泰莱微波 Talent Microwave

Suzhou Talent Microwave,Inc
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Power Amplifier

6-18GHz /50dB Gain/48 dBm Psat Model: TLPA6G18G-47-48

TLPA6G18G-47-48 is a power amplifier with a typical power gain of 50 dB and a Psat of 48 dBm across the frequency range of 6 to 18 GHz. The DC power requirement for the amplifier is +28 VDC/800 W. The input port configuration offers coax adapter structure with SMA female and output port configuration offers coax adapter structure with N female.

Features:

- Ultra Wide Band: 6-18GHz
- Gain: 50dB Typ
- Output Power Psat: 48dBm 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		6-18		GHz
功率增益 Power Gain	47	50		dB
增益平坦度 Gain Flatness		±4.5		dB
线性输出功率 Output P1dB		45		dBm
饱和输出功率 Output Psat	48			dBm
杂散 Spurious@Pout=47dBm		-60	-50	dBc
二次谐波 2nd Harmonic@Pout=48dBm		-20	-12	dBc
输入驻波 Input VSWR			2	:1
直流电压 DC Voltage		28		V DC
直流电流 DC Current		18		A
功耗 Power Consumption		800		W
阻抗 Impedance		50		Ohms

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机械特性 Mechanical Specifications:

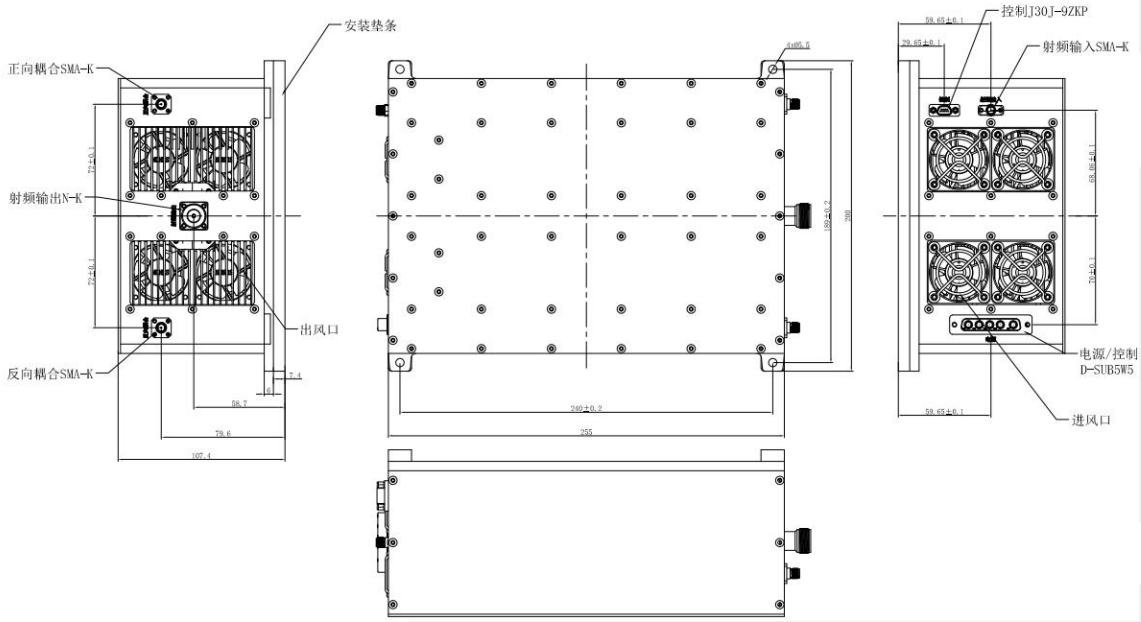
参数 Parameter	指标 Value	单位 Units
输入/输出接口 Input /Output Connector	SMA Female/N Female	
正向/反向耦合 Forward/Reverse Coupling	SMA Female/ SMA Female	
直流供电 DC Supply	DSUB-5W5	A1~2:+28V A3~5:GND
尺寸 Size	255*200*107.4	mm
重量 Weight	5000	g

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	5dBm
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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控制接口 Control Connector(J30J-9ZKP):

J30J-9ZKP	
Pin	Function
1	TTL(EN(+5V-ON,0V-OFF))
2	TEMP sensor
3	Voltage sensor
4	Current sensor
5	GND
6~9	NC

温度环境 Environmental Conditions:

参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature*	-20		+40	℃
存储温度 Non-operating Temperature*	-30		+50	℃
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 Desciption	版本号 Revision
TLPA6G18G-47-48	Power amplifier 6-18GHz,Gain:47dB,Psat:48dBm, +28V DC,Without Heatsink	Rev.1.1
TLPA6G18G-47-48-HS	Power amplifier 6-18GHz,Gain:47dB,Psat:48dBm, +28V DC,With Heatsink	Rev.1.1

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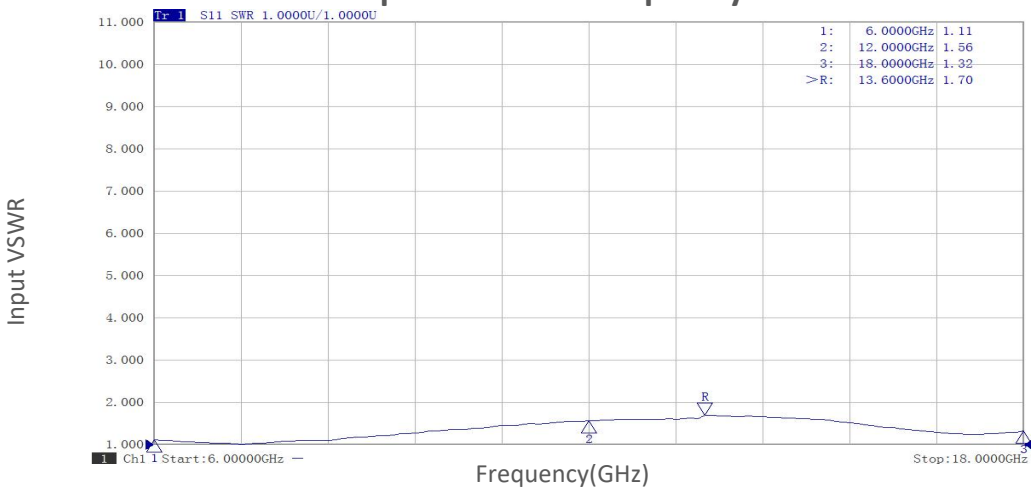
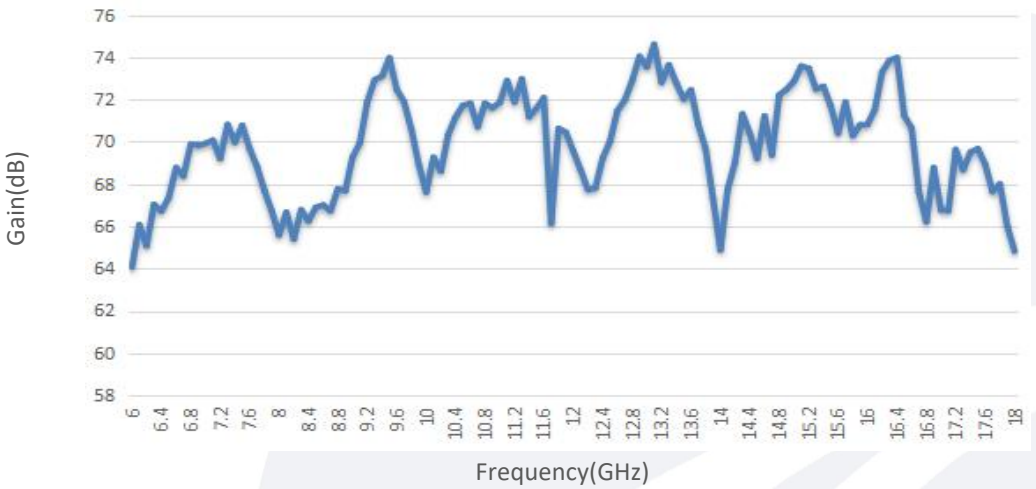
典型曲线 Typical Performance Data:

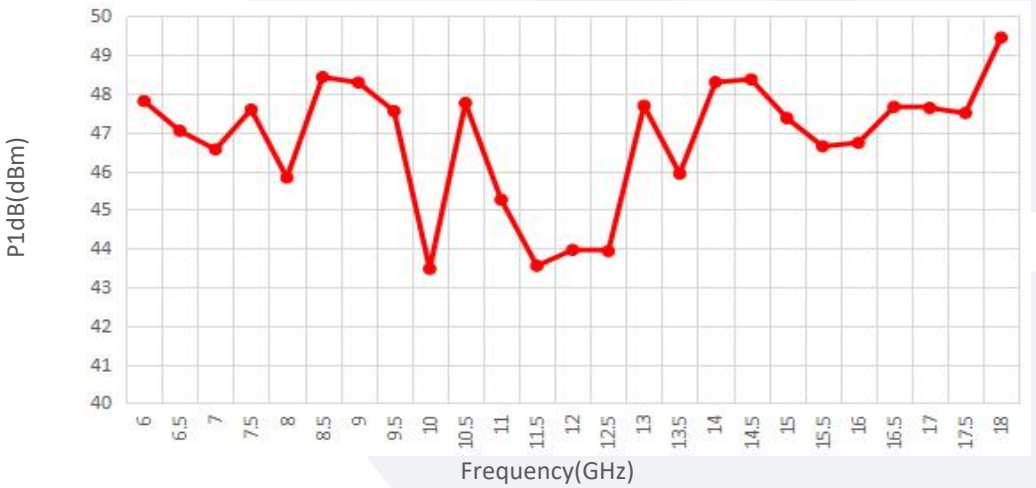
Input VSWR vs Frequency



Small Signal Gain vs Frequency



P1dB vs Frequency



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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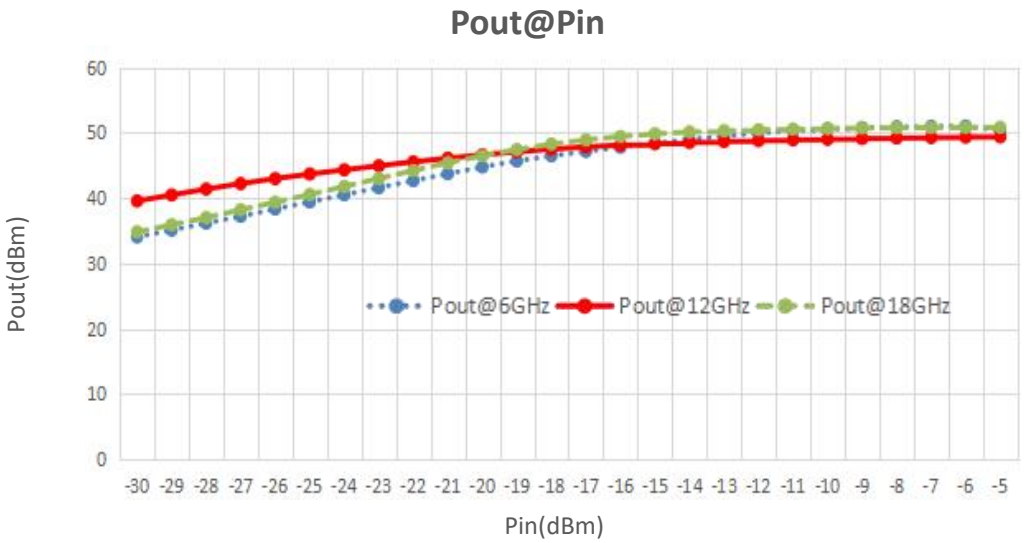

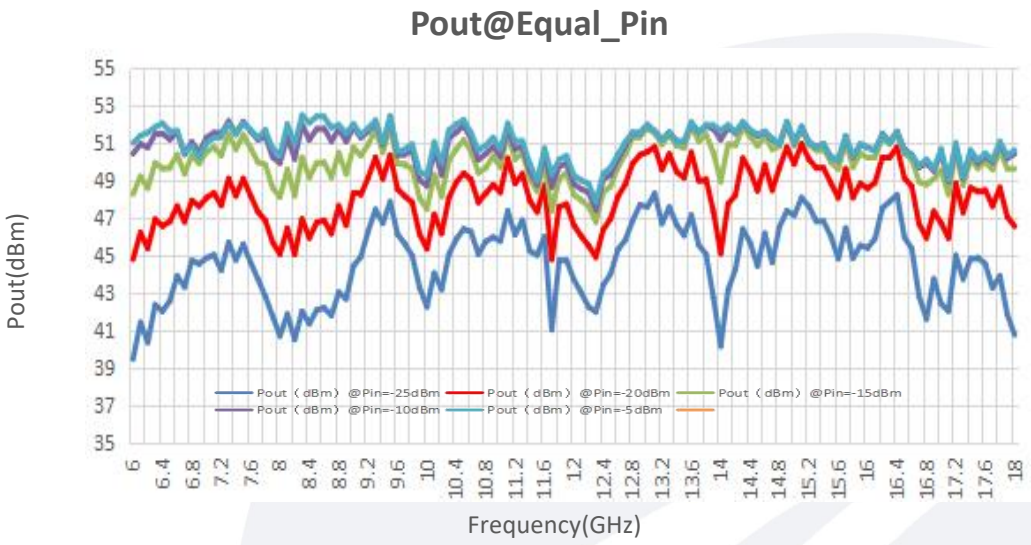

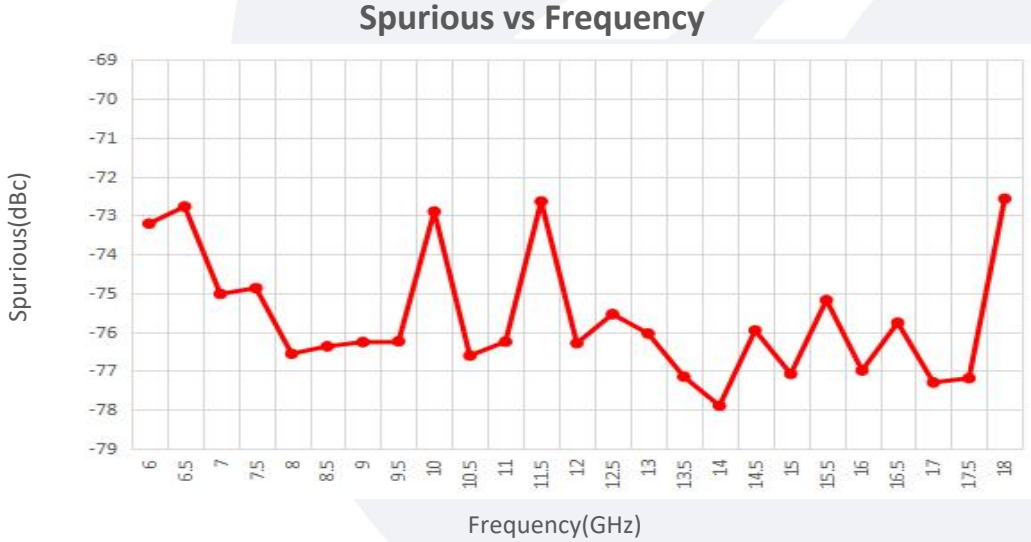

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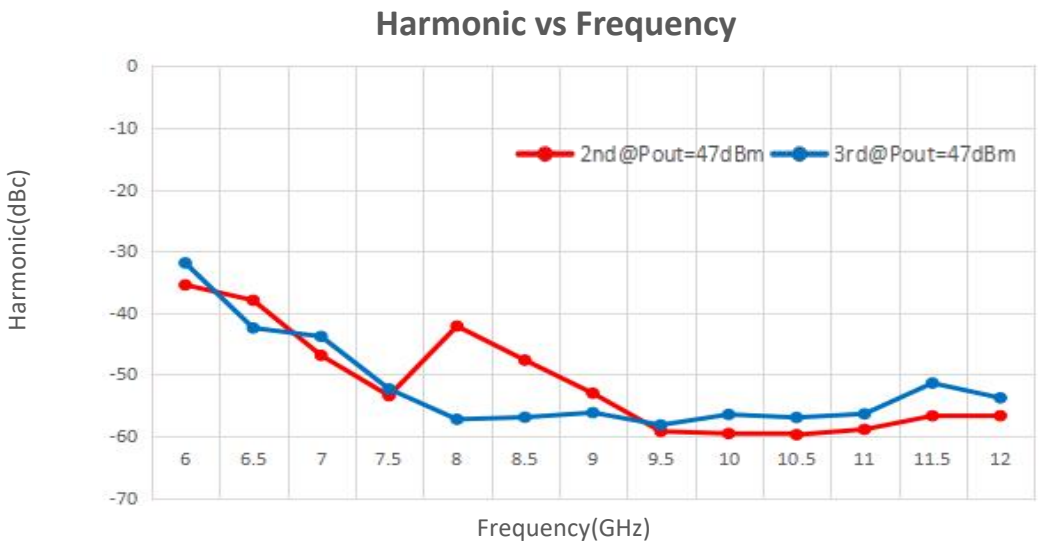

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