Turpanic Co, Ltd
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Low Noise Amplifier

0.2-6GHz/2.1dB NF/29dB Gain/17.5dBm P1dB Model: TLLA0.2G6G-29-17-LC

TLLA0.2G6G-29-17-LC is a low noise amplifier with small signal gain of 29 dB and noise figure of 2.1 dB across the frequency range of 0.2 to 6 GHz. The DC power requirement for the amplifier is +5V DC/80mA. The input and output port configuration offers coax adapter structure with SMA female.

Features:

- Frequency range:0.2-6GHz
- Gain: 29dB Typ
- Noise Figure: 2.1dB 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	0.2		6	GHz
小信号增益 Small Signal Gain		29		dB
增益平坦度 Gain Flatness		±1		dB
噪声系数 Noise Figure		2.1		dB
输出1dB压缩点 Output P1dB	17	17.5		dBm
输入驻波 Input VSWR		2.5		:1
输出驻波 Output VSWR		2.8		:1
直流电压 DC Voltage		5		V DC
直流电流 DC Supply Current		80		mA
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	SMA Female/SMA Female	

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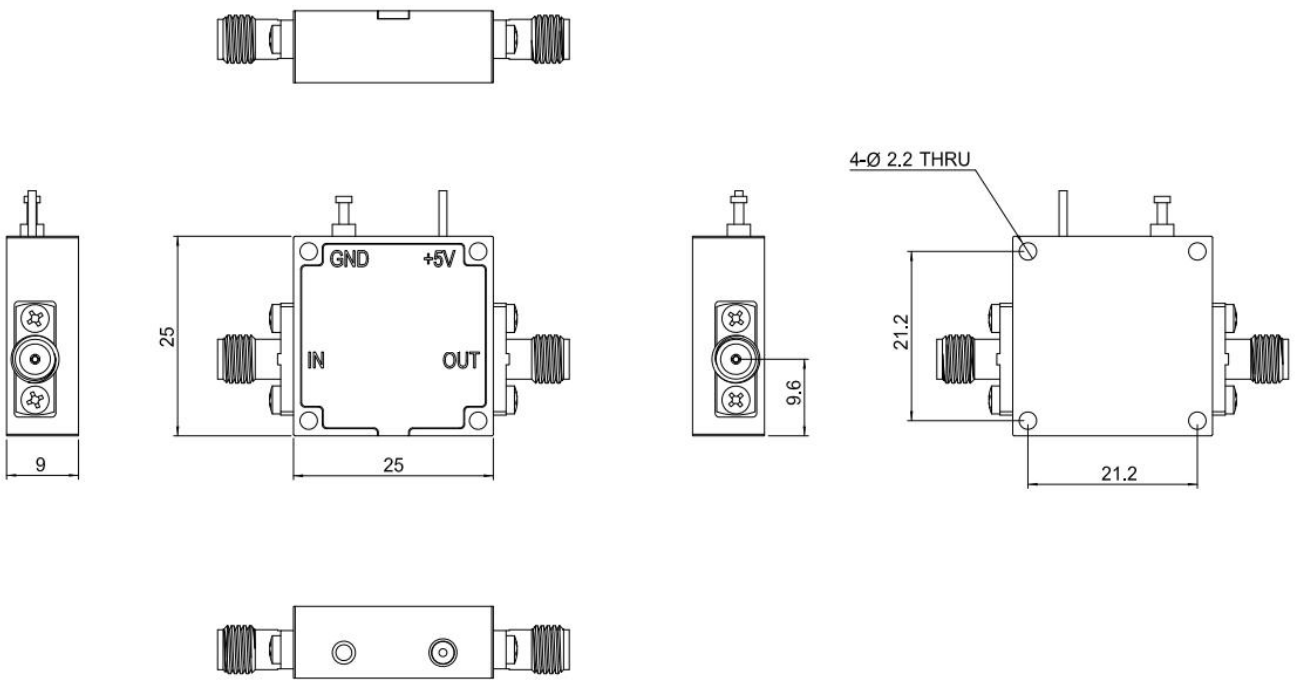
绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+8V
输入功率 RF Input Power	+16 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

外形图 Outline Drawing: Unit:mm



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

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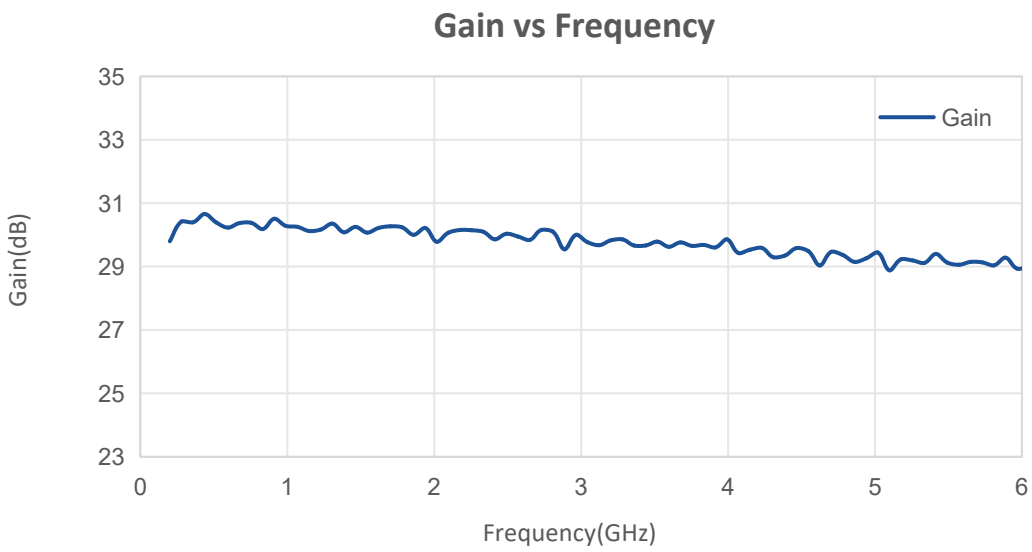
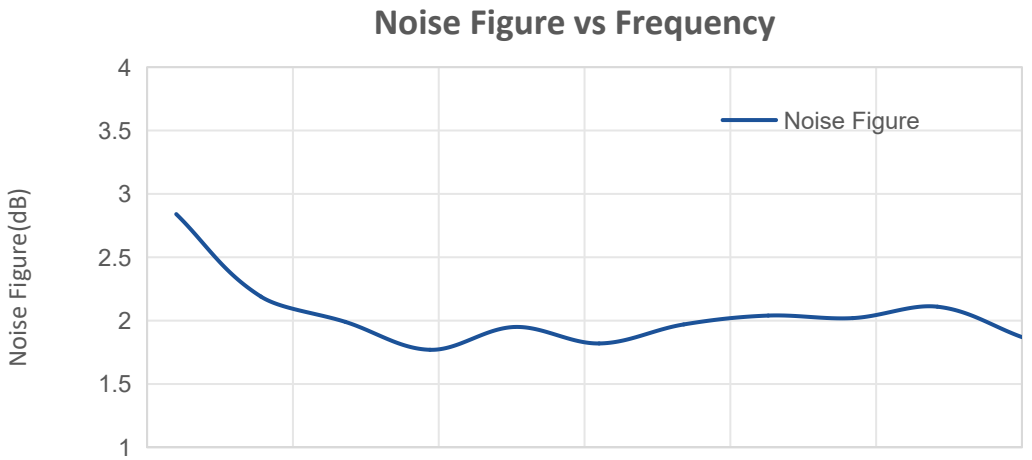
订货信息 Ordering Information:

标准型号 Base Number	描述 Description	版本号 Revision
TLLA0.2G6G-29-17-LC	Low Noise Amplifier, 0.2-6GHz, Noise Figure:2.1dB, Gain:29 dB,P1dB:17.5dBm,+5V DC,Without Heatsink	Rev.1.0

典型曲线 Typical Performance Data:





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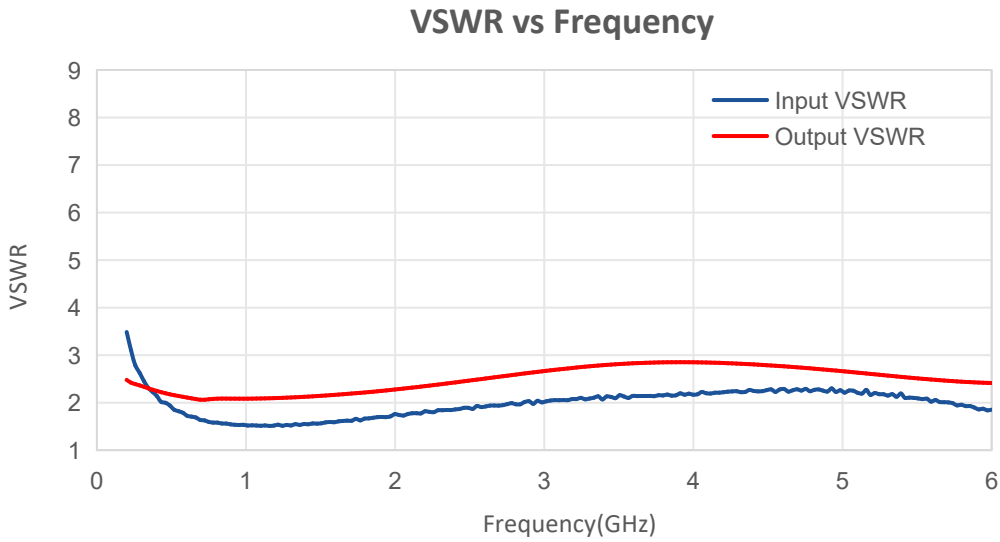

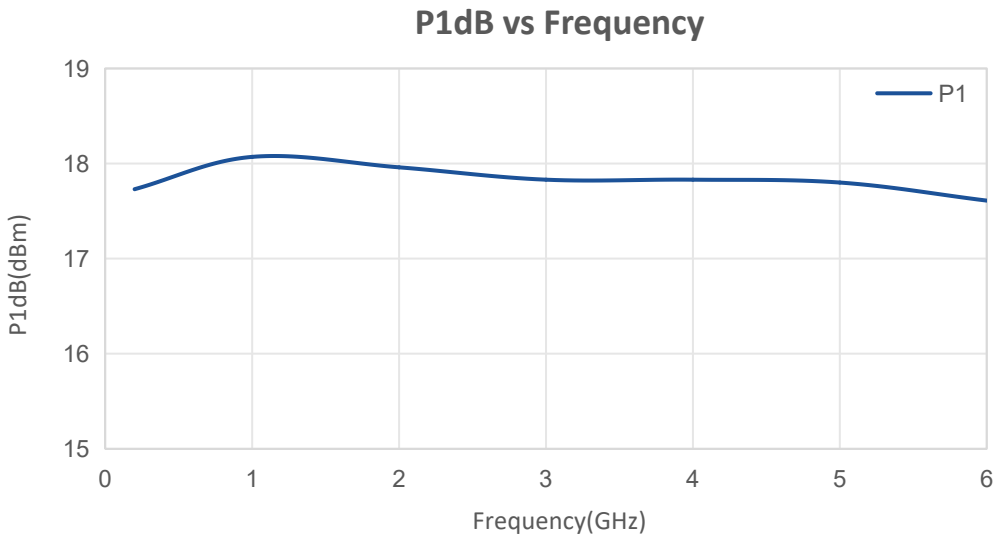

Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.