泰莱微波 Talent Microwave

Suzhou Talent Microwave,Inc
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Power Amplifier

2-4GHz/46dB Gain/46dBm Psat

Model: TLPA2G4G-46-46

TLPA2G4G-46-46 is a power amplifier with a minimum small signal gain of 46 dB and a minimum Psat of 46 dBm across the frequency range of 2 to 4 GHz. The DC power requirement for the amplifier is +28 VDC/6 A. The input and output ports configuration offers coax adapter structure with SMA female.

Features:

- Frequency range: 2-4GHz
- Gain: 46dB Min
- Output Power Psat: 46dBm 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	2		4	GHz
增益 Gain	46	48		dB
增益平坦度 Gain Flatness		±2	±3	dB
线性输出功率 Output P1dB		42		dBm
饱和输出功率 Output Psat	46	46.5		dBm
输入驻波 Input VSWR		1.5	2	:1
直流电压 DC Voltage		28	30	V DC
静态电流 Static Current		2		A
饱和电流 Saturation Current		6	7	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/SMA Female	
直流供电接口 DC Power Supply Connector	D-SUB9 Pin	
尺寸 Size	138*97*20(Without heatsink) 232*140*82(With heatsink)	mm
重量 Weight	500	g

绝对最大值 Absolute Maximum Ratings:

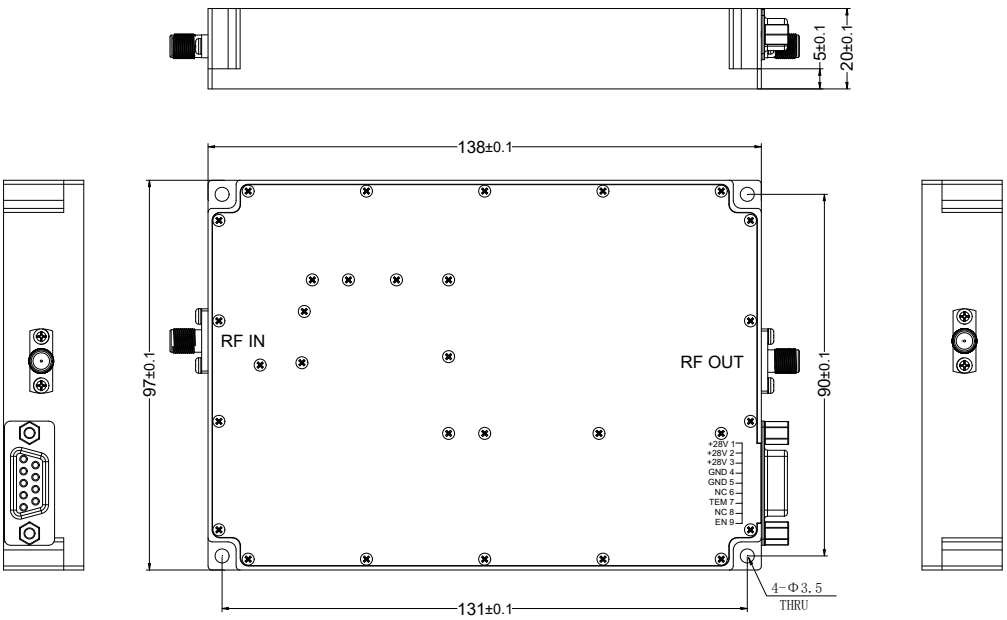
参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+30 V
输入功率 RF Input Power	+5 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V



Simple 220V System
Available SAC option

外形图 Outline Drawing:

Unit:mm; Tolerance:±0.1mm



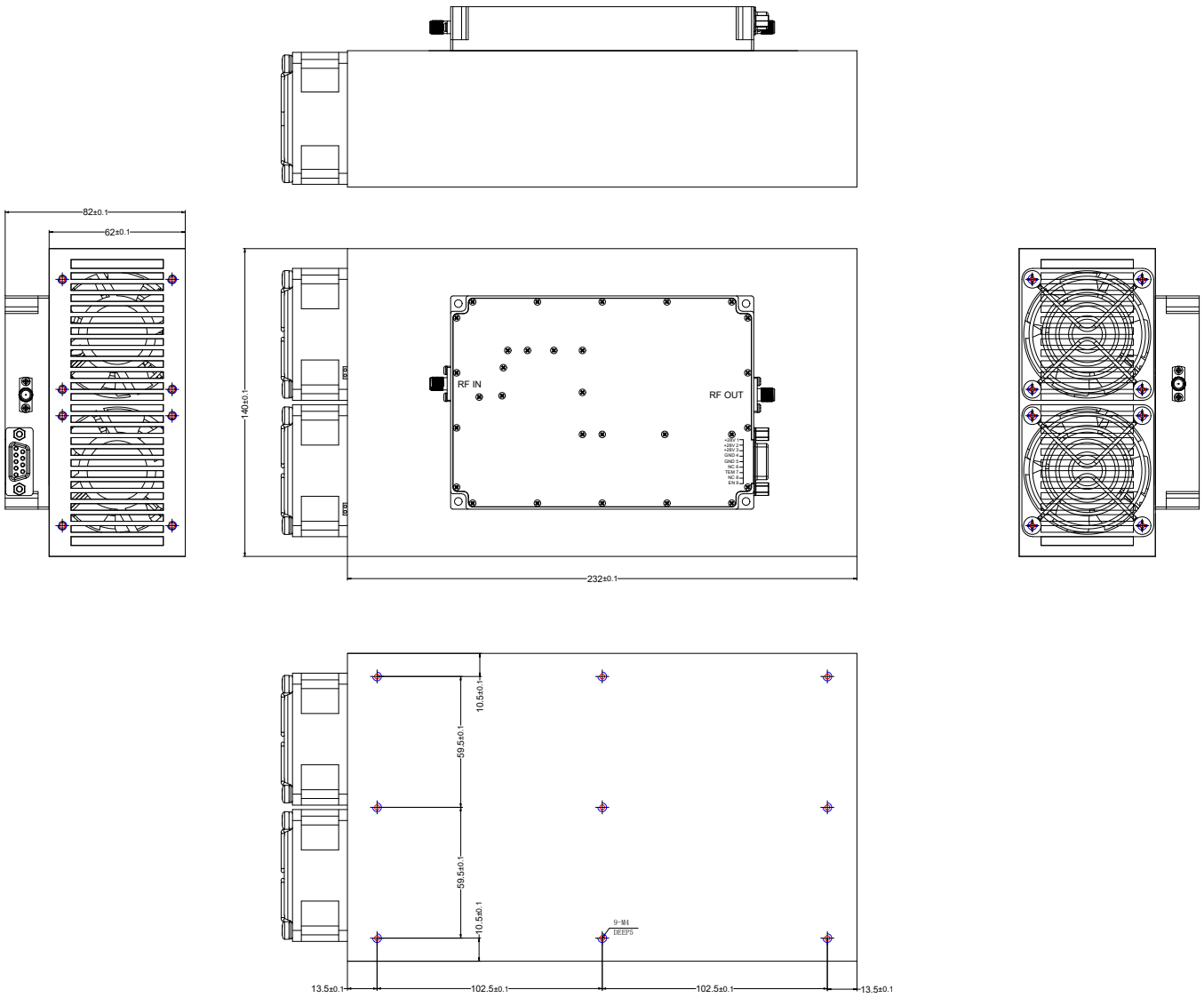
***Heat Sink Required During Operation

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



风扇供电 Fan power supply	
Red line	Power supply positive,+24.0-28.0VDC DC current: 0.3A
Black line	Ground

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

引脚 Pin	名称 Name	功能 Function
1	+28V	电源正极,+26.0-30.0VDC
2	+28V	电源正极,+26.0-30.0VDC
3	+28V	电源正极,+26.0-30.0VDC
4	GND	地
5	GND	地
6	NC	未连接
7	Over TEM	当外壳温度超过75℃时，功率放大器关闭，此引脚拉高。如果机箱温度降至70℃，功率放大器将恢复正常工作，此引脚将拉低。
8	NC	未连接
9	EN	放大器使能：TTL高(5V)(内拉高) 放大器禁用：接地

温度环境 Environmental Conditions:

参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature*	-40		+50	℃
存储温度 Non-operating Temperature*	-50		+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
TLPA2G4G-46-46	Power amplifier 2-4GHz, Gain:46dB,Psat:46dBm,+28V DC,Without Heatsink	Rev.1.0
TLPA2G4G-46-46-HS	Power amplifier 2-4GHz, Gain:46dB,Psat:46dBm,+28V DC,With Heatsink	Rev.1.0