

Model:TLPA18G40G-35-31

Power Amplifier

18-40GHz,Gain:35dB,Psat:31dBm

Feature:

- Ultra Wide Band: 18-40GHz
- Gain:35dB Min
- Psat Output Power:31dBm Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Electrical Specifications:

Parameter	Min	Typ	Max	Units
Frequency range	18-40			GHz
Gain	35	40		dB
Gain Flatness		±3		dB
Output P1dB	27	29		dBm
Output Psat		31		dBm
Input VSWR		2		:1
Output VSWR		2		:1
DC Voltage		20		V DC
DC Supply Current		2.2		A
Impedance	50			Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	2.92 Female/2.92 Female	
DC Bias	Solder Pin	
Size	60*50*12	mm
Weight	/	g

Absolute Maximum Ratings:

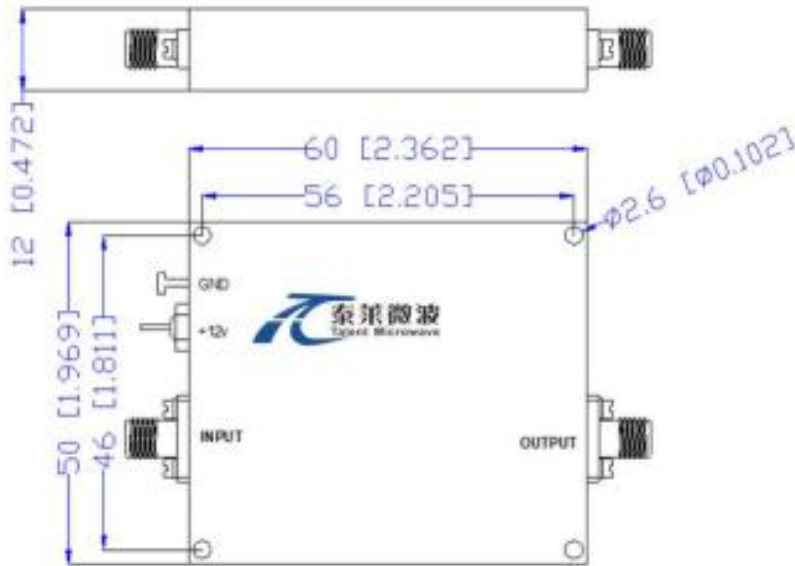
Parameter	Value
Supply Bias Voltage	TBD
RF Input Power	3dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Available 220V System
Benchtop Amplifier

Outline Drawing:

Unit: mm



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

Environmental Conditions:



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

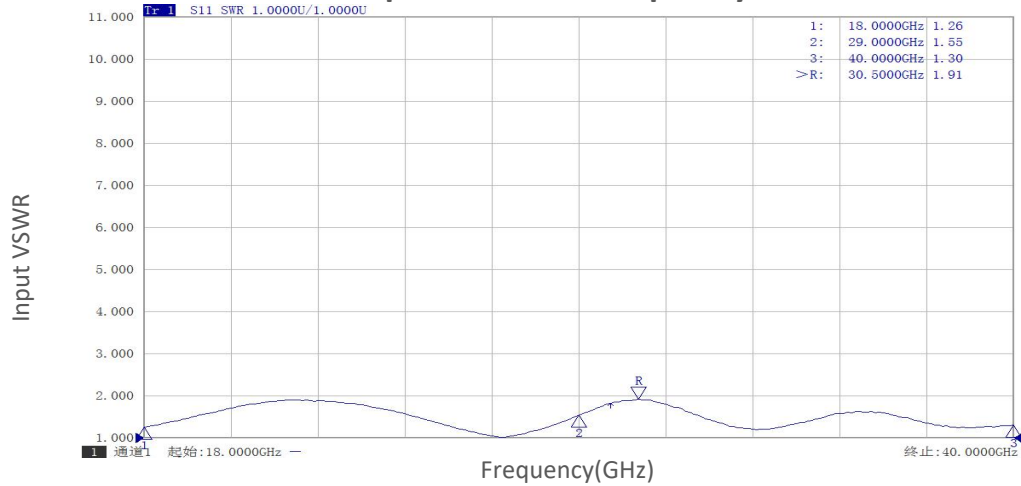
Parameter	Min	Typ	Max	Units
Operating Temperature	-40		+85	°C
Non-operating Temperature	-55		+125	°C
Relative humidity		95		%
Altitude	50,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

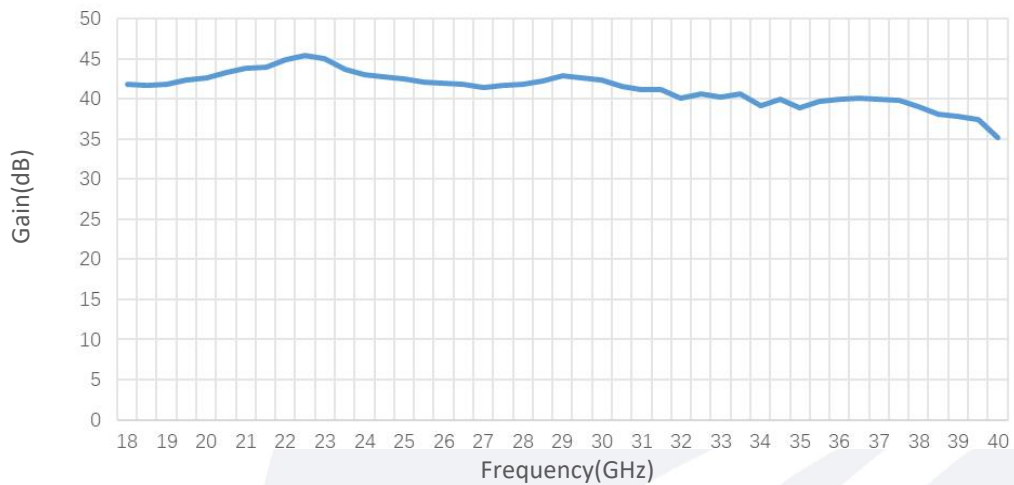
Part Number	Description	Revision
TLPA18G40G-35-31	Power amplifier 18-40GHz,Gain:35dB,Psat:31dBm,+12V DC,Without Heatsink.	Rev.1.1
TLPA18G40G-35-31-HS	Power amplifier 18-40GHz,Gain:35dB,Psat:31dBm,+12V DC,With Heatsink.	Rev.1.1

Typical Performance Data:

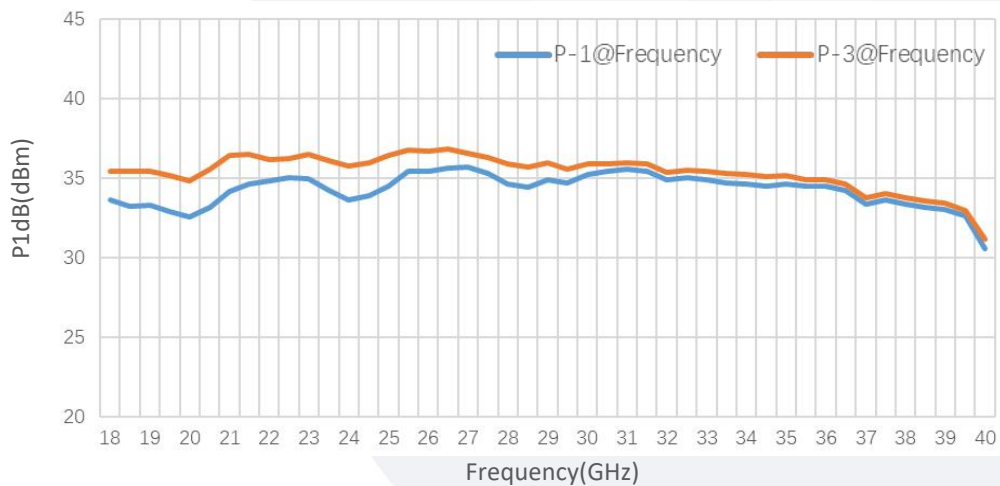
Input VSWR vs Frequency



Small Signal Gain vs Frequency



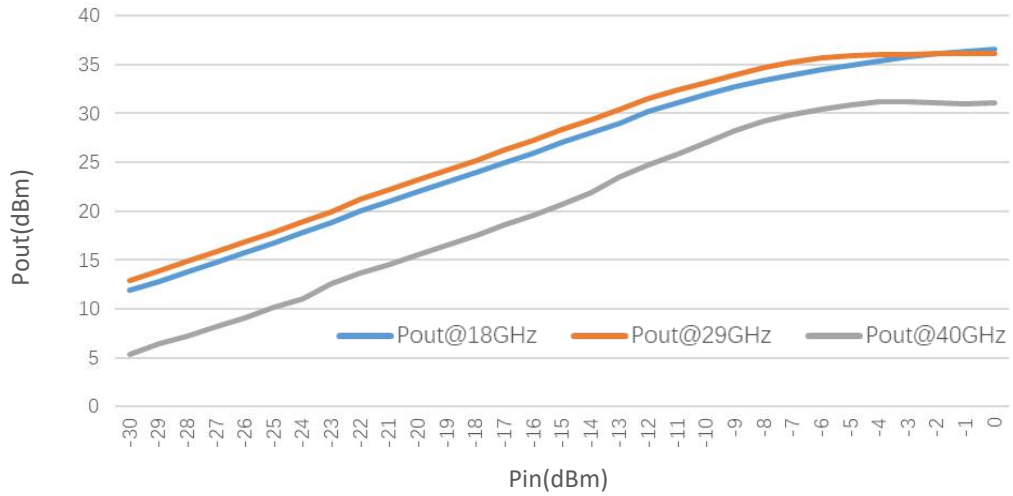
P1dB vs Frequency



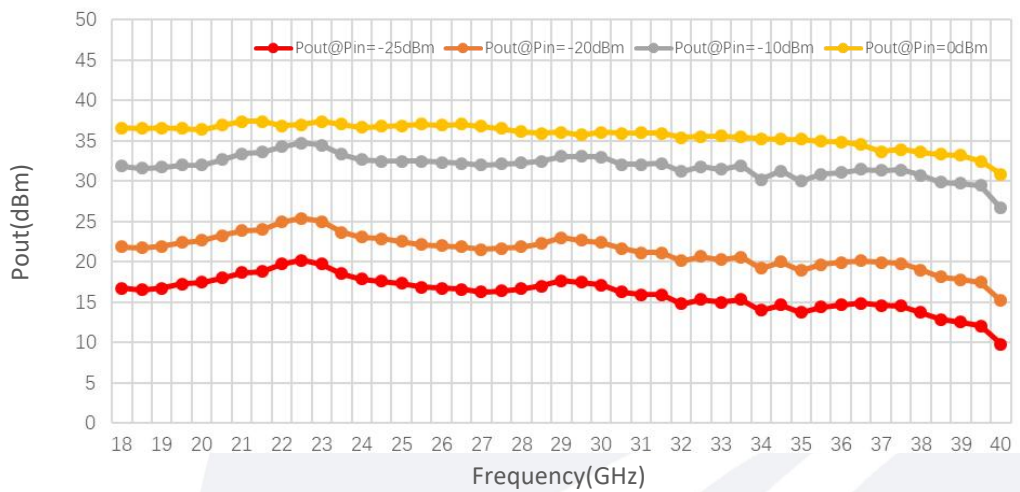
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

Typical Performance Data:

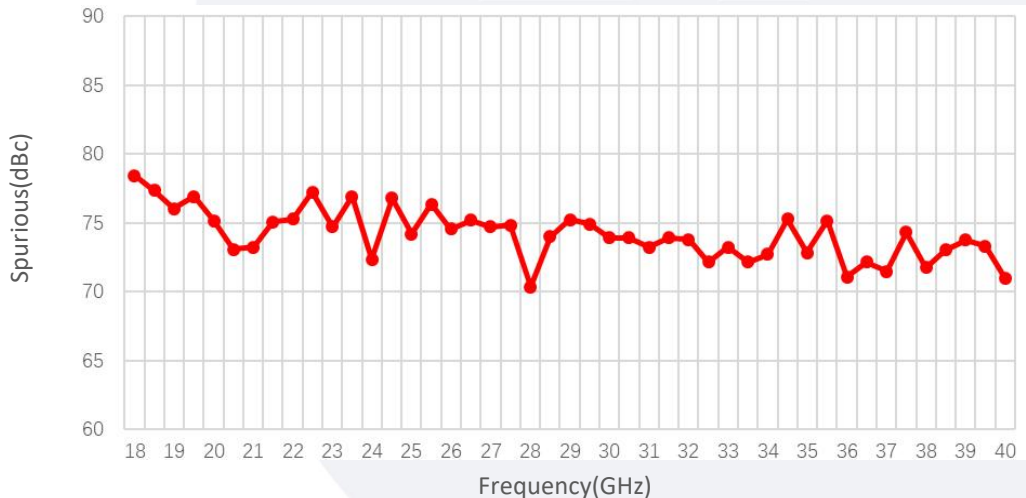
Pout@Pin



Pout@Equal_Pin



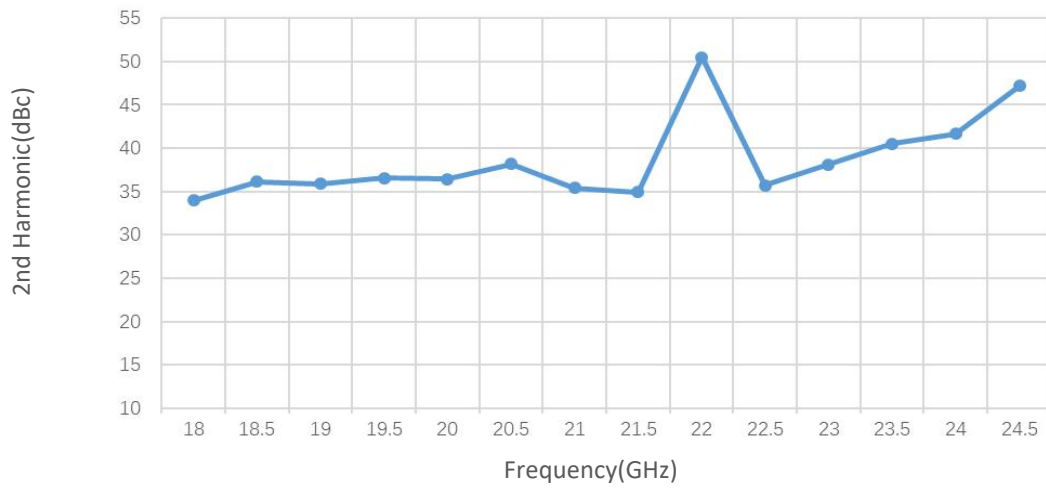
Spurious vs Frequency



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Typical Performance Data:

2nd Harmonic vs Frequency



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