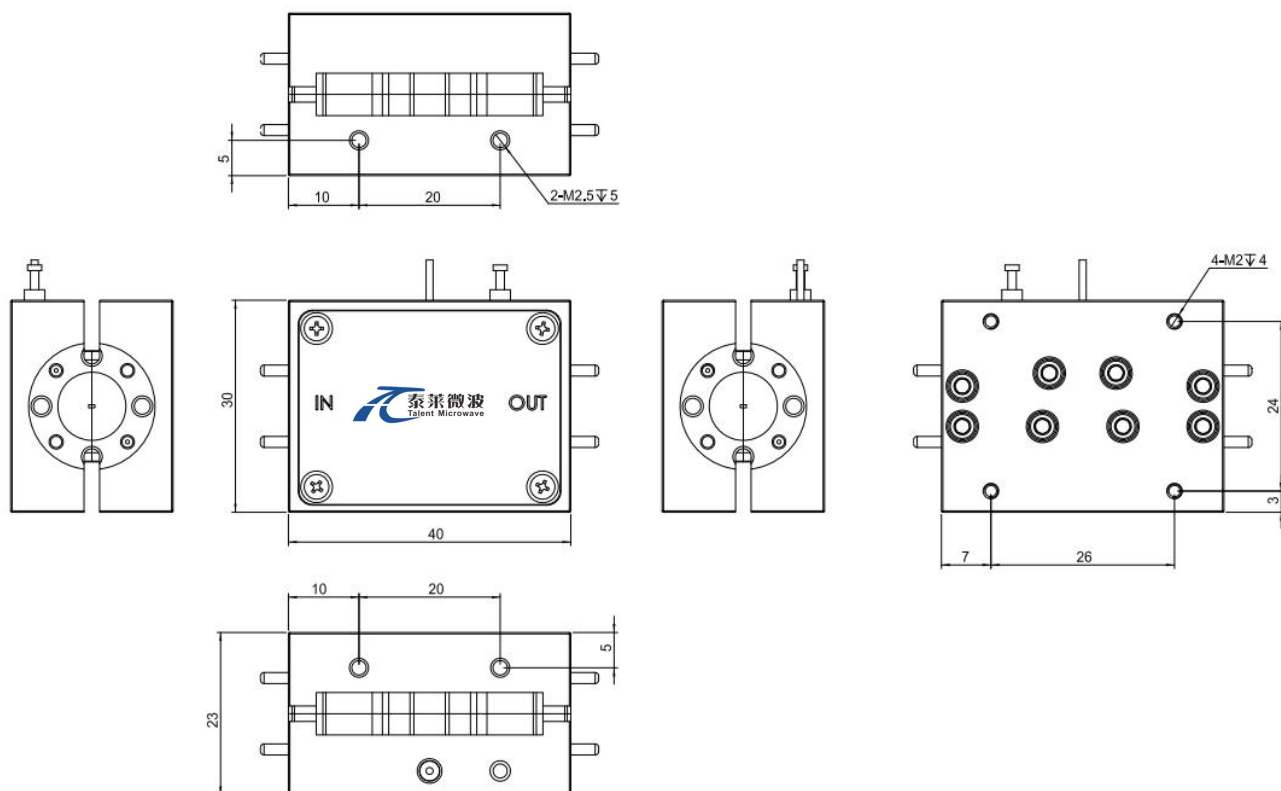
参数 Parameter	指标 Value	单位 Units
输入接口 Input Connector	WR-03/ UG-387/U	
输出接口 Output Connector	WR-03/ UG-387/U	
供电引脚 Power Supply Pin	Solder Pin	
尺寸 Size	40*30*23	mm

绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+12 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



温度环境 Environmental Conditions:

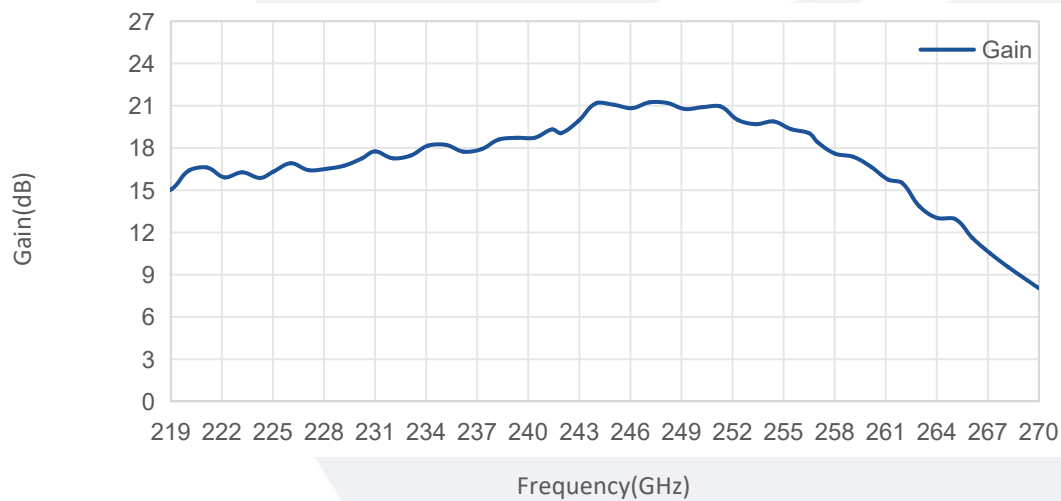
参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature	-10		+65	℃
存储温度 Non-operating Temperature	-45		+85	℃
相对湿度 Relative humidity		95		%
海拔 Altitude	10,000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half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

订货信息 Ordering Information:

标准型号 Base Number	描述 Desciption	版本号 Revision
TMLA-219270-1580-03	Low Noise Amplifier,219-270GHz, Noise Figure:8.0dB, Gain:15dB,+12V DC,WR-03	Rev.1.1

典型曲线 Typical Performance Data:

Gain vs Frequency



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.