

Model:TLPA1G8G-40-40

Power Amplifier 1-8GHz,Gain:40dB,Psat:40dBm

Feature:

- Ultra Wide Band: 1-8GHz
- Gain:40dB Min
- Psat Output Power:40dBm Min
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Electrical Specifications:

Parameter	Min	Typ	Max	Units
Frequency range	1-8			GHz
Gain	40			dB
Gain Flatness		±3		dB
Output Psat	40			dBm
Spurious@Psat			-50	dBc
Harmonics@Psat			-10	dBc
Input VSWR			2	:1
DC Voltage		+28		V DC
DC Supply Current			4.5	A
Impedance	50			Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Power Interface	J30J-9ZKP	
Size	150*90*20	mm
Weight	500	g

Absolute Maximum Ratings:

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



Available 220V System
Benchtop Amplifier

Outline Drawing:

Unit: mm



***Heat Sink Required During Operation

J30J-9ZKP Define	
Pin	Function
1-5	+28V
6-9	GND



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature*	-40		+60	°C
Non-operating Temperature*	-50		+70	°C
Relative humidity		95		%
Altitude	10,000			feet
Shock / Vibration(MIL-STD-810F)	20g,11ms,saw-tooth			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

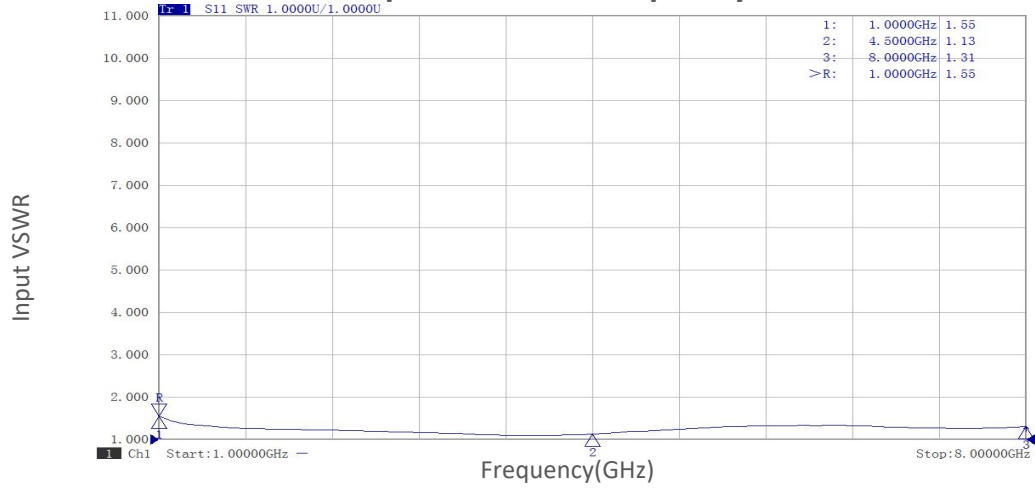
*Note: For a wider temperature range, please consult the manufacturer.

Ordering Information:

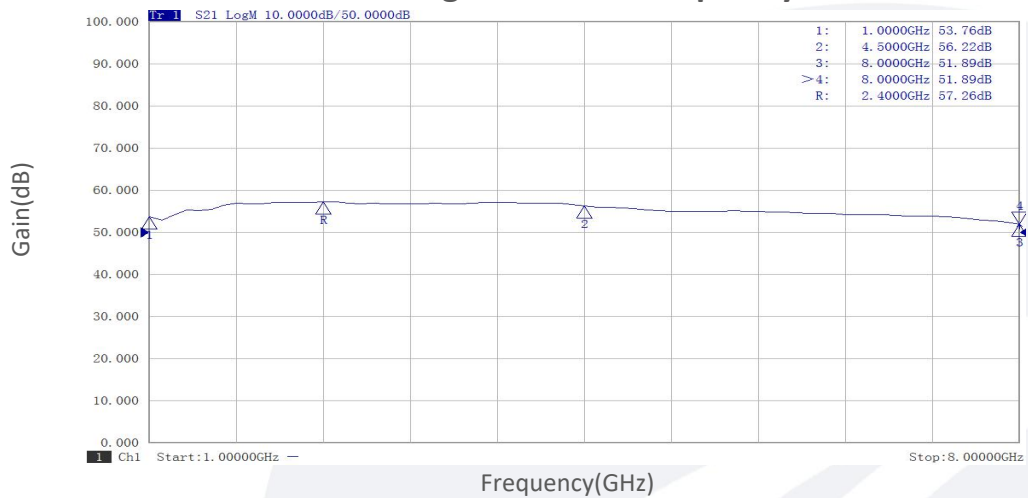
Part Number	Description	Revision
TLPA1G8G-40-40	Power amplifier 1-8GHz,Gain:40dB,Psat:40dBm,+28V DC,Without Heatsink.	Rev.1.1
TLPA1G8G-40-40-HS	Power amplifier 1-8GHz,Gain:40dB,Psat:40dBm,+28V DC,With Heatsink.	Rev.1.1

Typical Performance Data:

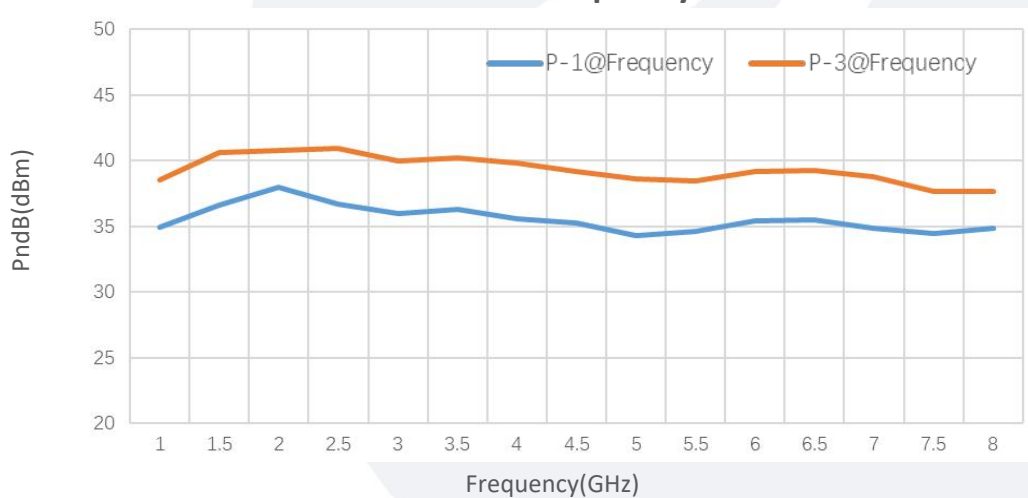
Input VSWR vs Frequency



Small Signal Gain vs Frequency



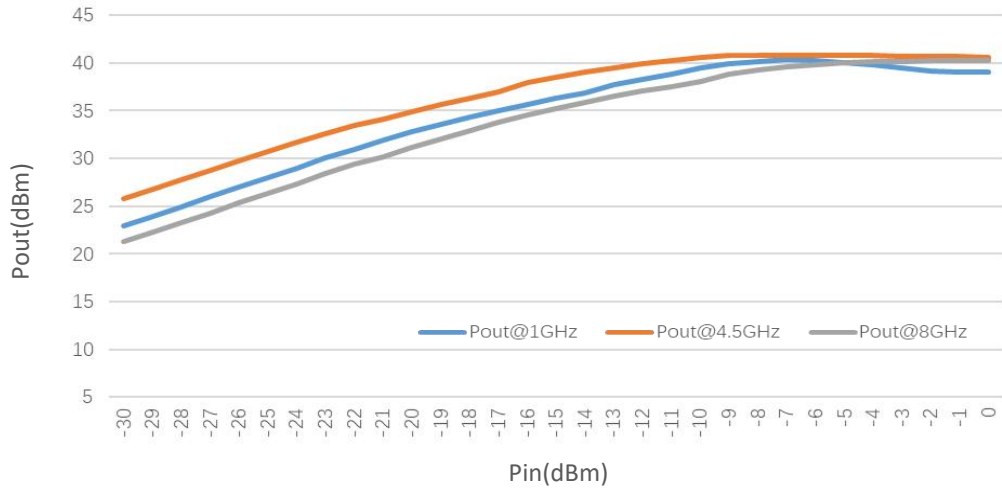
PndB vs Frequency



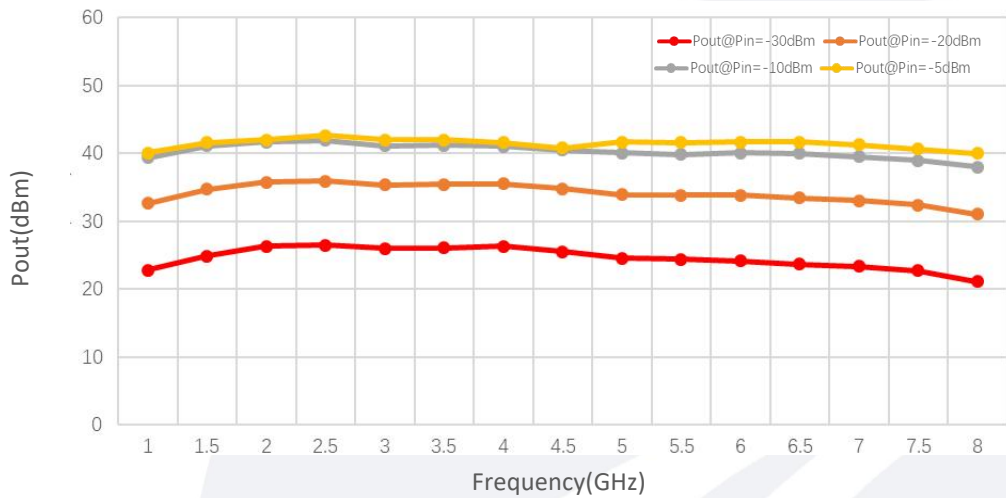
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

Typical Performance Data:

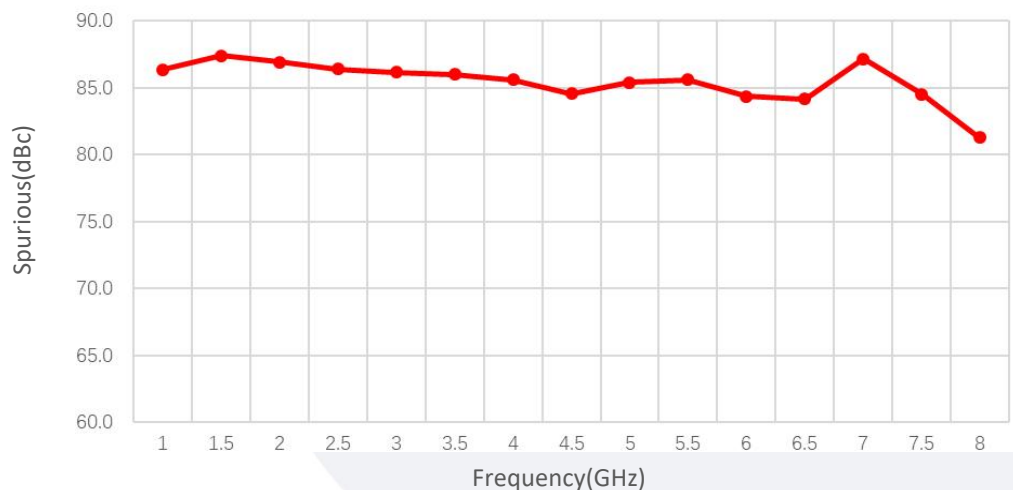
Pout@Pin



Pout@Equal_Pin



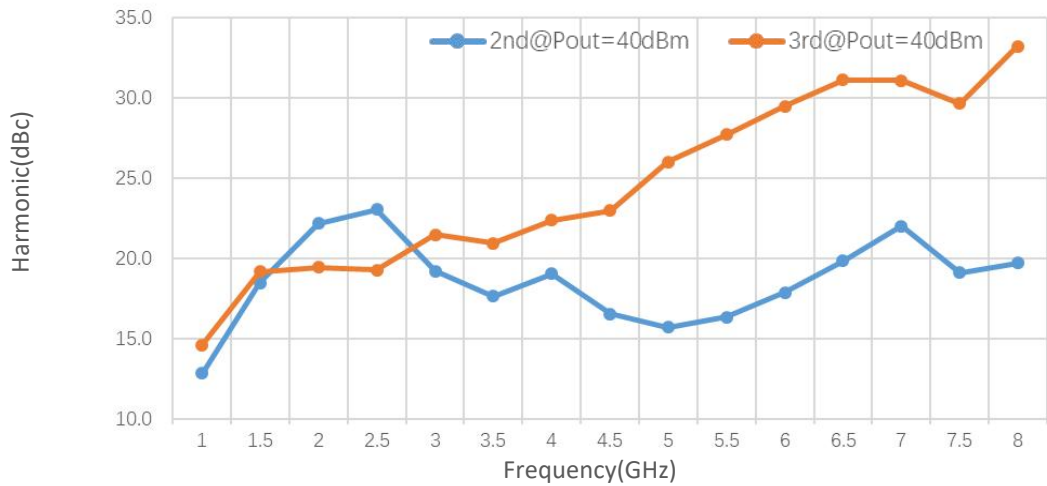
Spurious vs Frequency



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Typical Performance Data:

Harmonic vs Frequency



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