

**Model:TLPA43G52G-37-40**
**Power Amplifier**  
**43-52GHz,Gain:37dB,Psat:40dBm**
**Feature:**

- Ultra Wide Band: 43-52 GHz
- Gain:37 dB Min
- Psat Output Power: 40 dBm 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	43		52	GHz
增益 Gain	37			dB
饱和输出功率 Output Psat	40			dBm
杂散 Supurious@Pout=40dBm			-50	dBc
输入驻波 Input VSWR		2.0		:1
直流电压 DC Voltage		+18		V DC
功耗 Power Cnsumption		500@Max		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	1.85 Female/1.85 Female	
直流偏置 DC Bias	Solder Pin	
尺寸 Size	300*262*92	mm
重量 Weight	≤20	Kg

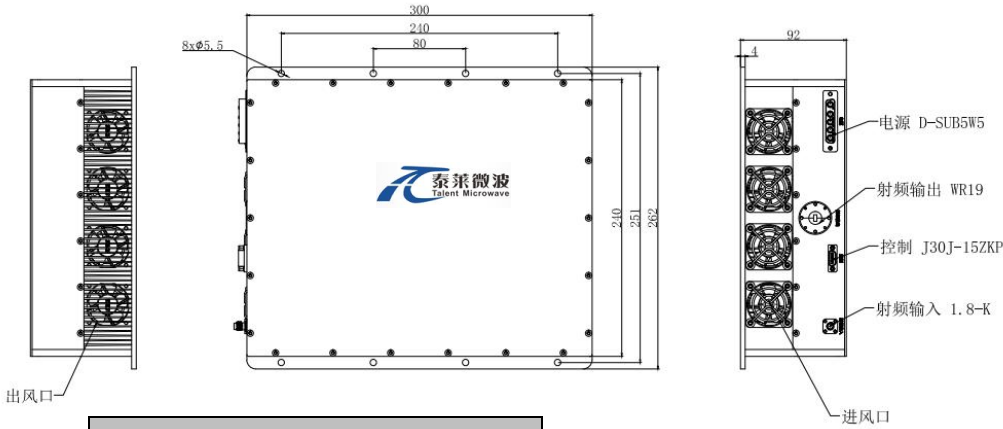
**绝对最大值 Absolute Maximum Ratings:**

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


**Available 220V System**  
**Benchtop Amplifier**

外形尺寸 Outline Drawing:

Unit: mm



DSUB-5W5	
Pin	Function
A1-3	+18V
A4-5	GND

J30J-15ZKP引脚定义	
引脚 Pin	功能 Function
1	TTL
2-5	GND
6-15	NC



温度环境 Environmental Conditions:

参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature*	-40		+60	°C
存储温度 Non-operating Temperature*	-50		+70	°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		

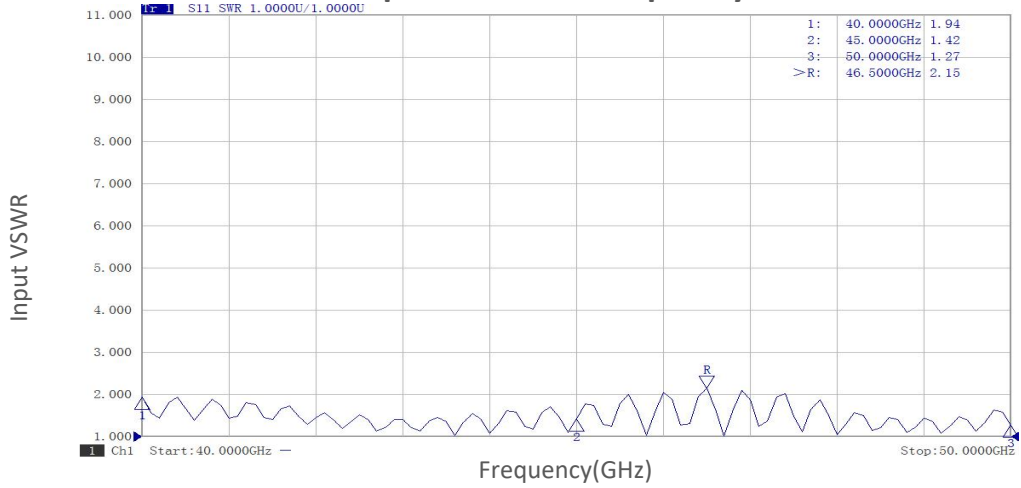
\*Note: For a wider temperature range, please consult the manufacturer.

订货信息 Ordering Information:

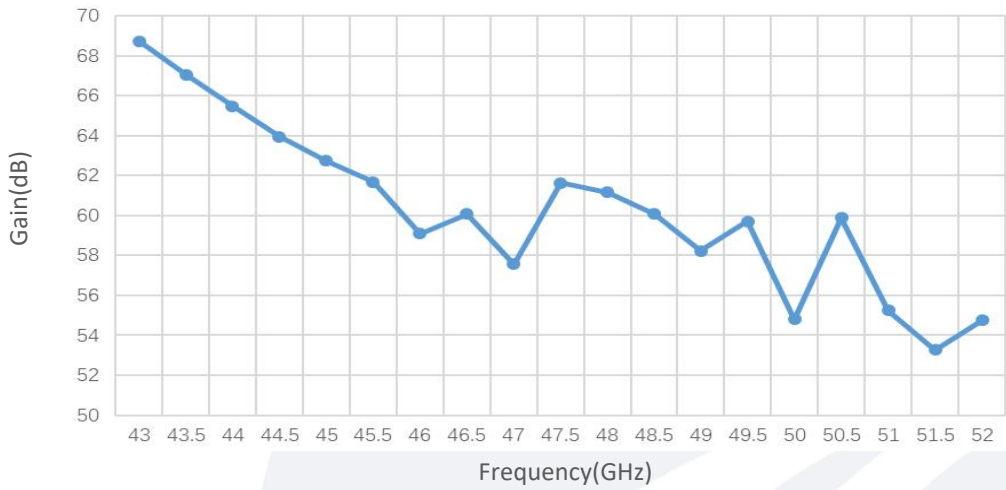
标准型号 Part Number	描述 Description	版本号 Revision
TLPA43G52G-37-40	Power amplifier 43-52GHz, Gain:37dB, Psat:40dBm, +18V DC	Rev.1.1

典型曲线 Typical Performance Data:

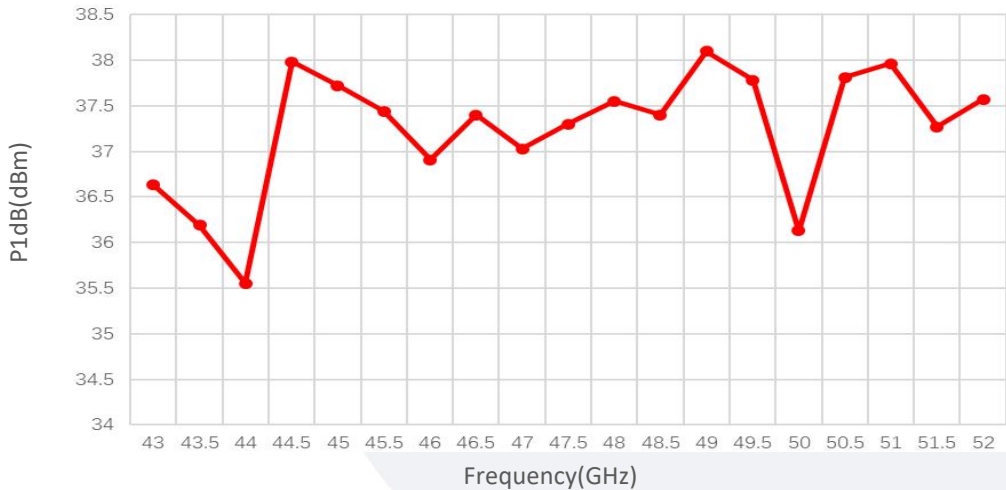
Input VSWR vs Frequency



Small Signal Gain vs Frequency



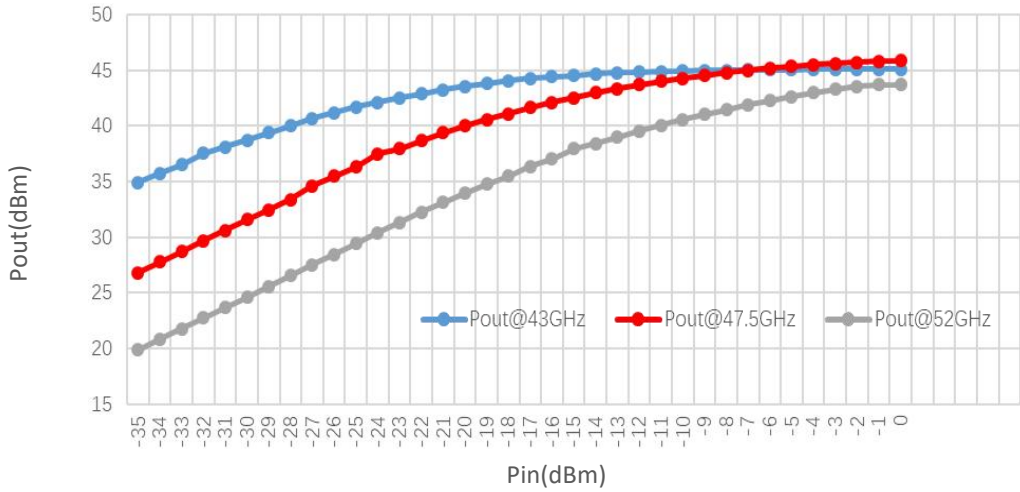
P1dB vs Frequency



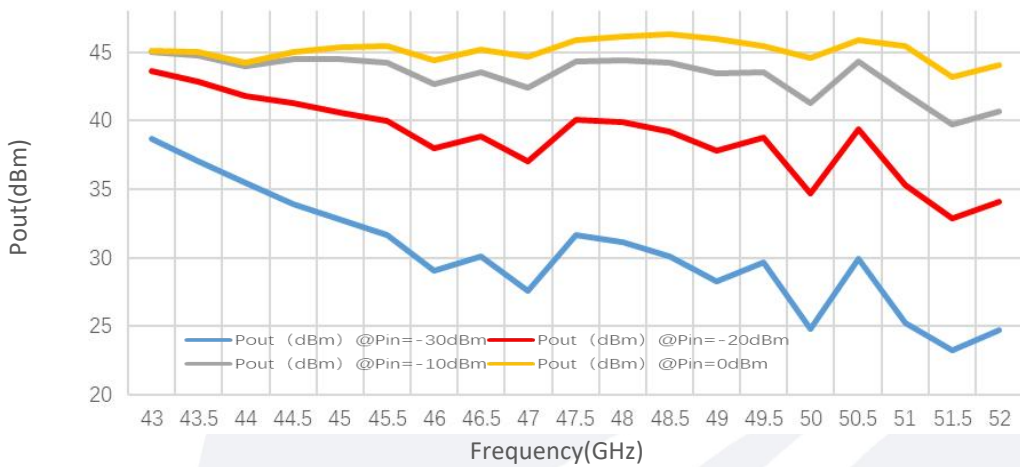
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

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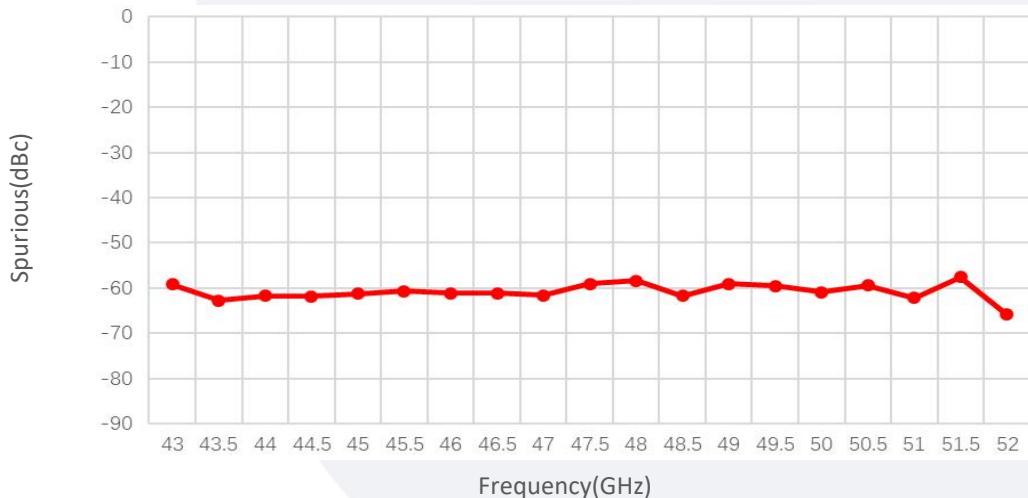
Pout@Pin



Pout@Equal\_Pin



Spurious vs Frequency



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