泰莱微波
Talent Microwave

Suzhou Talent Microwave,Inc
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Low Noise Amplifier

0.1-50GHz /5.0dB NF/27dB Gain/13 dBm P1dB

Model: TLLA0.1G50G-27-50

TLLA0.1G50G-27-50 is a low noise amplifier with a typical small signal gain of 27 dB and a nominal noise figure of 5.0 dB across the frequency range of 0.1 to 50 GHz. The DC power requirement for the amplifier is +8 V DC/320 mA. The input and output port configuration offers coax adapter structure with 2.4mm female.

Features:

- Ultra Wide Band:0.1-50GHz
- Gain: 27dB Typ
- Noise Figure: 5.0dB 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	0.1		50	GHz
增益 Gain	25	27		dB
噪声系数 Noise Figure		5.0	7	dB
线性输出功率 Output P1dB	12	13		dBm
饱和输出功率 Output Psat		13.5		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	5	8	12	V DC
直流电流 DC Supply Current		320		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	2.4mm Female/2.4mm Female	
直流偏置 DC Bias	Solder Pin	
尺寸 Size	35*40*12(Without Heatsink) 75*40*32(With Heatsink)	mm
重量 Weight	/	g

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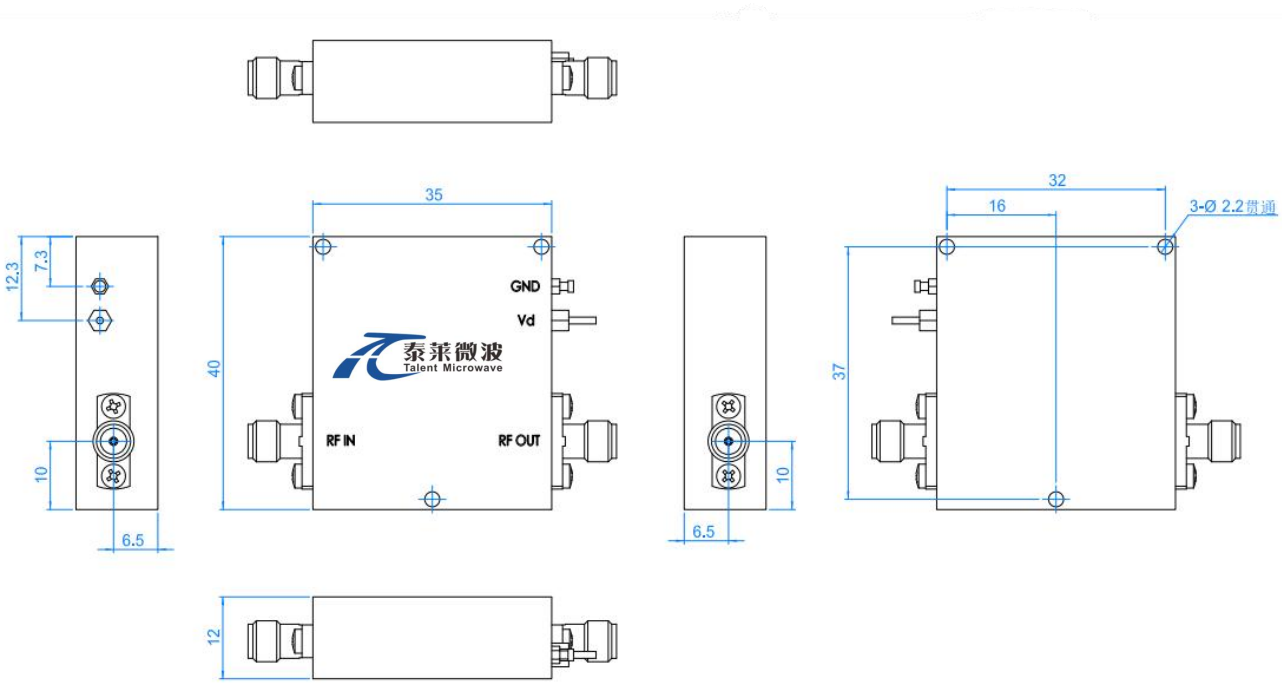
绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+12 V
输入功率 RF Input Power	+5 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

外形图 Outline Drawing:

Unit:mm



***Heat Sink Required During Operation

OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

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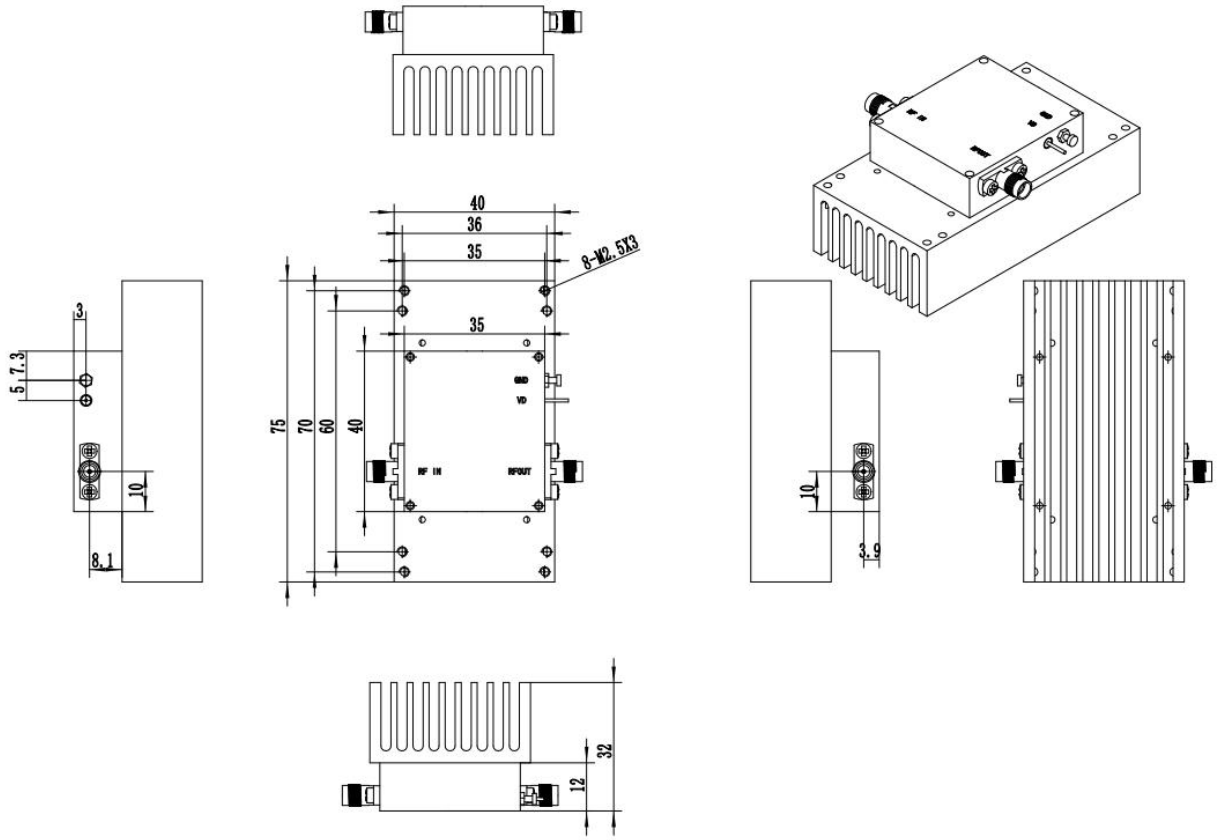
外形图 Outline Drawing: Unit:mm



温度环境 Environmental Conditions:

参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature	-45		+85	℃
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			

订货信息 Ordering Information:

标准型号 Base Number	描述 Desciption	版本号 Revision
TLLA0.1G50G-27-50	Low Noise Amplifier, 0.1-50GHz, Noise Figure:5.0dB, Gain:27 dB,P1dB:13dBm,+8V DC,Without Heatsink	Rev.1.1
TLLA0.1G50G-27-50-HS	Low Noise Amplifier, 0.1-50GHz, Noise Figure:5.0dB, Gain:27 dB,P1dB:13dBm,+8V DC,With Heatsink	Rev.1.1