泰莱微波
Talent Microwave

Suzhou Talent Microwave,Inc
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75-110GHz Low Noise Amplifier

1.0mm/75-110GHz/4.5dB NF/33dB Gain Model: TLLA75G110G-25-45

TLLA75G110G-25-45 is a W-Band low noise amplifier with a typical small signal gain of 33 dB and a nominal noise figure of 4.5 dB across the frequency range of 75 to 110 GHz. The DC power requirement for the amplifier is +12 VDC. The input and output port configuration offers coax adapter structure with 1.0mm female.

Features:

- Frequency range: 75-110GHz
- Gain: 33dB Typ
- Noise Figure: 4.5dB Typ
- Unconditional stability

Applications:

- Passive Imaging
- Communication Systems
- Radar Systems

电气特性 Electrical Characteristics:

参数 Parameter	Min	Typ	Max	单位 Units
频率范围 Frequency range	75		110	GHz
增益 Gain		33		dB
噪声系数 Noise Figure		4.5		dB
饱和输出功率 Output Psat		15		dBm
直流电压 DC Voltage		12		V DC
阻抗 Impedance		50		Ohms

机械特性 Mechanical Specifications:

参数 Parameter	指标 Value	单位 Units
输入/输出接口 Input /Output Connector	1.0mm Female/1.0mm Female	
直流偏置 DC Bias	Solder Pin	
尺寸 Size	41.8*51.8*12	mm

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绝对最大值 Absolute Maximum Ratings:

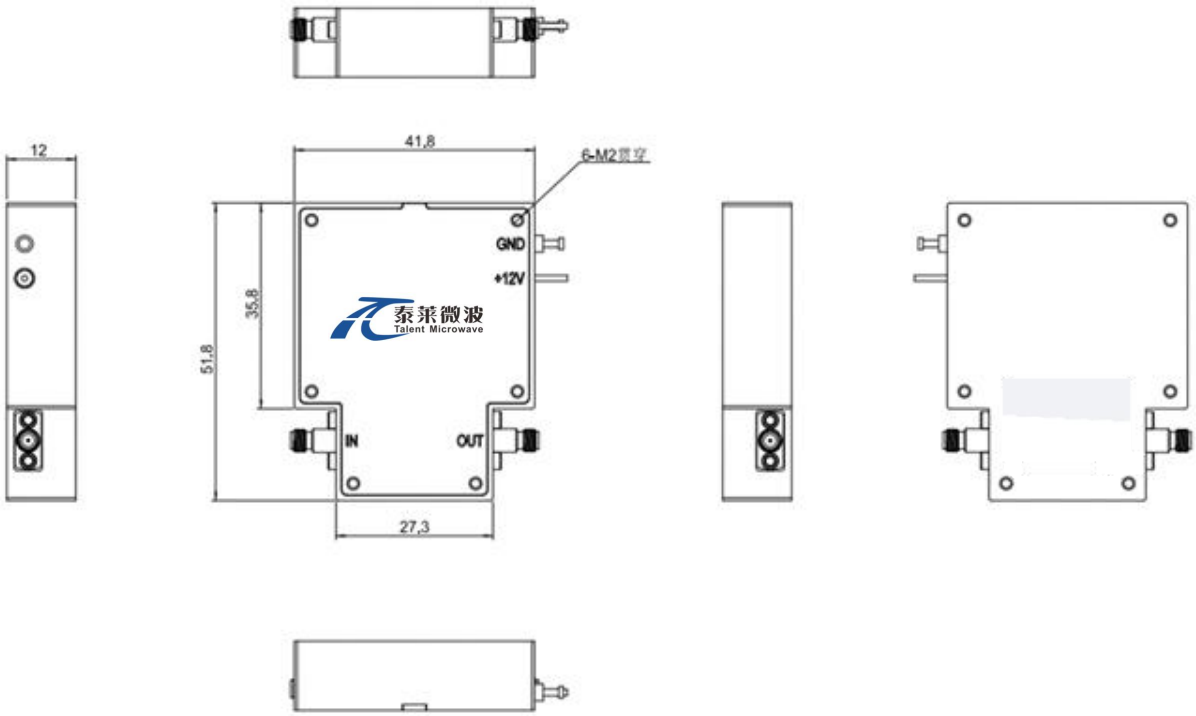
参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+15 V
输入功率 RF Input Power	+0dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V



Simple 220V System
Available SAC option

外形图 Outline Drawing:

Unit:mm; Tolerance:±0.1mm



***Heat Sink Required During Operation



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

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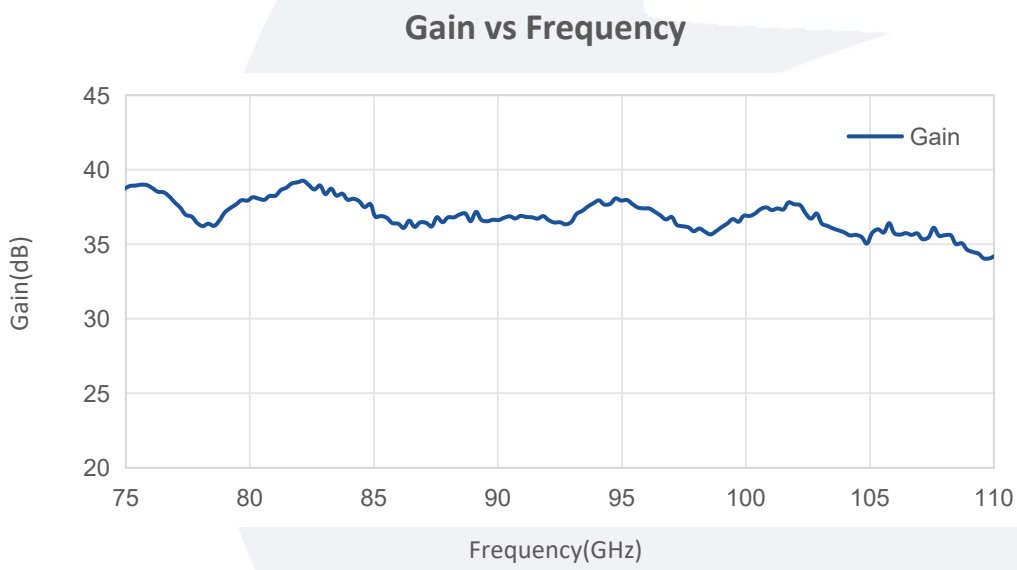
温度环境 Environmental Conditions:

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
TLLA75G110G-25-45	Low Noise Amplifier, 75-110 GHz, Noise Figure:2.0dB, Gain:33 dB Type+12V DC,1.0mm Female	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.

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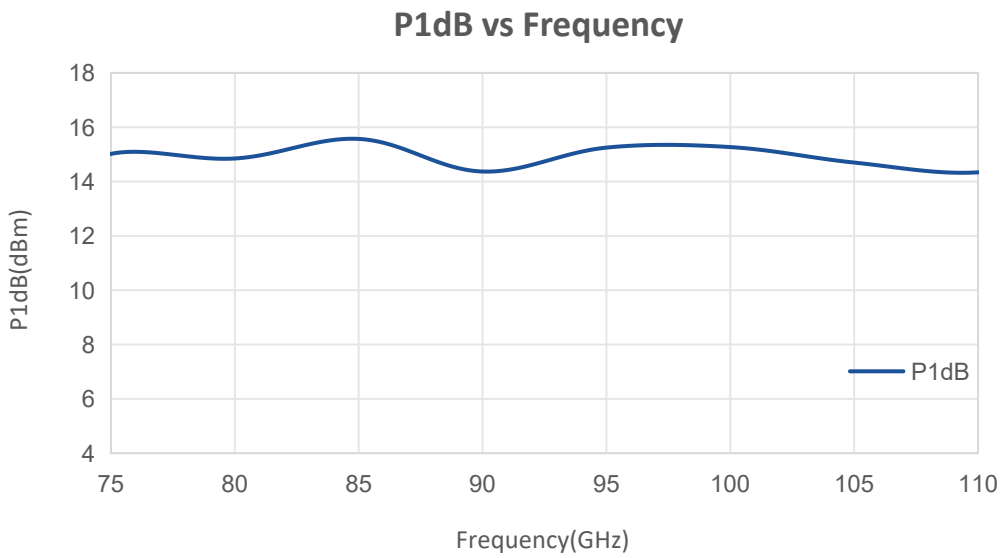

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