

Model:TLPA18G40G-40-37

Power Amplifier

18-40GHz, Gain:40dB, Psat:37dBm

Feature:

- Ultra Wide Band:18-40GHz
- Gain:40dB Min
- Psat Output Power:37dBm Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Electrical Specifications:

Parameter	Min	Typ	Max	Units
Frequency range	18-40			GHz
Gain	40	45		dB
Output P1dB	30	32		
Output Psat		37		dBm
Spurious			-50	dBc
Input VSWR		2		:1
DC Voltage		+20		V DC
Power Consumption			90	W
Impedance	50			Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	2.92 Female/2.92 Female	
DC Power Interface	J30J-9ZKP	
Size	150*90*20	mm
Weight	0.5	Kg

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+24V
RF Input Power	0dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Available 220V System
Benchtop Amplifier

Outline Drawing:

Unit: mm



***Heat Sink Required During Operation

J30J-9ZKP	
Pin	Function
1-5	+20V
6-9	GND



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

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			

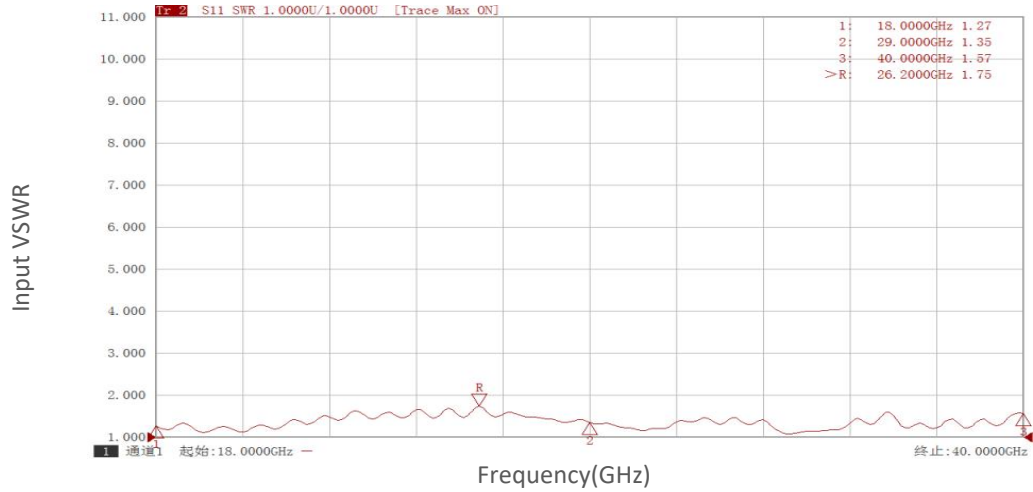
*Note: For a wider temperature range, please consult the manufacturer.

Ordering Information:

Part Number	Description	Revision
TLPA18G40G-40-37	Power amplifier 18-40GHz,Gain 40dB,Psat:37dBm,+20V DC,Without Heatsink.	Rev.1.1
TLPA18G40G-40-37-HS	Power amplifier 18-40GHz,Gain 40dB,Psat:37dBm,+20V DC,With Heatsink.	Rev.1.1

Typical Performance Data:

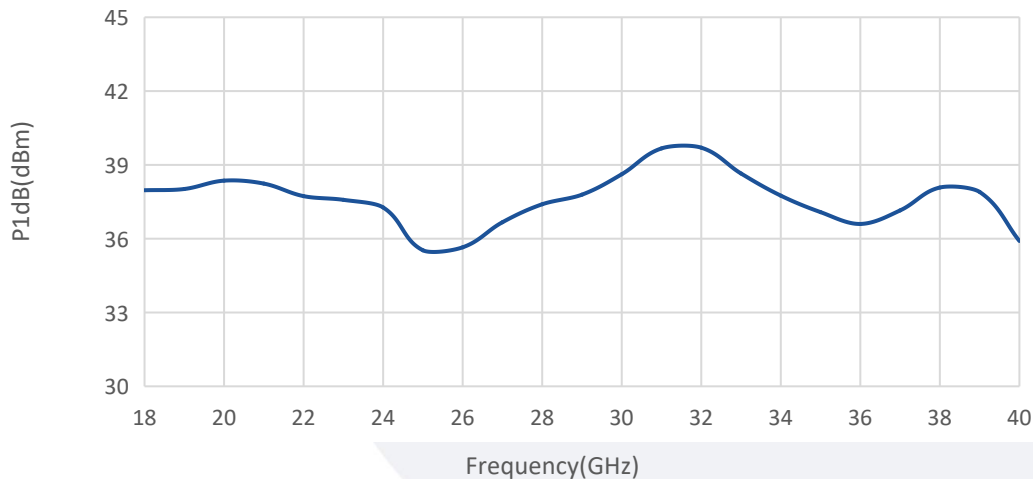
Input VSWR vs Frequency



Gain vs Frequency



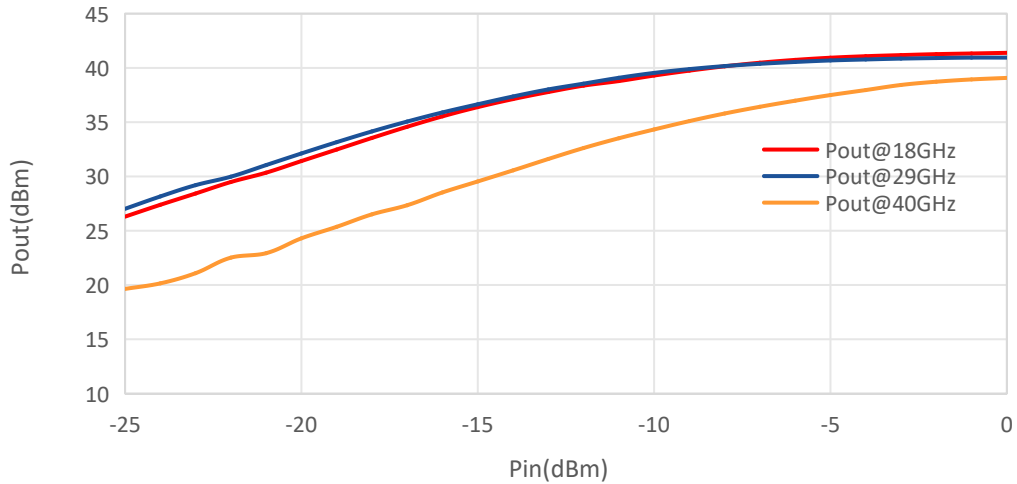
P1dB vs Frequency



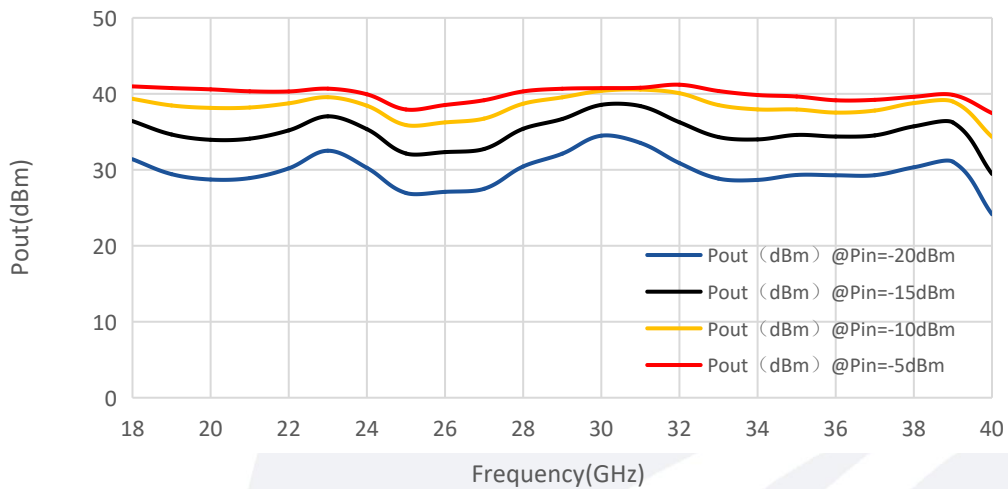
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

Typical Performance Data:

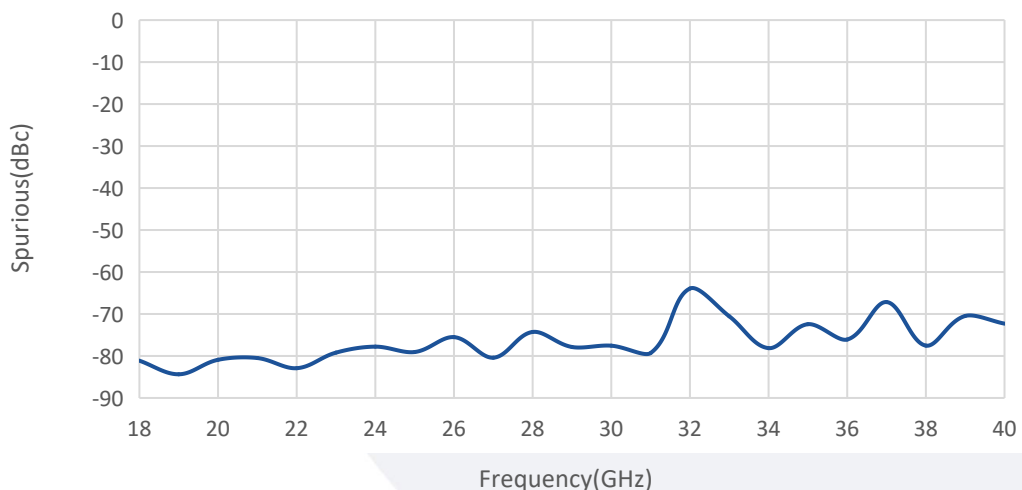
Pout@Pin



Pout@Equal_Pin



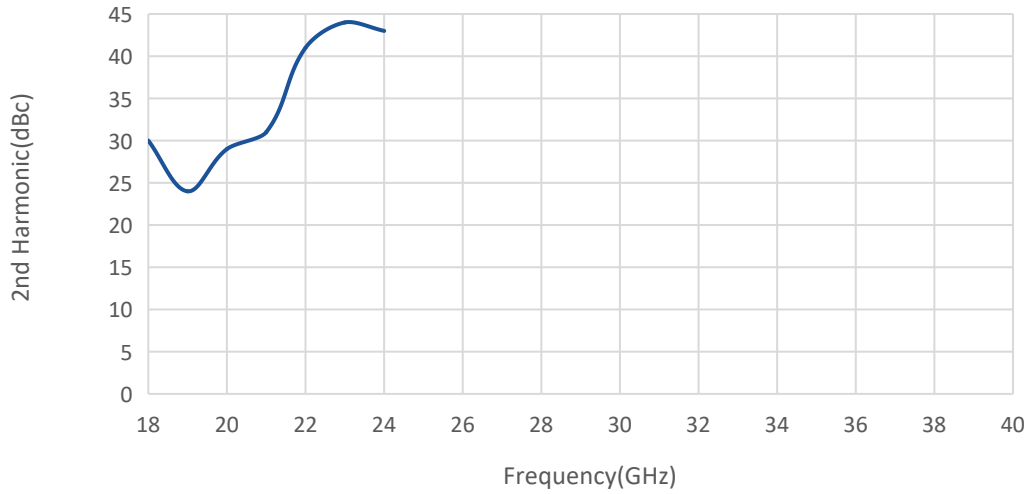
Spurious vs Frequency



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Typical Performance Data:

2nd Harmonic vs Frequency



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