

## Low Noise Amplifier

0.8-4.5GHz /1.0dB NF/29dB Gain/13 dBm P1dB

Model: TLLA0.8G4.5G-29-10-LC

TLLA0.8G4.5G-29-10-LC is a low noise amplifier with small signal gain of 29 dB and noise figure of 1.0 dB across the frequency range of 0.8 to 4.5 GHz. The DC power requirement for the amplifier is +12 V DC/39 mA. The input and output port configuration offers coax adapter structure with SMA female.

### Features:

- Ultra Wide Band:0.8-4.5GHz
- Gain: 29dB Typ
- Noise Figure: 1.0dB 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	0.8		4.5	GHz
增益 Gain		29		dB
增益平坦度 Gain Flatness		±1.5	±1.5	dB
噪声系数 Noise Figure		1.0		dB
输出1dB压缩点 Output P-1 dB		13		dBm
输入驻波 Input VSWR		2.0		:1
输出驻波 Output VSWR		2.0		:1
直流电压 DC Voltage		+12	+15	V DC
直流电流 DC Supply Current		39		mA
阻抗 Impedance		50		Ohms

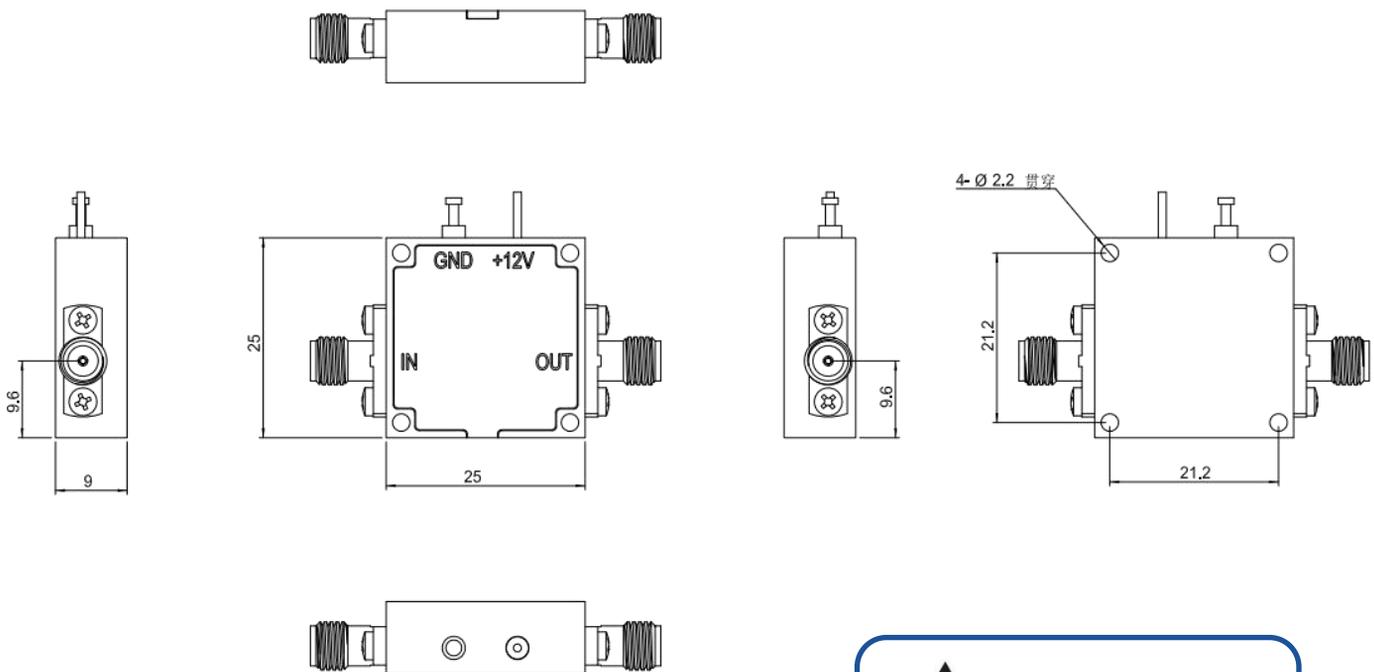
## 机械特性 Mechanical Specifications:

参数 Parameter	指标 Value	单位 Units
输入/输出接口 Input /Output Connector	SMA Female/SMA Female	

## 绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+7 V
输入功率 RF Input Power	+17 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	-45		+85	°C
存储温度 Non-operating Temperature	-55		+125	°C
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			

## 订货信息 Ordering Information:

标准型号 Base Number	描述 Description	版本号 Revision
TLLA0.8G4.5G-29-10-LC	Low Noise Amplifier, 0.8-4.5GHz, Noise Figure:1.0dB, Gain:29 dB,P1dB:13dBm,+12V DC,Without Heatsink	Rev.1.0