泰莱微波
Talent Microwave

Suzhou Talent Microwave,Inc
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Power Amplifier

0.3-2GHz/50dB Gain/50dBm Psat

Model: TLPA0.3G2G-50-50

TLPA0.3G2G-50-50 is a power amplifier with a minimum gain of 50 dB and a minimum Psat of 50 dBm across the frequency range of 0.3 to 2 GHz. The DC power requirement for the amplifier is +28 VDC/850W.The input port configuration offers coax adapter structure with SMA female and output port configuration offers coax adapter structure with N Female.

Features:

- Frequency range: 0.3-2GHz
- Gain: 50dB Min
- Output Power Psat: 50dBm Min
- Protection:Over TEM,over voltage, over current ,over VSWR protection
- 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	0.3		2	GHz
增益 Gain	50			dB
增益平坦度 Gain Flatness		±3		dB
饱和输出功率 Output Psat	50			dBm
杂散 Spurious@Pout=50dBm			-60	dBc
谐波 Harmonics@Pout=50dBm			-10	dBc
输入驻波 Input VSWR			2.0	:1
直流电压 DC Voltage		+28		V DC
功耗 Power Consumption			850	W
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	
直流供电接口 DC Power Supply Connector	D-SUB-15	
尺寸 Size	200*130*23.5	mm
重量 Weight	1.2	Kg

绝对最大值 Absolute Maximum Ratings:

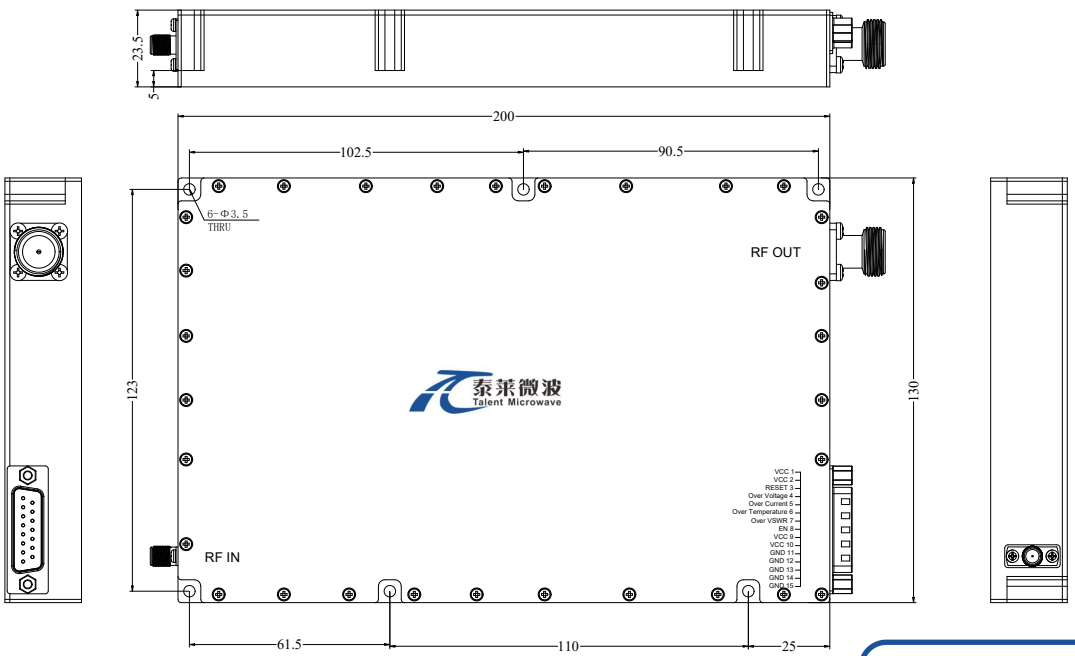
参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+28 V
输入功率 RF Input Power	0 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V



Simple 220V System
Available SAC option

外形图 Outline Drawing:

Unit:mm; Tolerance:±0.1mm



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

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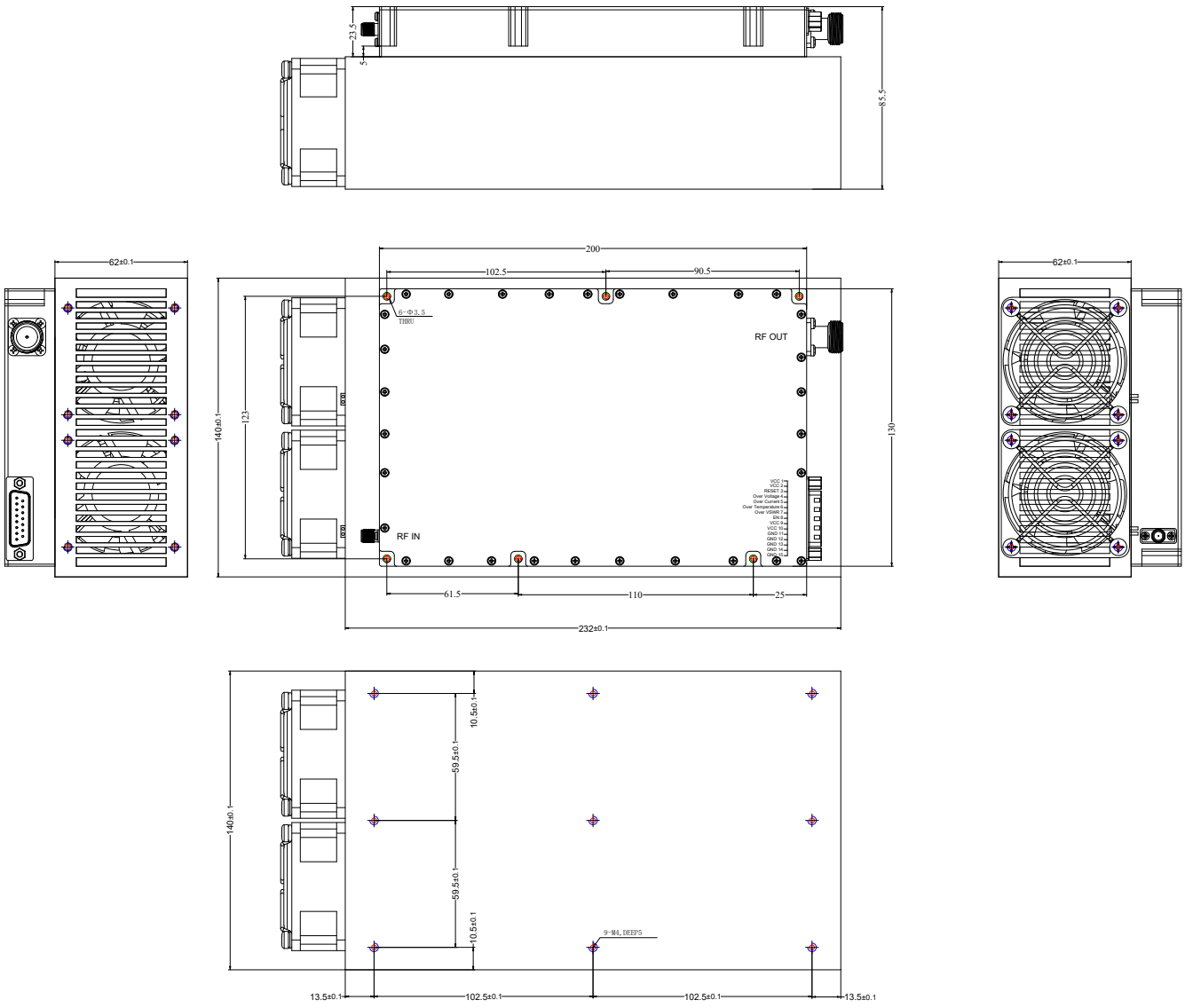

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直流供电接口 DC Supply Connector(DSUB-15 Female):

引脚 Pin	名称 Name	功能 Function
1	VCC	电源正极,+26.0-30.0VDC
2	VCC	电源正极,+26.0-30.0VDC
3	复位	当逻辑为低电平时复位PA，并在释放后恢复(内部上拉)
4	过压	电压报错: (TTL高电平=故障, TTL低电平=正常)
5	过流	电流报错: (TTL高电平=故障, TTL低电平=正常)
6	过温	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。
7	过驻波	驻波报错: (TTL高电平=故障, TTL低电平=正常)
8	EN	放大器使能：TTL高(5V)(内拉高) 放大器禁用：接地
9	VCC	电源正极,+26.0-30.0VDC
10	VCC	电源正极,+26.0-30.0VDC
11~15	GND	地

主要功能 Key Features:

参数 Parameter	特点 Advantages
监测功能 Monitoring protections	1,OutputPower 2,Temperature 3,Voltage 4,Current
保护功能 Protection functions	1,Over TEM 2,Over voltage 3,Over current 4,Over VSWR
控制功能 Control functions	Power setting on/off

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温度环境 Environmental Conditions:

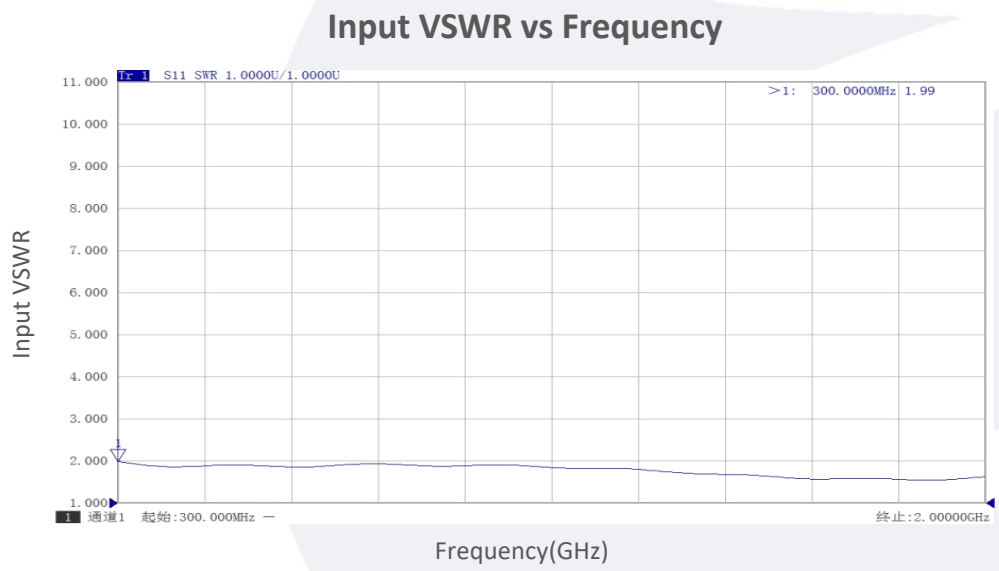
参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature*	-20		+50	℃
存储温度 Non-operating Temperature*	-30		+60	℃
相对湿度 Relative humidity		95		%
海拔 Altitude	10,000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half 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
TLPA0.3G2G-50-50	Power amplifier 0.3-2GHz, Gain:50dB,Psat:50dBm,+28V DC,With Heatsink	Rev.1.2

典型曲线 Typical Performance Data:



Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

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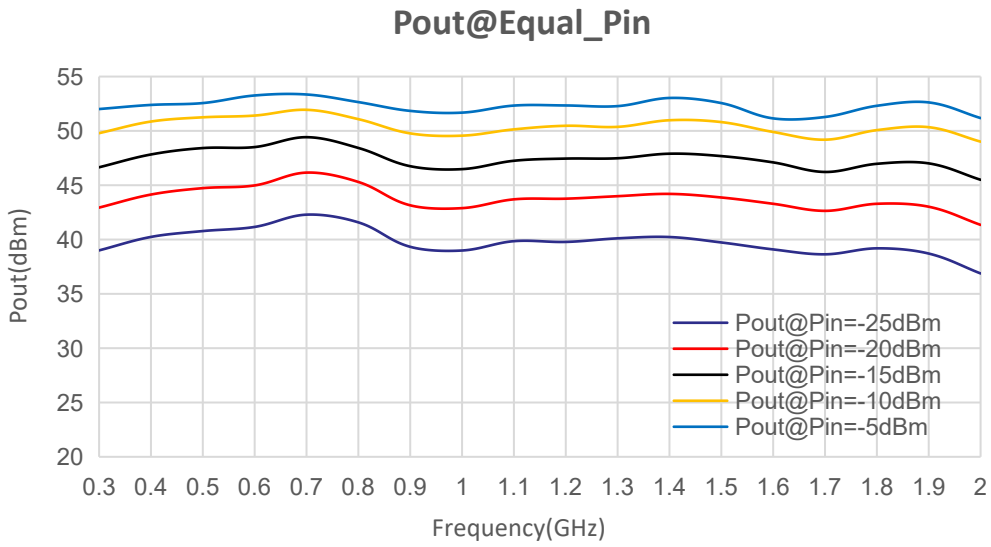

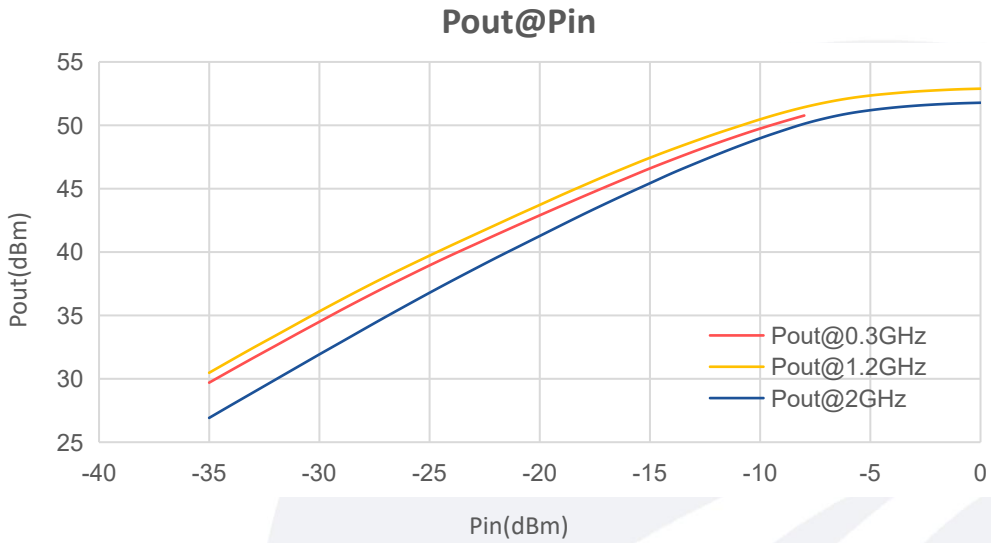

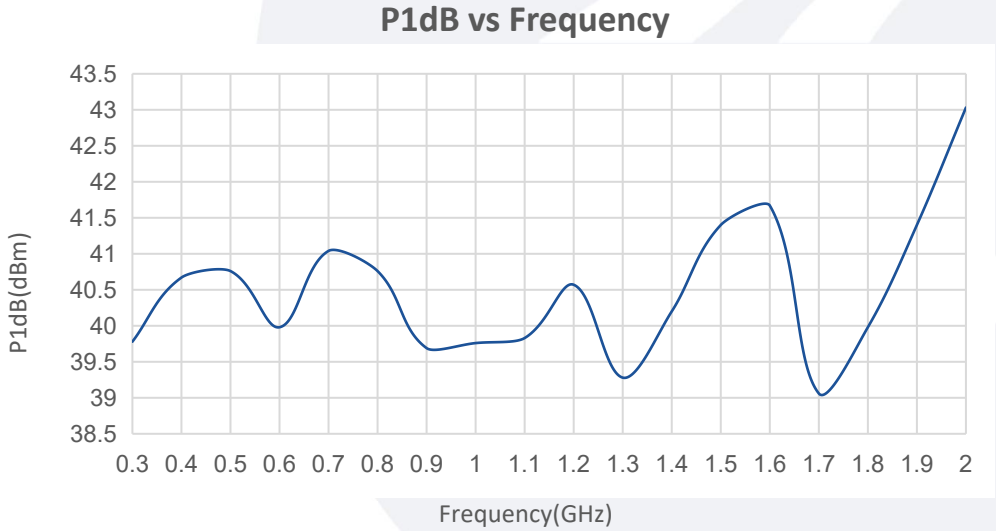

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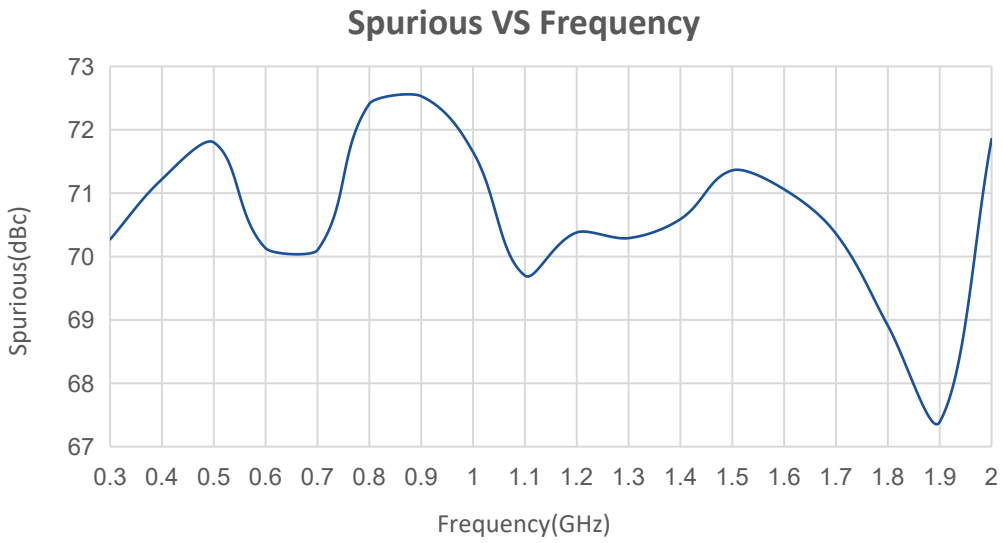

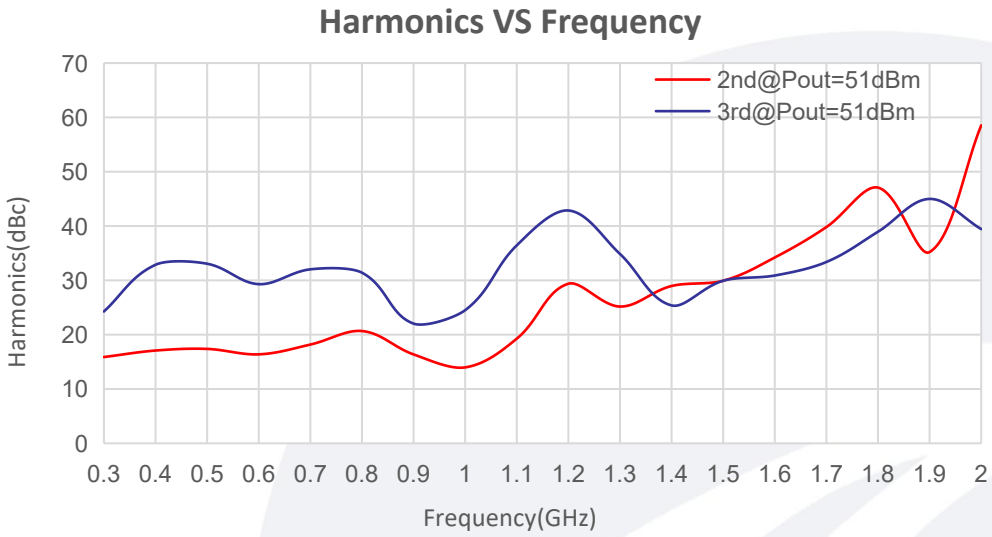

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