

**Model: TLLA1G40G-42-40**
**Low Noise Amplifier**  
**1-40GHz, NF:4.0dB, Gain:42dB, P1dB:18dBm**
**Feature:**

- Ultra Wide Band: 1-40GHz
- Gain: 42dB Typ
- Noise Figure: 4.0dB Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

**电气特性 Electrical Specifications:**

参数 Parameter	Min	Typ	Max	单位 Units
频率范围 Frequency range	1-40			GHz
增益 Gain	40	42		dB
增益平坦度 Gain Flatness		±3.5		dB
噪声系数 Noise Figure		4	5	dB
线性输出功率 Output P1dB	@1~30GHz	18		dBm
	@30~40GHz	16		dBm
输入驻波 Input VSWR		1.8		:1
输出驻波 Output VSWR		1.8		:1
直流电压 DC Voltage	9	12	16	V DC
直流电流 DC Supply Current		420		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	2.92mm Female/2.92mm Female	
直流偏置 DC Bias	Solder Pin	
壳体材质 Shell Material	Aluminum	
尺寸 Size	50*60*12	mm
重量 Weight	/	g

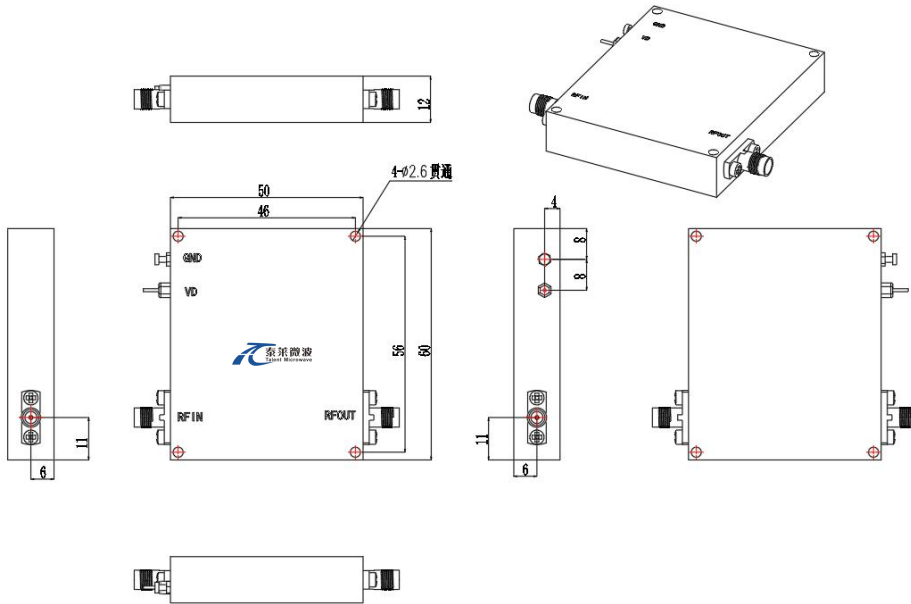
**绝对最大值 Absolute Maximum Ratings:**

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+16V
输入功率 RF Input Power	5 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V


**Available 220V System  
Benchtop Amplifier**

外形尺寸 Outline Drawing:

Unit: mm



**\*\*\*Heat Sink Required During Operation**



OBSERVE PRECAUTIONS  
ELECTROSTATIC SENSITIVE  
DEVICES

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			
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 Part Number	描述 Description	版本号 Revision
TLLA1G40G-42-40	Low Noise Amplifier, 1-40GHz, Noise Figure:4.0dB, Gain:42 dB,P1dB:18dBm,+12V DC,Without Heatsink	Rev.1.1
TLLA1G40G-42-40-HS	Low Noise Amplifier, 1-40GHz, Noise Figure:4.0dB, Gain:42 dB,P1dB:18dBm,+12 DC,With Heatsink	Rev.1.1