

Low Noise Amplifier

WR-4.3/170-260GHz/8dB NF/16dB Gain

Model: TMLA-170260-1680-04

TMLA-170260-1680-04 is a H-Band low noise amplifier with a typical small signal gain of 16 dB and a nominal noise figure of 8 dB across the frequency range of 170 to 260 GHz. The DC power requirement for the amplifier is +5 VDC. 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:170-260GHz
- Gain: 16dB Typ
- Noise Figure: 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	170		260	GHz
小信号增益 Small Signal Gain		16		dB
增益平坦度 Gain Flatness		±3		dB
噪声系数 Noise Figure		8		dB
直流电压 DC Voltage		5		V DC

机械特性 Mechanical Specifications:

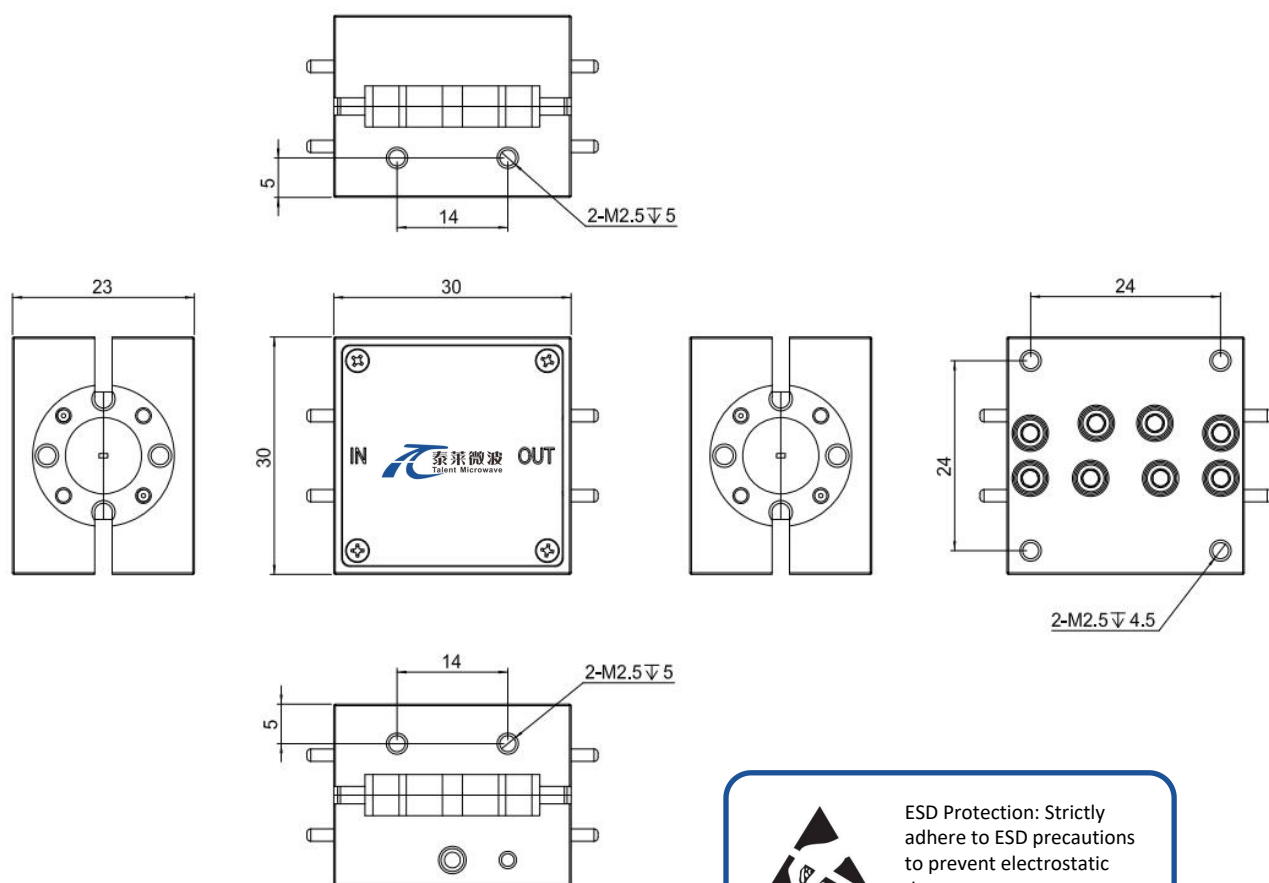
参数 Parameter	指标 Value	单位 Units
输入接口 Input Connector	WR-4.3/ UG-387/U	
输出接口 Output Connector	WR-4.3/ UG-387/U	
供电引脚 Power Supply Pin	Solder Pin	
尺寸 Size	30*30*23	mm

绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+8 V
输入功率 RF Input Power	+5 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-170260-1680-04	Low Noise Amplifier,170-260GHz, Noise Figure:8.0dB, Gain:16dB,+5V DC,WR-4.3	Rev.1.0