泰莱微波
Talent Microwave

Suzhou Talent Microwave,Inc
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Power Amplifier

0.5-3GHz/50dB Gain/50dBm Psat

Model: TLPA0.5G3G-50-50

TLPA0.5G3G-50-50 is a power amplifier with a minimum small signal gain of 50 dB and a minimum Psat of 50 dBm across the frequency range of 0.5 to 3 GHz. The DC power requirement for the amplifier is +28 VDC/10A. The input ports configuration offers coax adapter structure with SMA female and output ports configuration offers coax adapter structure with N female.

Features:

- Frequency range: 0.5-3GHz
- Gain: 50dB Min
- Output Power Psat: 50dBm Min
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

电气特性 Electrical Characteristics:

参数 Parameter	Min	Typ	Max	单位 Units
频率范围 Frequency range	0.5		3	GHz
增益 Gain	50	53		dB
增益平坦度 Gain Flatness		±2	±3	dB
线性输出功率 Output P1dB	46	47		dBm
饱和输出功率 Output Psat	50			dBm
输入驻波 Input VSWR		1.5	2	:1
直流电压 DC Voltage	26	28	30	V DC
静态电流 Static Current		2		A
饱和电流 Saturation current		10	13	A
阻抗 Impedance		50		Ohms

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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/N Female	
直流偏置 DC Bias	D-SUB-9Pin	
尺寸 Size	170*130*22(Without heatsink) 292*200*84(With heatsink)	mm
重量 Weight	1000	g

绝对最大值 Absolute Maximum Ratings:

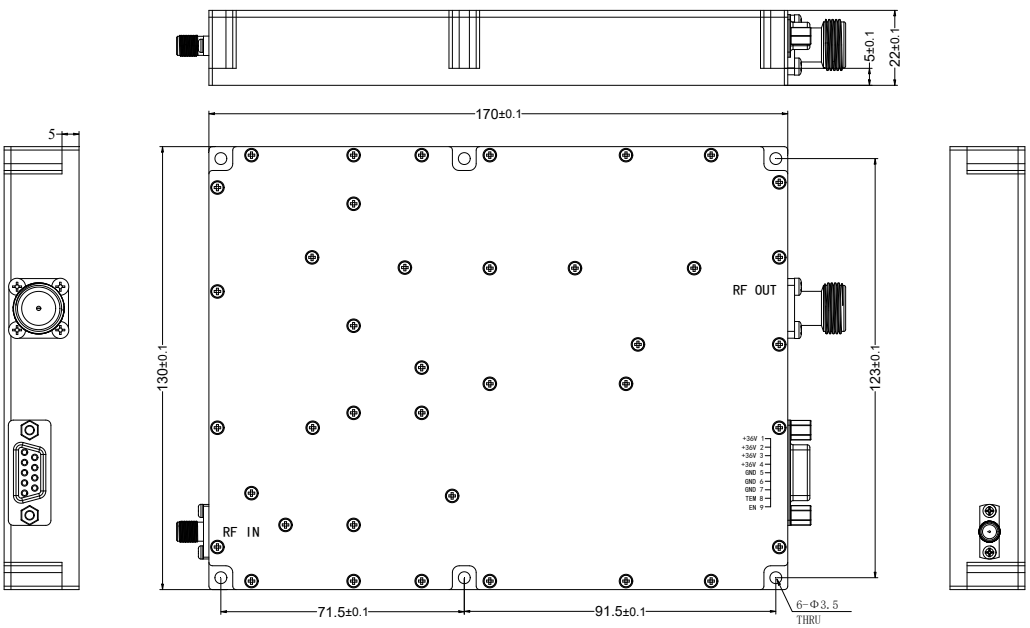
参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+30 V
输入功率 RF Input Power	+5 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V



Simple 220V System
Available SAC option

外形图 Outline Drawing:

Unit:mm; Tolerance:±0.1mm



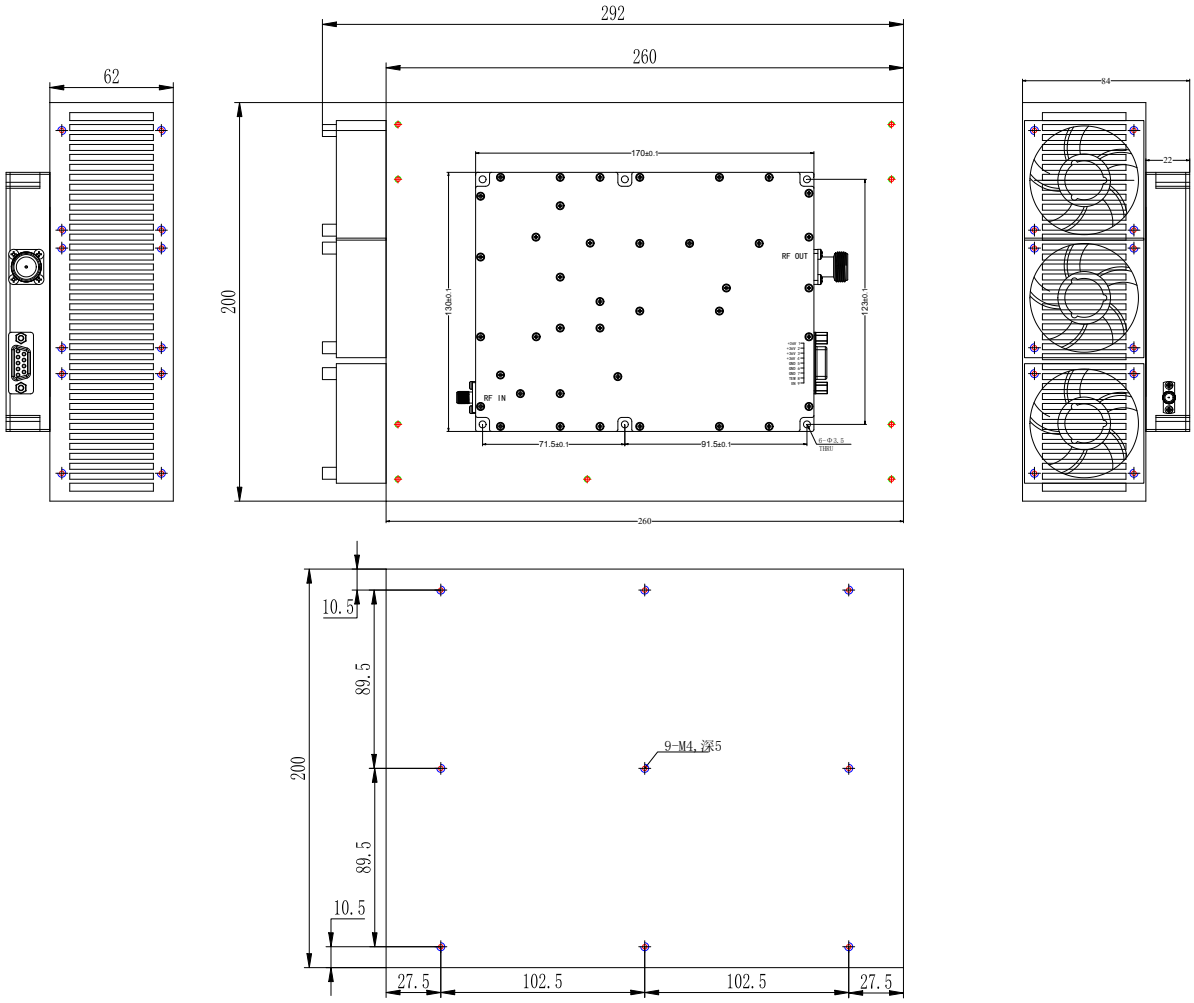
***Heat Sink Required During Operation

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

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外形图 Outline Drawing:

Unit:mm; Tolerance:±0.1mm



直流供电接口 DC Supply Connector(DSUB-9 Female):

引脚 Pin	名称 Name	功能 Function
1~4	VCC	电源正极,+26.0-30.0VDC
5~7	GND	电源正极,+26.0-30.0VDC
8	Over TEM	当外壳温度超过85℃时，功率放大器关闭，此引脚拉高。如果机箱温度降至80℃，功率放大器将恢复正常工作，此引脚将拉低。
9	EN	放大器使能：TTL高(5V)(内拉高) 放大器禁用：接地

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温度环境 Environmental Conditions:

参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature*	-20		+50	℃
存储温度 Non-operating Temperature*	-30		+60	℃
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			

*Note: For a wider temperature range, please consult the manufacturer.

订货信息 Ordering Information:

标准型号 Base Number	描述 Description	版本号 Revision
TLPA0.5G3G-50-50	Power amplifier 0.5-3GHz, Gain:50dB,Psat:50dBm,+28V DC,Without Heatsink	Rev.1.2
TLPA0.5G3G-50-50-HS	Power amplifier .5-3GHz, Gain:50dB,Psat:50dBm,+28V DC,With Heatsink	Rev.1.2