泰莱微波 Talent Microwave

Suzhou Talent Microwave,Inc
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Power Amplifier

6-18GHz/50dB Gain/51dBm Psat

Model: TLPA6G18G-50-51

TLPA6G18G-50-51 is a power amplifier with a minimum power gain of 50 dB and a nominal Psat of 51 dBm across the frequency range of 6 to 18 GHz. The DC power requirement for the amplifier is +28 VDC. The input port configuration offers coax adapter structure with SMA female and output port configuration offers WRD500.

Features:

- Frequency range: 6-18GHz
- Gain: 50dB Min
- Output Power Psat: 51dBm Typ
- 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	50			dB
增益平坦度 Gain Flatness		±3.5	±5	dB
饱和输出功率 Output Psat	50.5	51		dBm
杂散 Spurious@Pout=50dBm			-60	dBc
谐波抑制 Harmonic@Pout=50dBm			-10	dBc
输入驻波 Input VSWR			2	:1
直流电压 DC Voltage		28		V DC
直流电流 DC Supply Current			1500	A
阻抗 Impedance		50		Ohms

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机械特性 Mechanical Specifications:

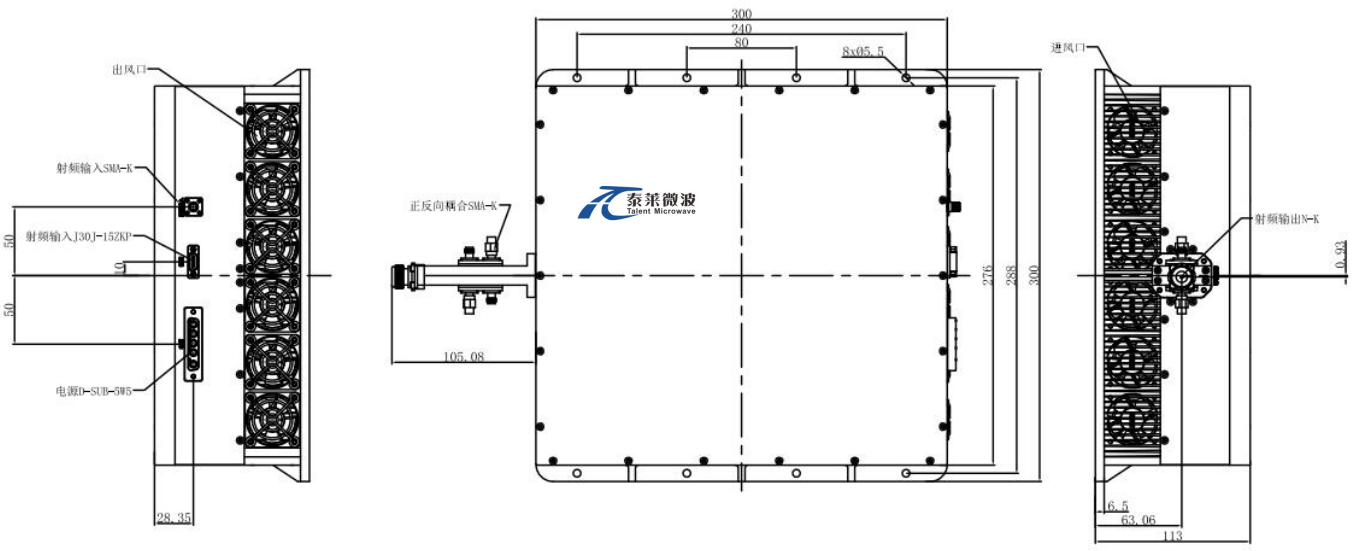
参数 Parameter	指标 Value	单位 Units
输入/输出接口 Input /Output Connector	SMA Female/WRD500	
直流偏置 DC Bias	DSUB-5W5	
控制接口 Control Connector	J30J-15ZKSP	
正向/反向耦合 Forward/Reverse Coupling	SMA Female/SMA Female	
尺寸 Size	300*300*113	mm
重量 Weight	11	Kg

绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	TBD
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



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

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控制接口 Control Connector:

J30J-15ZKP Define	
引脚 Pin	功能 Function
1	Voltage Monitor
2	Current Monitor
3	Temperature Monitor
4	0.5dB Attenuation
5	1dB Attenuation
6	2dB Attenuation
7	4dB Attenuation
8	8dB Attenuation
9	16dB Attenuation
10	TTL(high for open,low for close)
11~15	GND

直流供电接口 DC Supply Connector（DSUB-5W5):

引脚Pin	功能 Function
A1	+28V
A2	+28V
A3~A5	GND

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温度环境 Environmental Conditions:

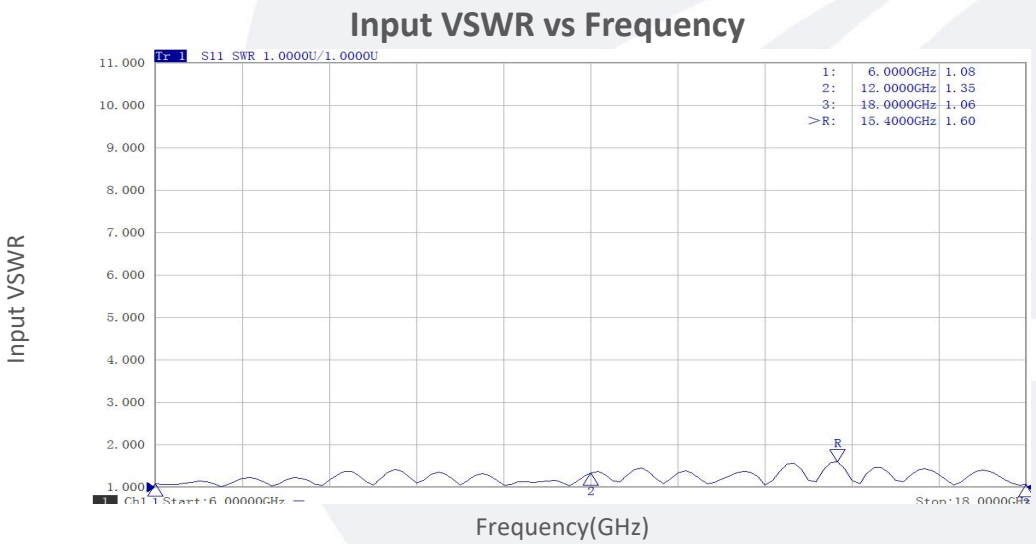
参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature*	-20		+65	℃
存储温度 Non-operating Temperature*	-30		+75	℃
相对湿度 Relative humidity		95		%
海拔 Altitude	10,000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half 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
TLPA6G18G-50-51	Power amplifier 6-18GHz, Gain:50dB,Psat:51dBm,+28V DC,Built in Fan Cooling	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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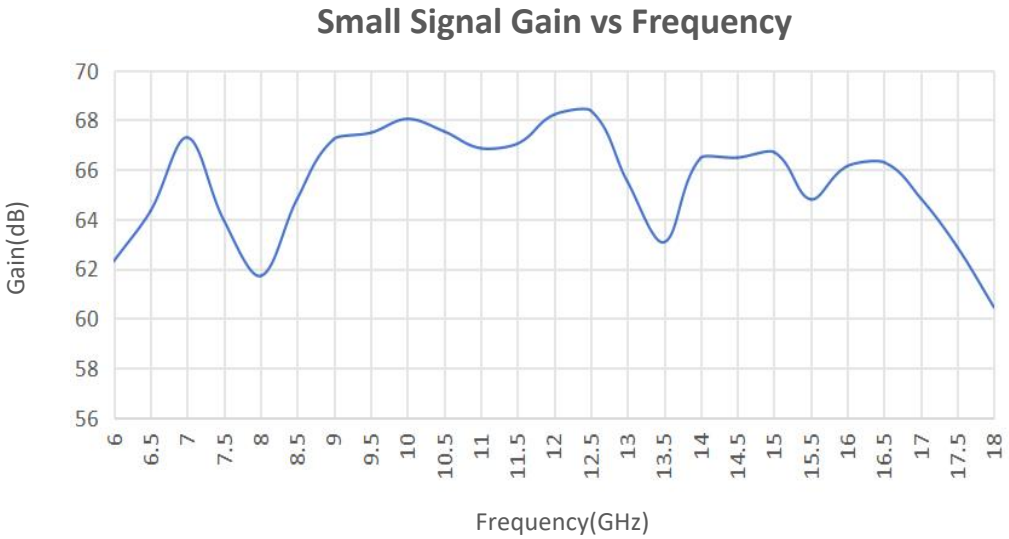

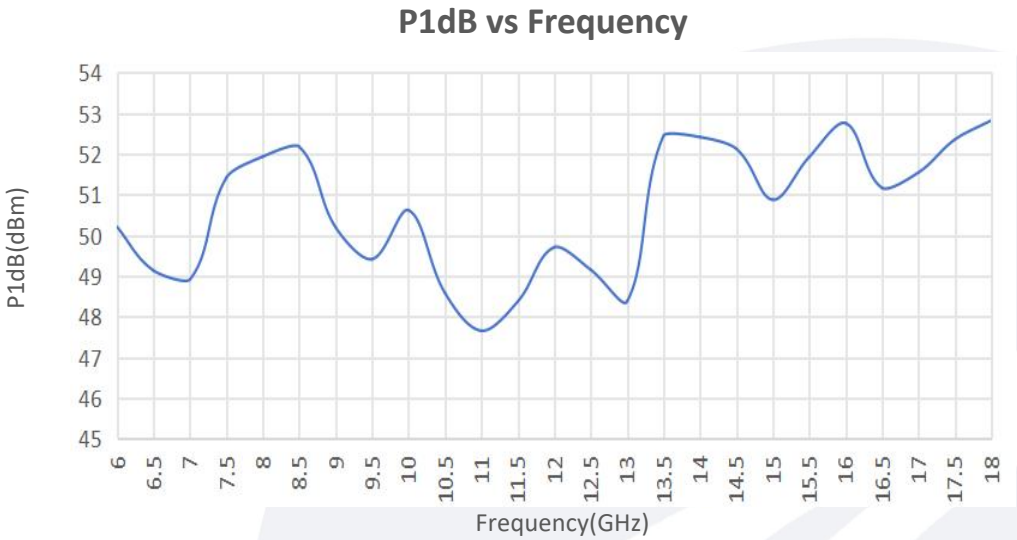

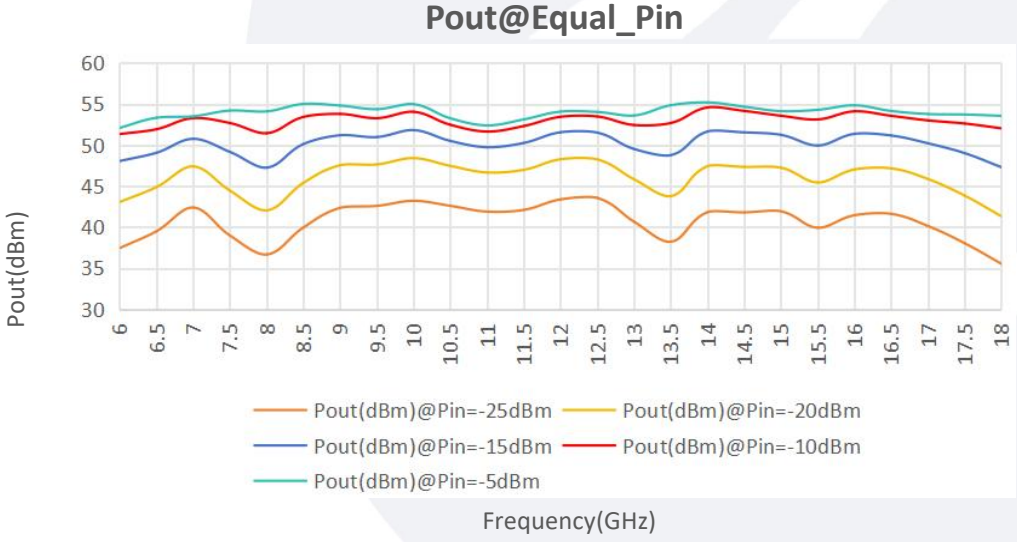

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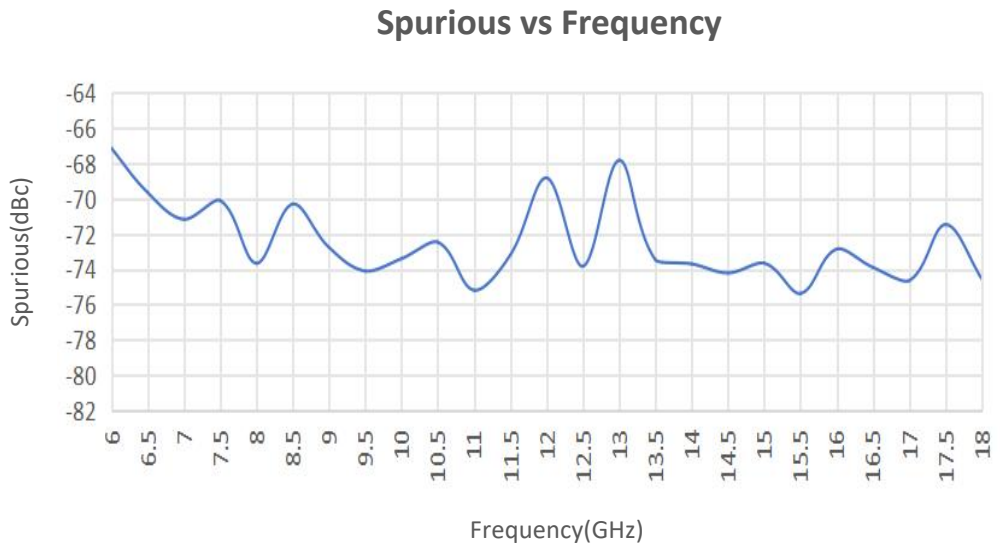

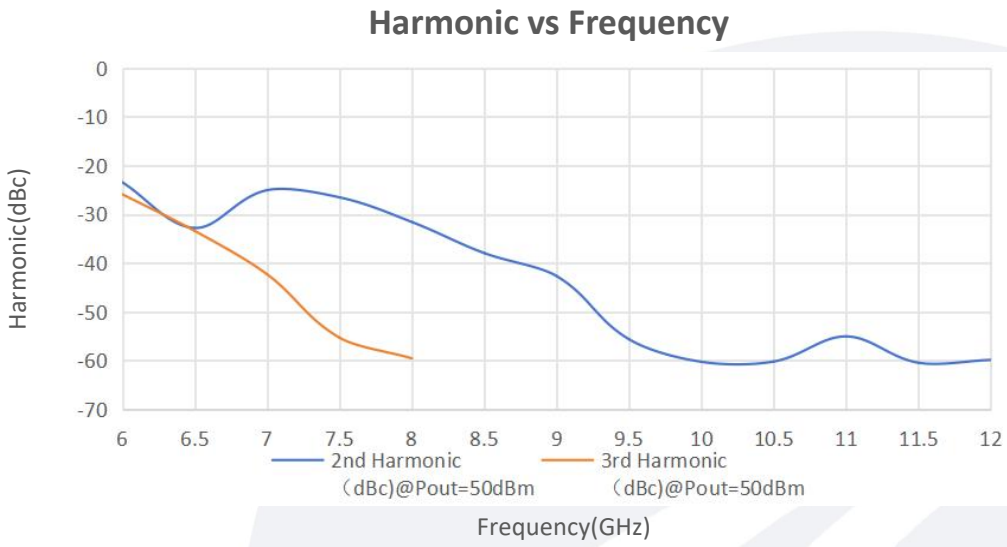

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