

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

Electrical Specifications:

Parameter	Min	Typ	Max	Units
Frequency range	43		52	GHz
Gain	37			dB
Output Psat	40			dBm
Supurious@Pout=40dBm			-50	dBc
Input VSWR		2.0		:1
DC Voltage	+18			V DC
Power Cnsumption	500@Max			W
Impedance	50			Ohms

Mechanical Specifications:

Parameter	Value	Units
Input/Output Connector	1.85 Female/1.85 Female	
DC Bias	Solder Pin	
Size	300*262*92	mm
Weight	≤20	Kg

Absolute Maximum Ratings:

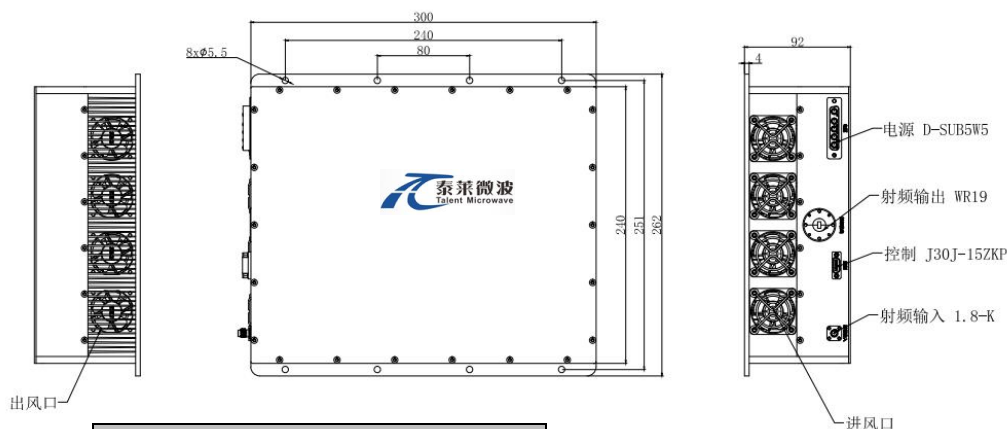
Parameter	Value
Supply Bias Voltage	TBD
RF Input Power	+10 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Available 220V System
Benchtop Amplifier

Outline Drawing:

Unit: mm



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

J30J-15ZKP	
Pin	Function
1	TTL
2-5	GND
6-15	NC



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		

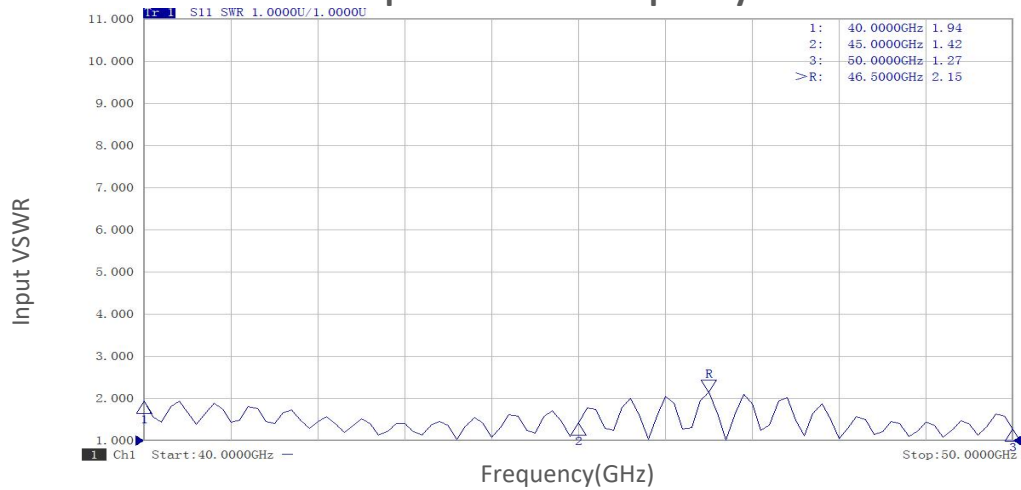
*Note: For a wider temperature range, please consult the manufacturer.

Ordering Information:

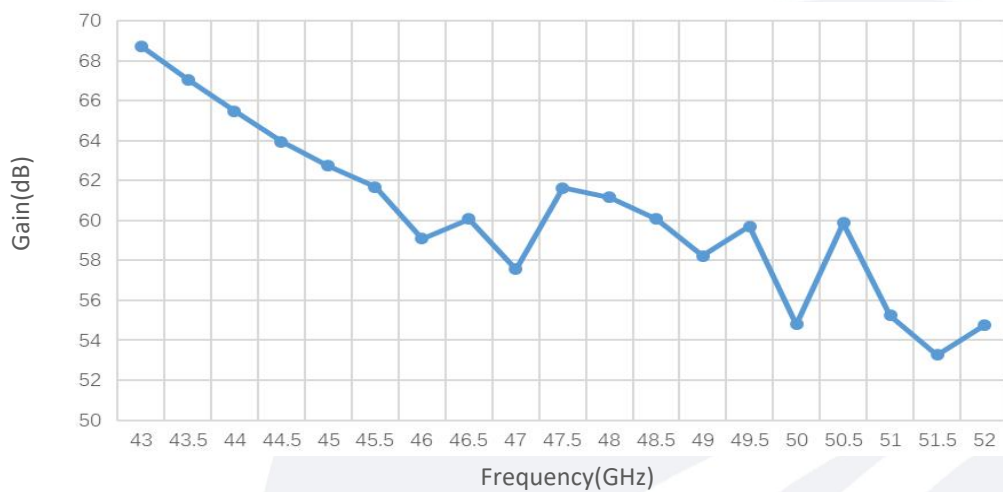
Part Number	Description	Revision
TLPA43G52G-37-40	Power amplifier 43-52GHz, Gain:37dB, Psat:40dBm, +18V DC	Rev.1.1

Typical Performance Data:

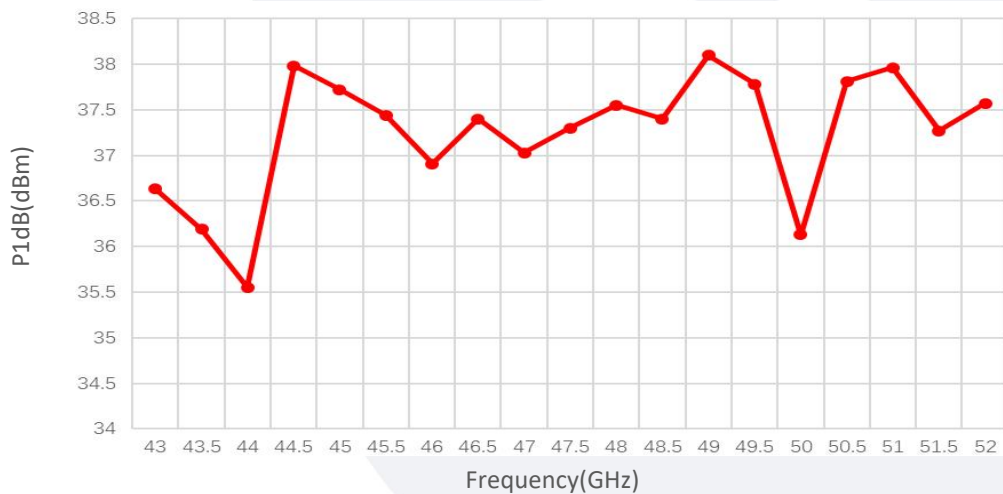
Input VSWR vs Frequency



Small Signal Gain vs Frequency



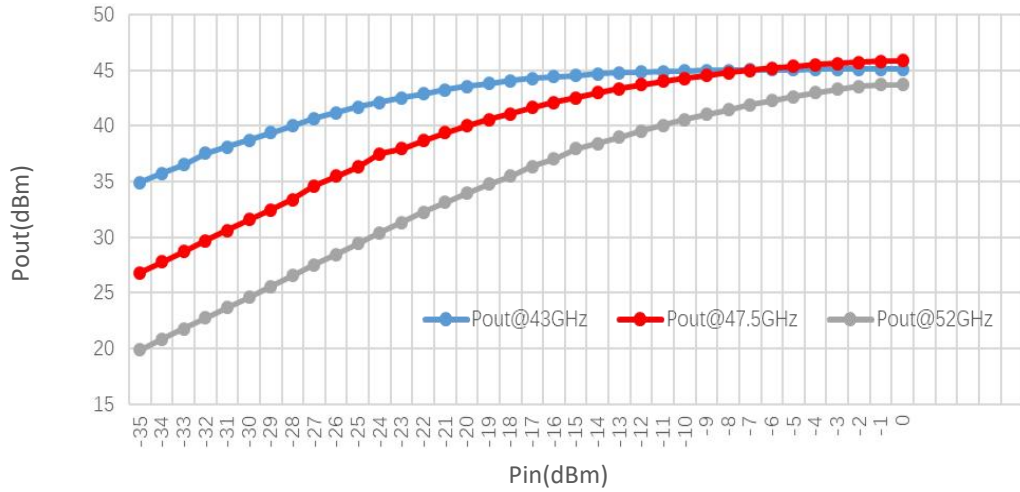
P1dB vs Frequency



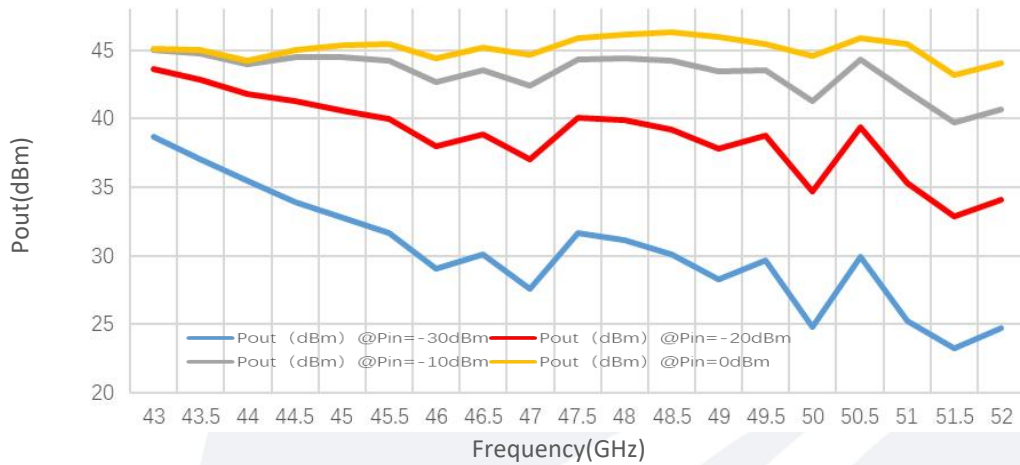
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

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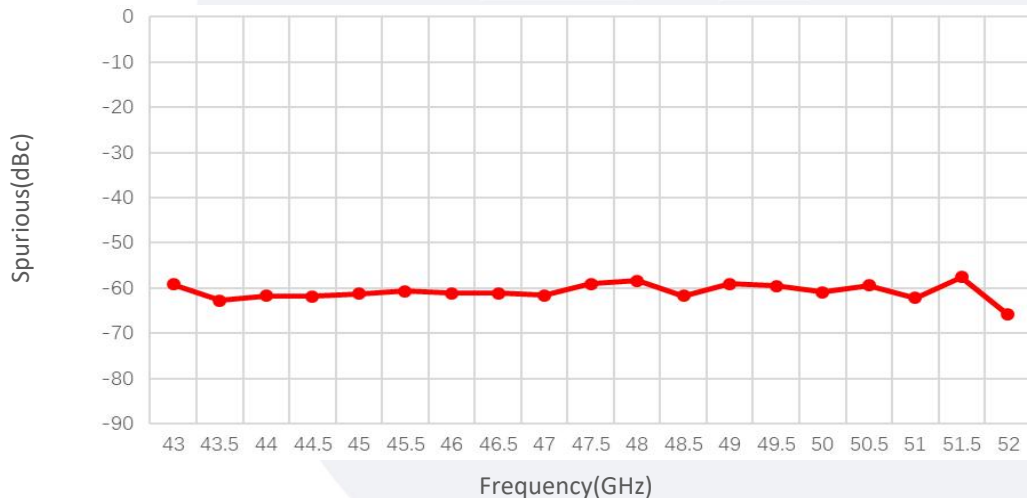
Pout@Pin



Pout@Equal_Pin



Spurious vs Frequency



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