泰莱微波 Talent Microwave

Suzhou Talent Microwave,Inc
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Low Noise Amplifier

10MHz-110GHz/6dB NF/20dB Gain/4dBm P1dB Model: TLLA10M110G-13-60

TLLA10M110G-13-60 is a low noise amplifier with a typical small signal gain of 20 dB and a nominal noise figure of 6dB@10MHz-80GHz across the frequency range of 10MHz to 110 GHz. The DC power requirement for the amplifier is +12 V DC. The input and output port configuration offers coax adapter structure with 1.0mm female.

Features:

- Frequency range: 10MHz-110GHz
- Gain: 20dB Typ
- Noise Figure: 6dB@10MHz-80GHz Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Applications:

- Communication systems

电气特性 Electrical Characteristics:

参数 Parameter		Min	Typ	Max	单位 Units
频率范围 Frequency range		0.01		110	GHz
小信号增益 Small Signal Gain			20		dB
噪声系数 Noise Figure	@10MHz-80GHz		6		dB
	@80-110GHz		8		
线性输出功率 Output P1dB	@10MHz-80GHz		4		dBm
	@80-95GHz		1		
输入驻波 Input VSWR			2		:1
输出驻波 Output VSWR			2.5		:1
直流电压 DC Voltage			+12		V DC
阻抗 Impedance		50			Ohms

*Performance may degrade below 300 MHz. Please refer to below typical test plots

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	
直流供电接口 DC Supply Connector	Solder Pin	
尺寸 Size	41.8*49.8*12	mm

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绝对最大值 Absolute Maximum Ratings:

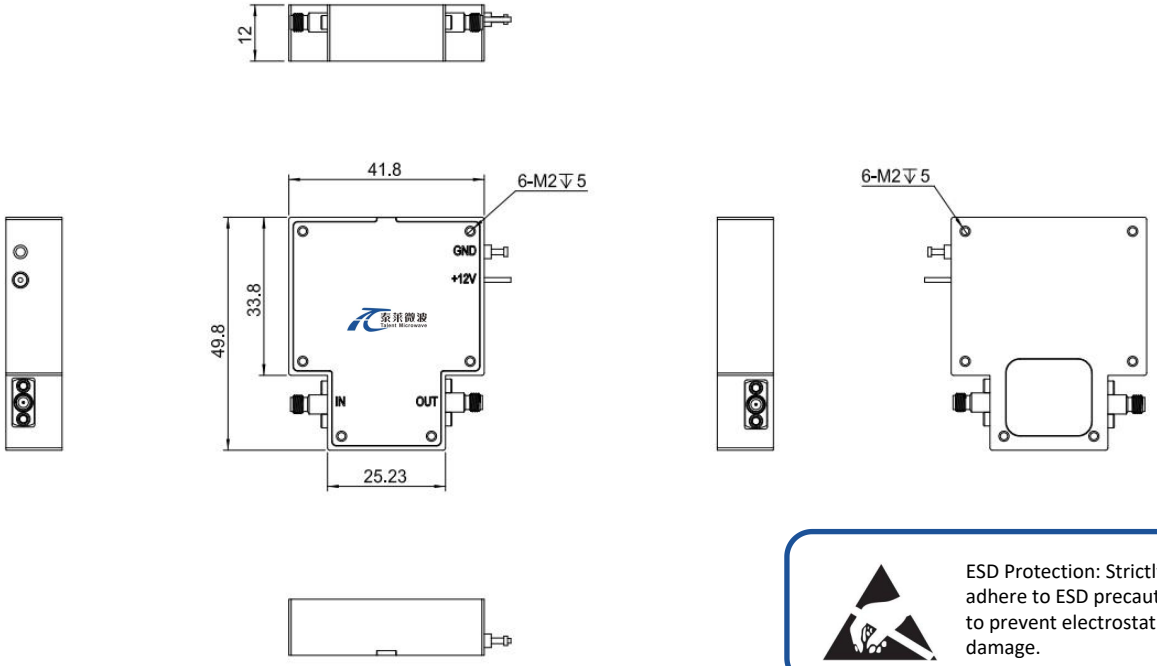
参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+15 V
输入功率 RF Input Power	0 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V



Simple 220V System
Available SAC option

外形图 Outline Drawing:

Unit:mm; Tolerance:±0.1mm



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

温度环境 Environmental Conditions:

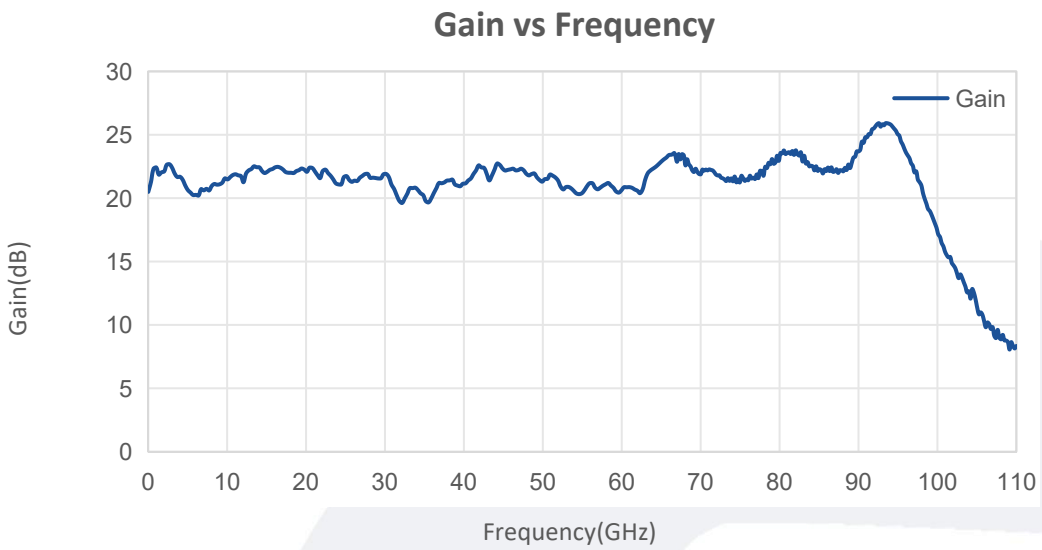
参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature	-45		+85	℃
存储温度 Non-operating Temperature	-55		+125	℃
相对湿度 Relative humidity		95		%
海拔 Altitude	10,000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

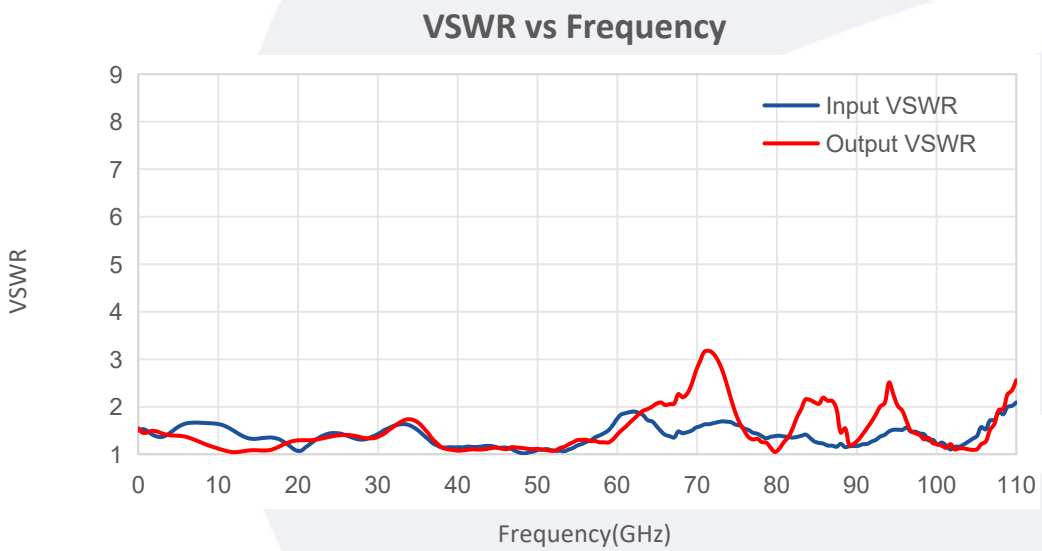
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订货信息 Ordering Information:

标准型号 Base Number	描述 Description	版本号 Revision
TLLA10M110G-13-60	Low Noise Amplifier, 10MHz-110GHz, Noise Figure:6dB, Gain: 20dB,P1dB: 4dBm, +12V DC, Without Heatsink	Rev.1.0
TLLA10M110G-13-60-HS	Low Noise Amplifier, 10MHz-110GHz, Noise Figure:6dB, Gain: 20dB,P1dB: 4dBm, +12V DC, With Heatsink	Rev.1.0

典型曲线 Typical Performance Data:

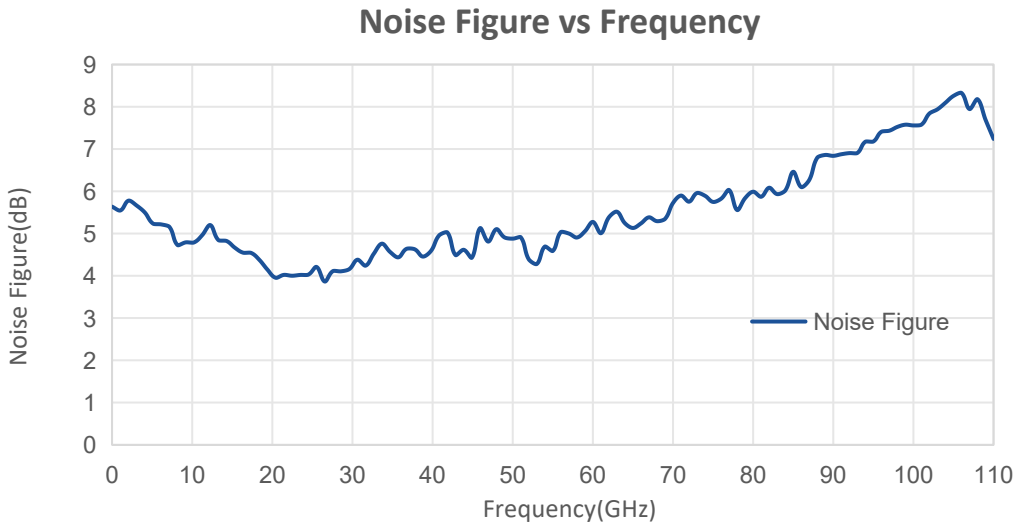


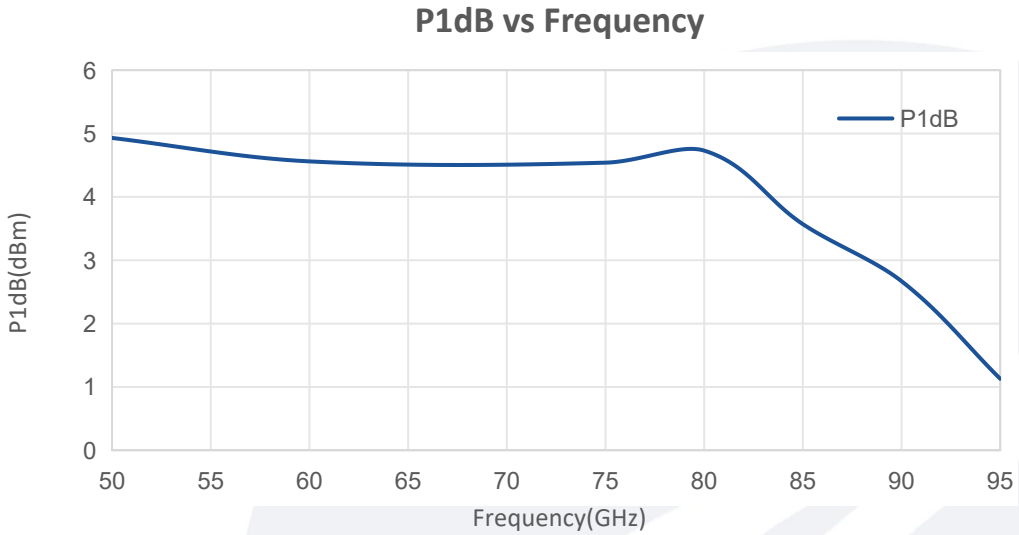


Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

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