

Model: TLPA1G6G-52-44
Power Amplifier
1-6GHz, Gain: 52dB, Psat: 44dBm
Feature:

- Ultra Wide Band: 1-6GHz
- Gain: 52 dB Min
- Psat Output Power: 44dBm Min
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

电气特性 Electrical Specifications:

参数Parameter	Min	Typ	Max	单位Units
频率范围 Frequency range	1-6			GHz
小信号增益 Small Signal Gain	52			dB
增益平坦度 Gain Flatness			±3	dB
线性输出功率 Output P1dB		37		dBm
饱和输出功率 Output Psat		44		dBm
杂散 Spurious@Pout=44dBm			-60	dBc
谐波 Harmonic@Pout=44dBm			-10	dBc
输入驻波 Input VSWR		1.5	2	:1
直流电压 DC Voltage	+28			V DC
直流电流 DC Supply Current		6		A
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	Solder Pin	
尺寸 Size	200*120*20	mm
重量 Weight	200	g

绝对最大值 Absolute Maximum Ratings:

参数Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+28V
输入功率 RF Input Power	5 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

外形尺寸 Outline Drawing:

Unit: mm



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



温度环境 Environmental Conditions:

参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature*	-40		+50	°C
存储温度 Non-operating Temperature*	-50		+60	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	10,000			feet
震动 Shock / Vibration(MIL-STD-810F)	20g,11ms,saw-tooth			
冲击 Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

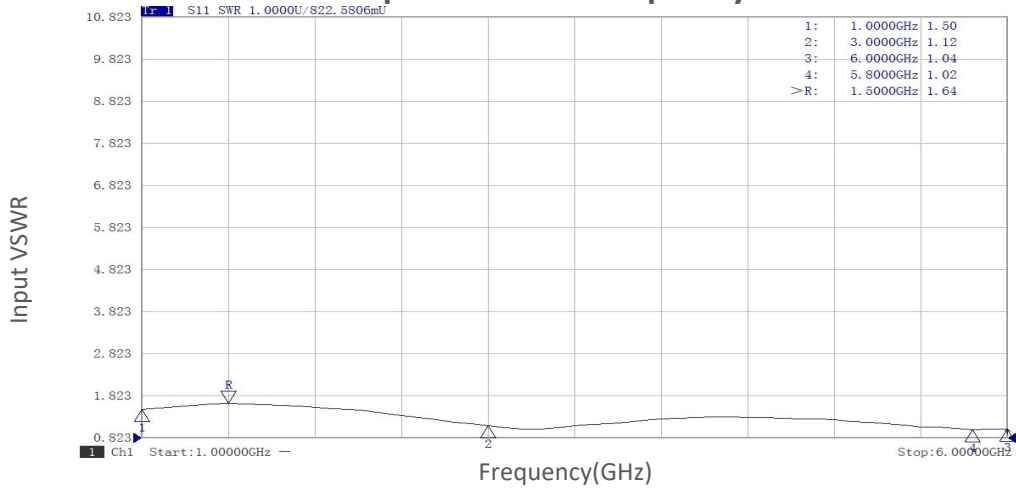
*Note: For a wider temperature range, please consult the manufacturer.

订货信息 Ordering Information:

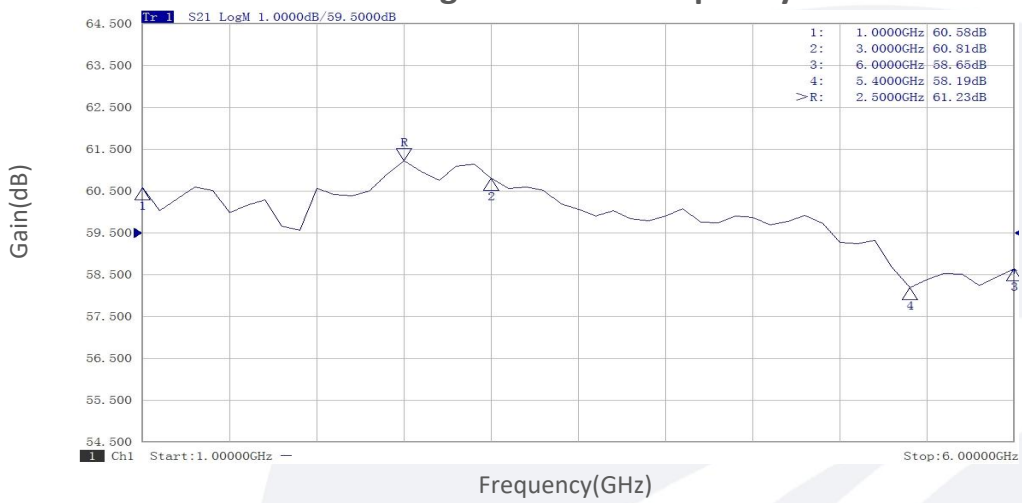
标准型号 Part Number	描述 Description	版本号 Revision
TLPA1G6G-52-44	Power amplifier 1-6GHz, Gain:52dB, Psat:44dBm, +28V DC, Without Heatsink	Rev.1.1
TLPA1G6G-52-44-HS	Power amplifier 1-6GHz, Gain:52dB, Psat:44dBm, +28V DC, With Heatsink	Rev.1.1

典型曲线 Typical Performance Data:

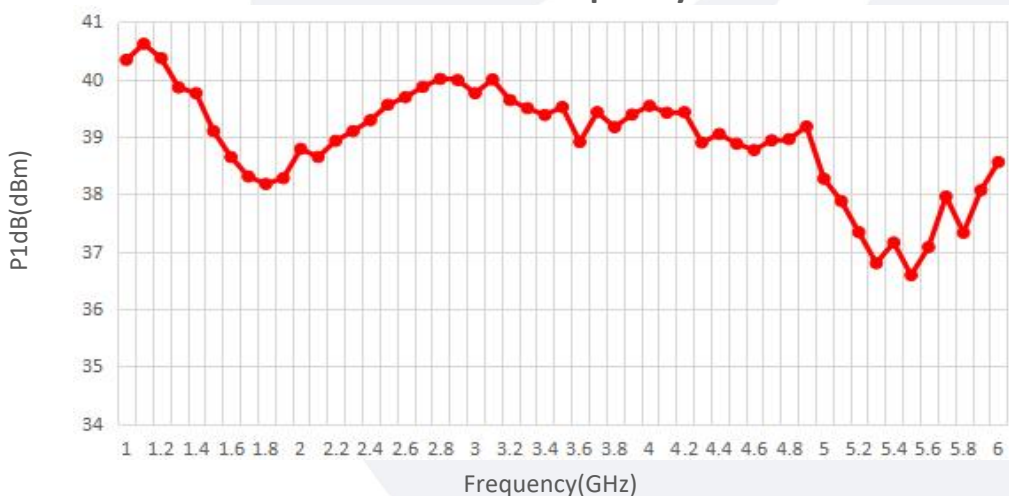
Input VSWR vs Frequency



Small Signal Gain vs Frequency



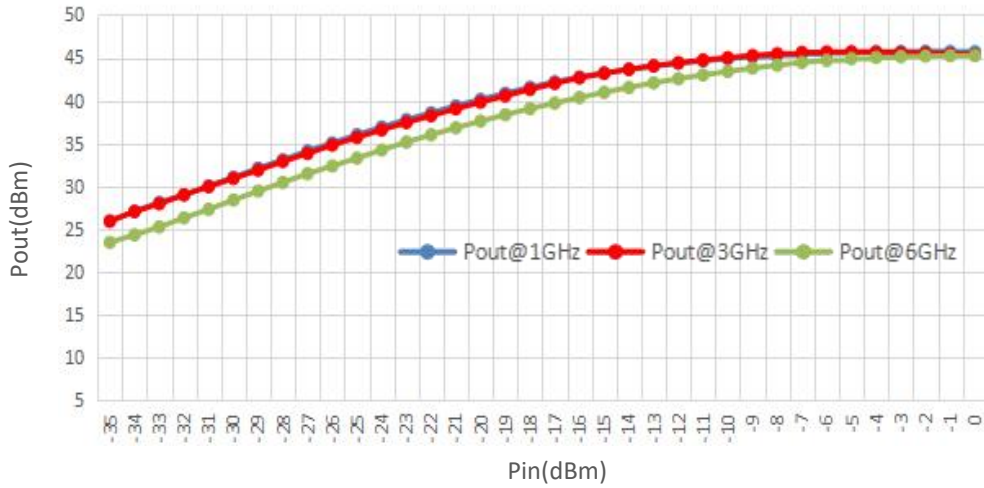
P1dB vs Frequency



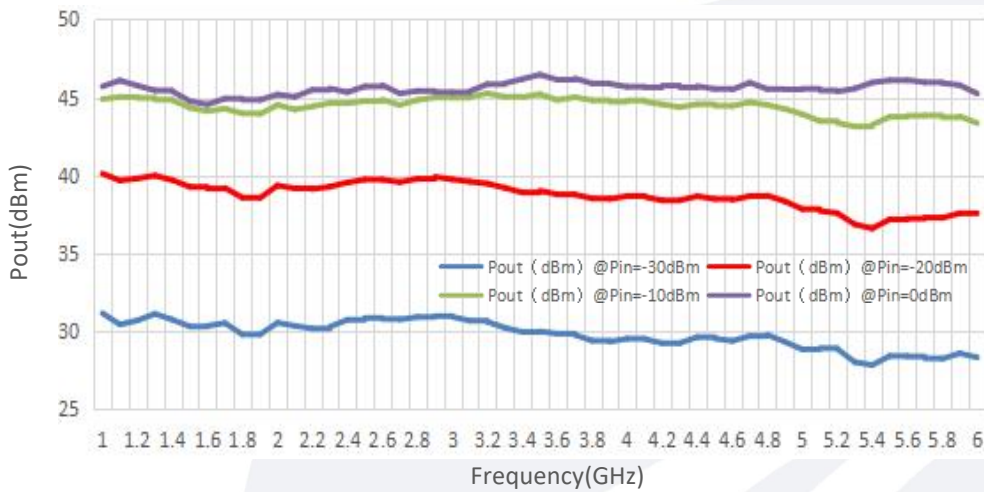
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

典型曲线 Typical Performance Data:

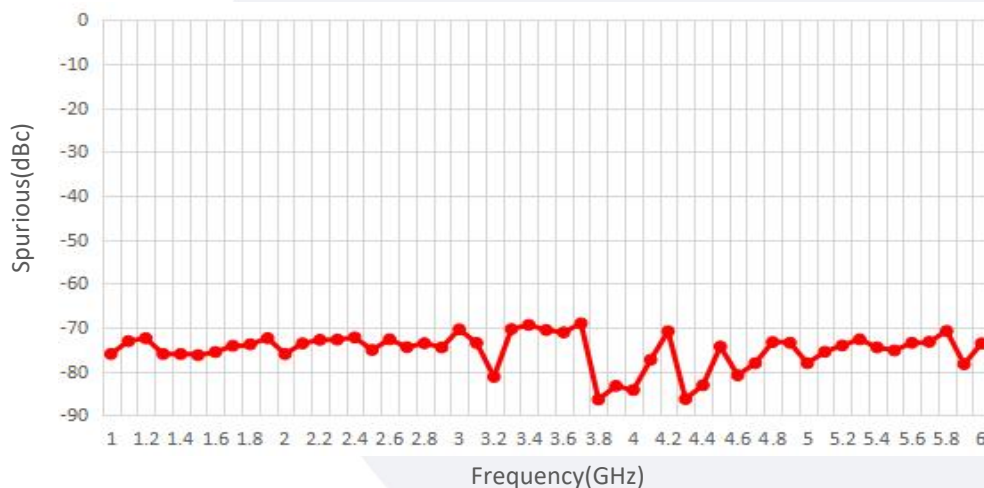
Pout@Pin



Pout@Equal_Pin



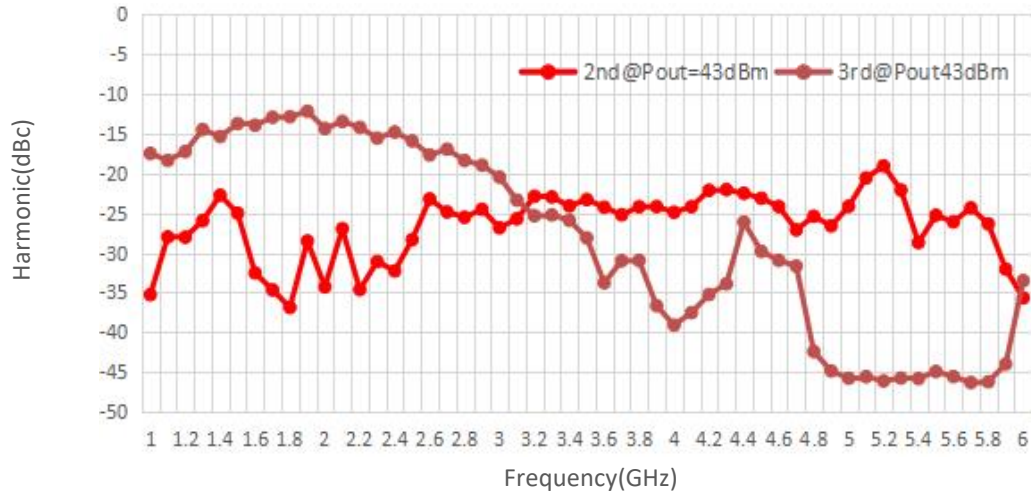
Spurious vs Frequency



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典型曲线 Typical Performance Data:

Harmonic vs Frequency



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