

Model:TLPA0.1G4G-45-41

Power Amplifier

0.1-4GHz,Gain:45dB,Psat:41dBm

Feature:

- Ultra Wide Band: 0.1-4GHz
- Gain:45 dB Typ
- Psat Output Power: 41 dBm Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Electrical Specifications:

Parameter		Min	Typ	Max	Units
Frequency range		0.1-4			GHz
Gain			45		dB
Gain Flatness			±3		dB
Outout P1dB	0.1-1G		38		dBm
	1-4G		40		
Output Psat			41		dBm
Input VSWR				1.8	:1
DC Voltage		+28			V DC
DC Supply Current			2.5		A
Impedance		50			Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	Solder Pin	
Size	140*80*12	mm
Weight	260	g

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+28V
RF Input Power	0 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit: mm



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



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

Environmental Conditions:

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

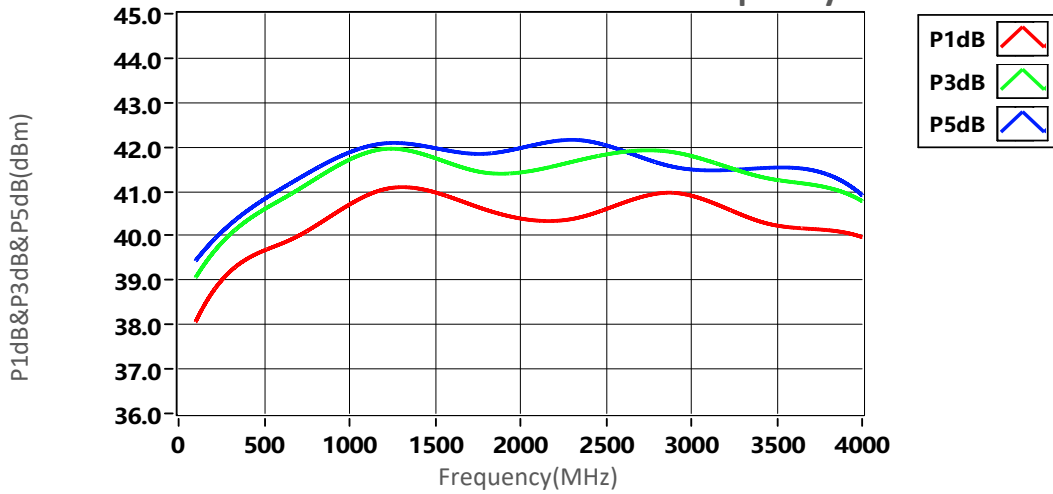
*Note: For a wider temperature range, please consult the manufacturer.

Ordering Information:

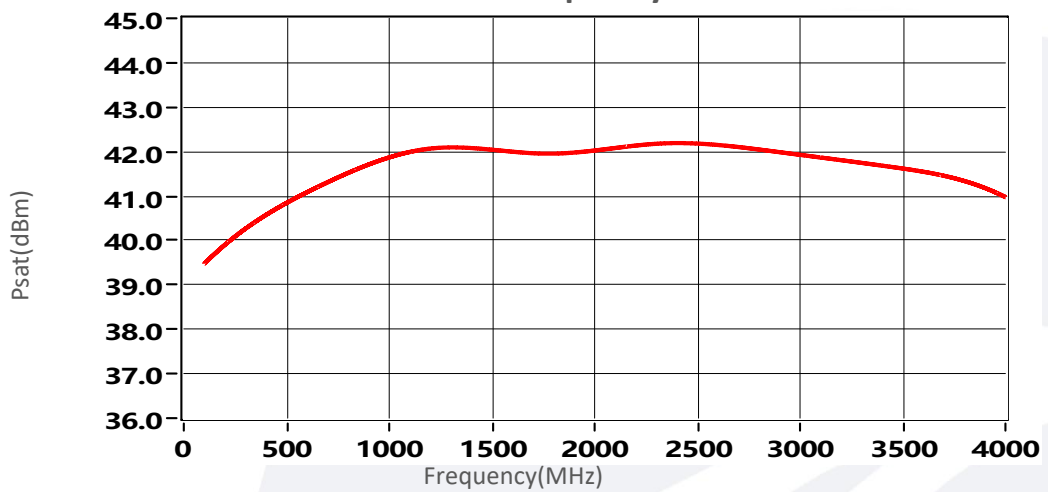
Part Number	Description	Revision
TLPA0.1G4G-45-41	Power amplifier 0.1-4GHz,Gain:45dB,Psat:41dBm, +28V DC,Without Heatsink	Rev.1.1
TLPA0.1G4G-45-41-HS	Power amplifier 0.1-4GHz,Gain:45dB,Psat:41dBm, +28V DC,With Heatsink	Rev.1.1

Typical Performance Data:

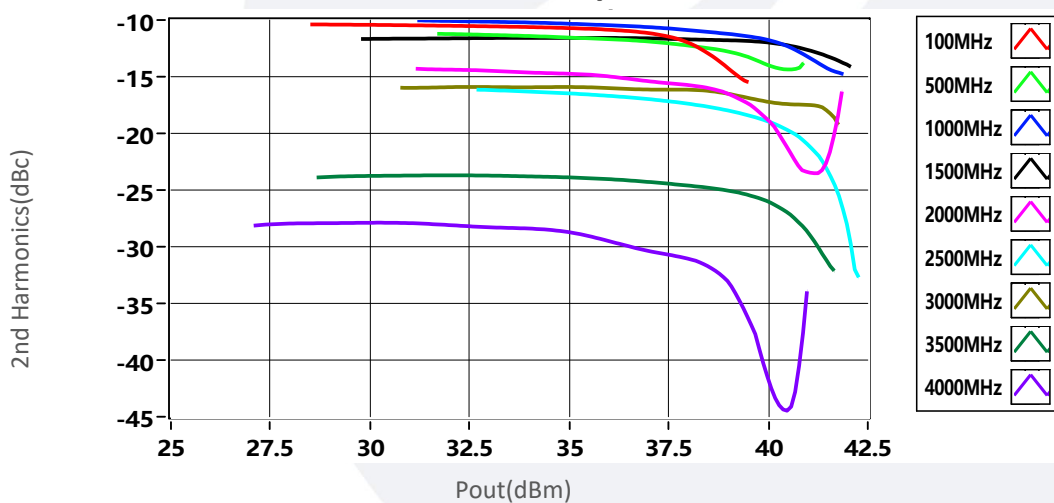
P1dB&P3dB&P5dB vs Frequency



Psat vs Frequency



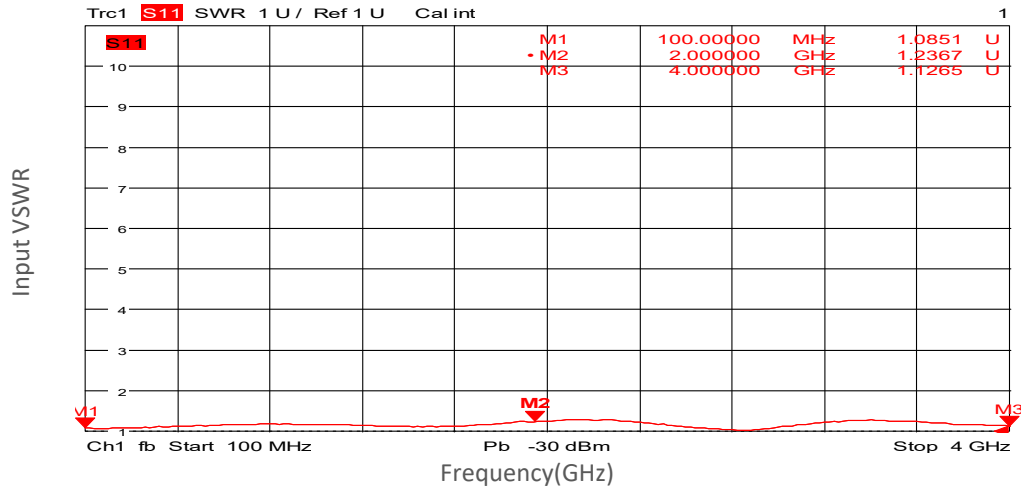
2nd Harmonics vs Output Power



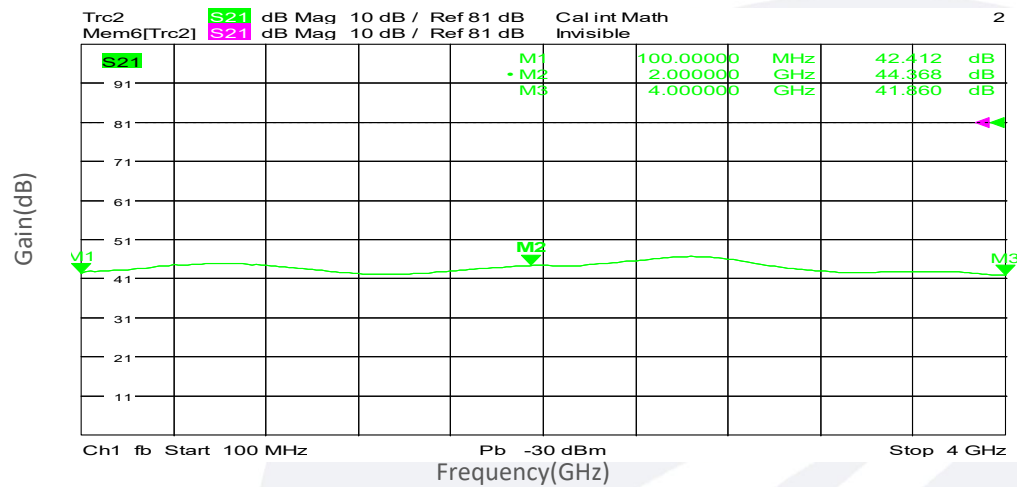
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

Typical Performance Data:

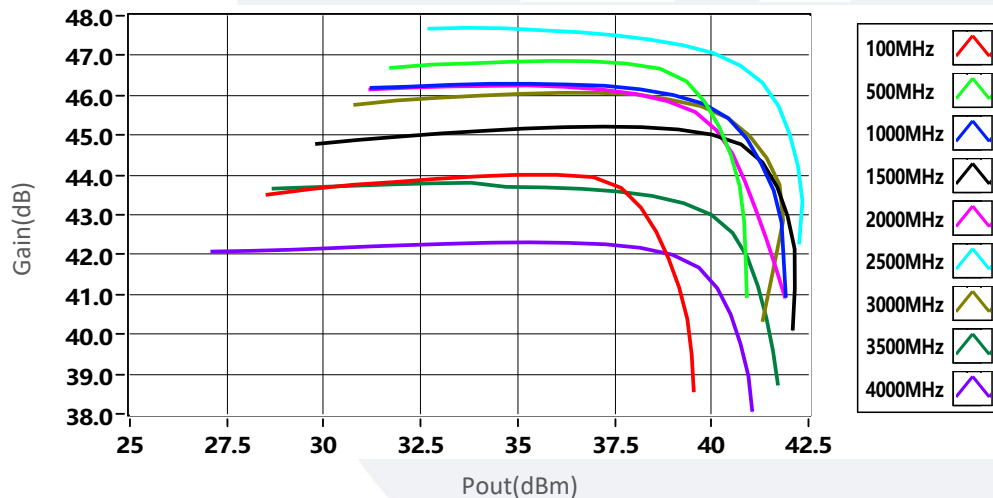
Input VSWR vs Frequency



Small Signal Gain vs Frequency



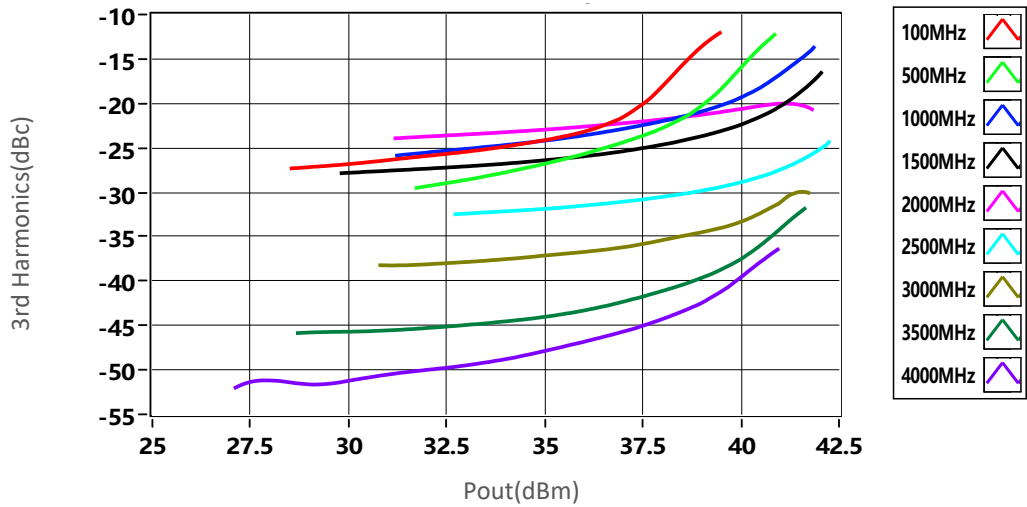
Gain vs Output Power



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Typical Performance Data:

3rd Harmonics vs Output Power



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