泰莱微波 Talent Microwave

Suzhou Talent Microwave,Inc
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Power Amplifier

2-18GHz/40dB Gain/37dBm Psat

Model: TLPA2G18G-40-37

TLPA2G18G-40-37 is a power amplifier with a minimum small signal gain of 40 dB and a minimum Psat of 37 dBm across the frequency range of 2 to 18 GHz. The DC power requirement for the amplifier is +28 VDC. The input and output port configuration offers coax adapter structure with SMA female.

Features:

- Frequency range: 2-18GHz
- Gain: 40dB Min
- Output Power Psat: 37dBm 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		2-18		GHz
小信号增益 Small Signal Gain	40			dB
增益平坦度 Gain Flatness		±3		dB
饱和输出功率 Output Psat	37			dBm
杂散 Spurious			-60	dBc
输入驻波 Input VSWR			2	:1
直流电压 DC Voltage		28	29	V DC
功耗 Power Consumption			80	W
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	SMA Female/SMA Female	
直流偏置 DC Bias	J30J-9ZKP	
尺寸 Size	200*100*30	mm
重量 Weight	1	Kg

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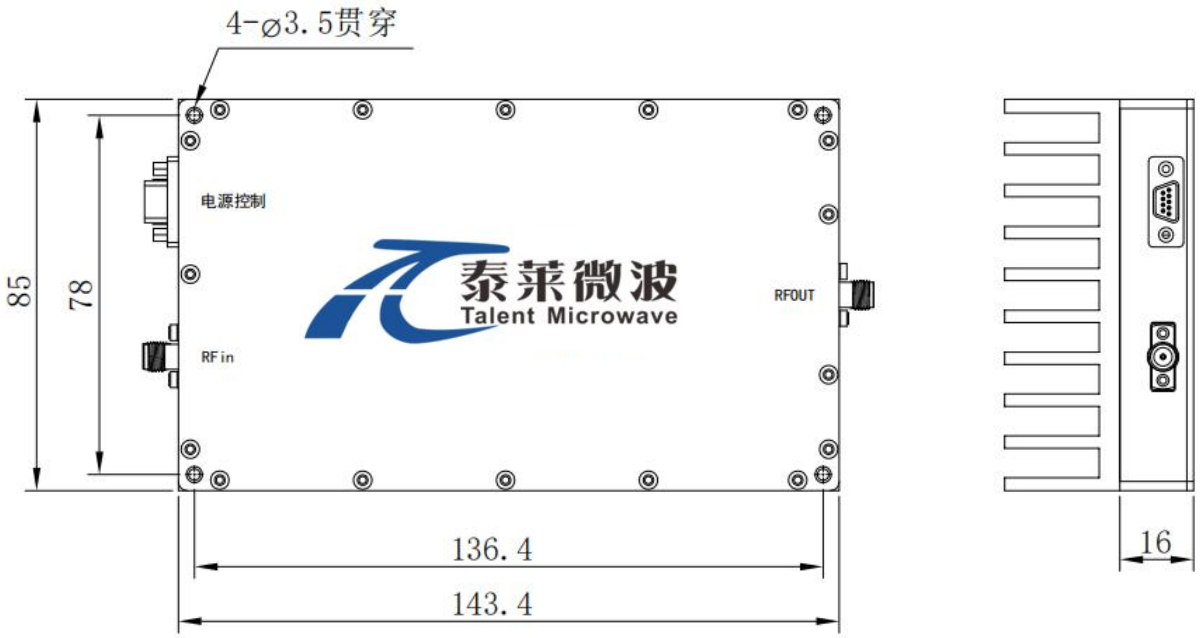
绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+29 V
输入功率 RF Input Power	+10 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

外形图 Outline Drawing:

Unit:mm



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

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

J30J-9ZKP Define	
引脚 Pin	功能 Function
1~4	+28 V
5	TTL high level: +3.3V to +5V, amplifier enable; TTL low level: 0V, amplifier disable
6~9	GND

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温度环境 Environmental Conditions:

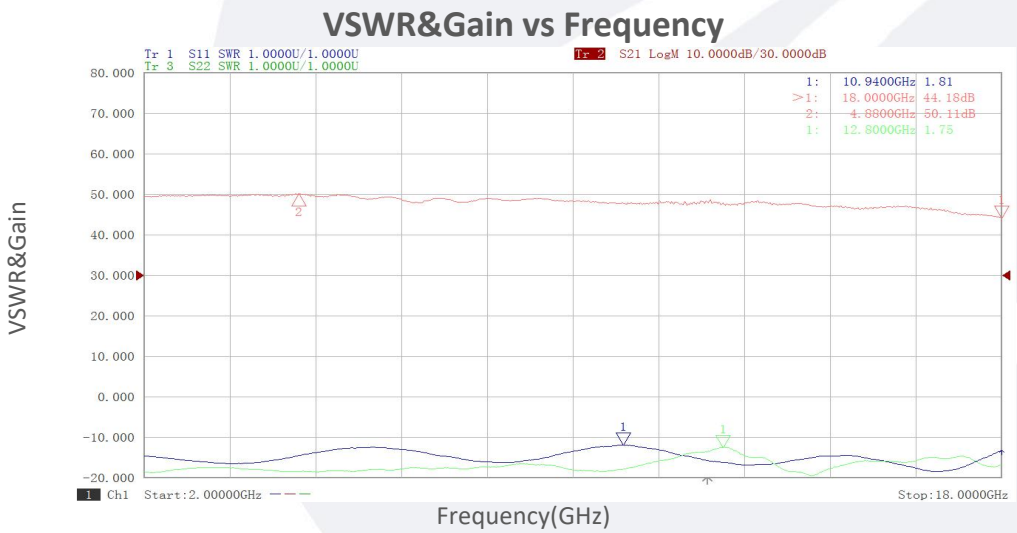
参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature*	-40		+60	℃
存储温度 Non-operating Temperature*	-50		+70	℃
相对湿度 Relative humidity		95		%
海拔 Altitude	10,000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half 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
TLPA2G18G-40-37	Power amplifier 2-18GHz, Gain:40dB,Psat:37dBm,+28V DC,Without Heatsink	Rev.1.1
TLPA2G18G-40-37-HS	Power amplifier 2-18GHz, Gain:40dB,Psat:37dBm,+28V DC,With Heatsink	Rev.1.1

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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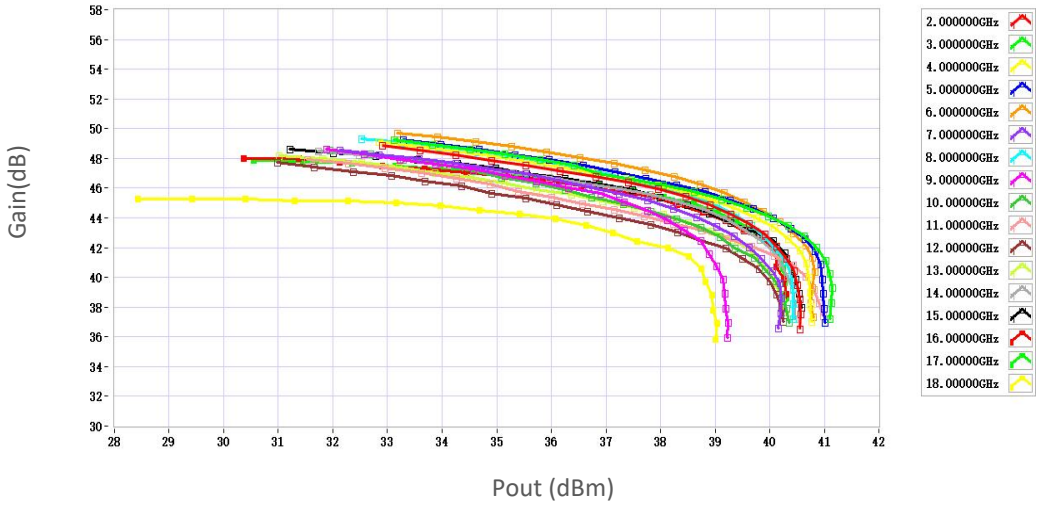
典型曲线 Typical Performance Data:

Gain vs Output Power



P1dB vs Frequency

P3dB vs Frequency

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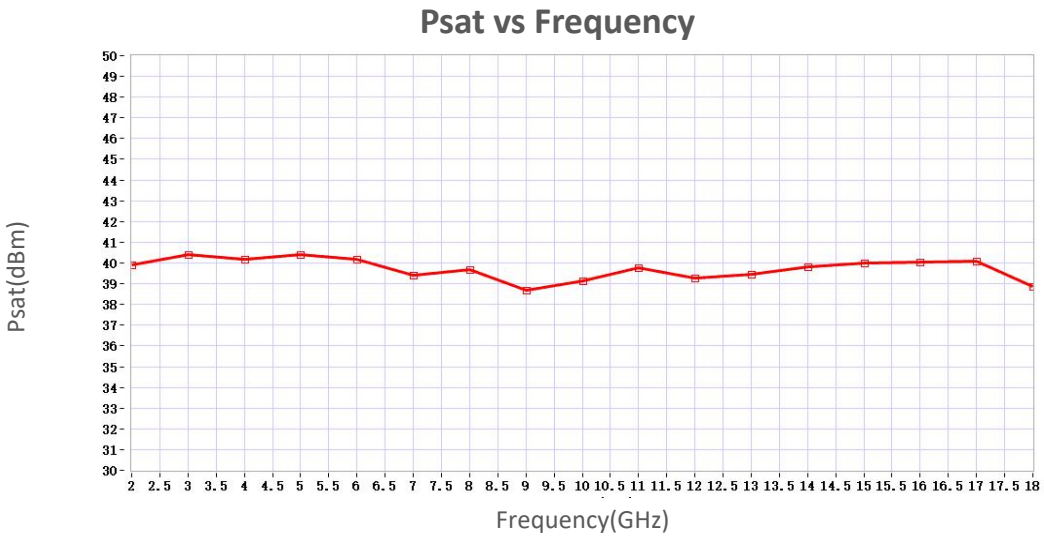

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