

Model:TLPA1G18G-40-30
Power Amplifier
1-18GHz,Gain:40dB,P1dB:27dBm
Feature:

- Ultra Wide Band:1-18GHz
- Gain:38dB Min
- Psat Output Power:30dBm Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Electrical Specifications:

Parameter	Min	Typ	Max	Units
Frequency range	1-18			GHz
Gain	38	40		dB
Gain Flatness		±2.5		dB
Output P1dB	27			dBm
Output Psat		30		dBm
Noise Figure		4		dB
Input VSWR			2.2	:1
Output VSWR			2.2	:1
DC Voltage		+15	+16	V DC
DC Supply Current		1		A
Impedance	50			Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	Solder Pin	
Size	35.3*40.3*12	mm
Weight	50	g

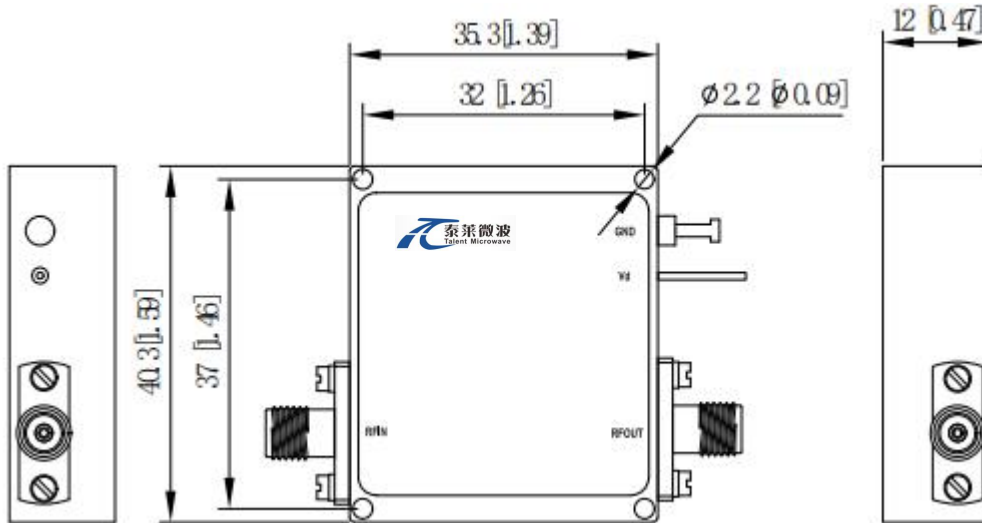
Absolute Maximum Ratings:

Parameter	Value
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



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

Environmental Conditions:

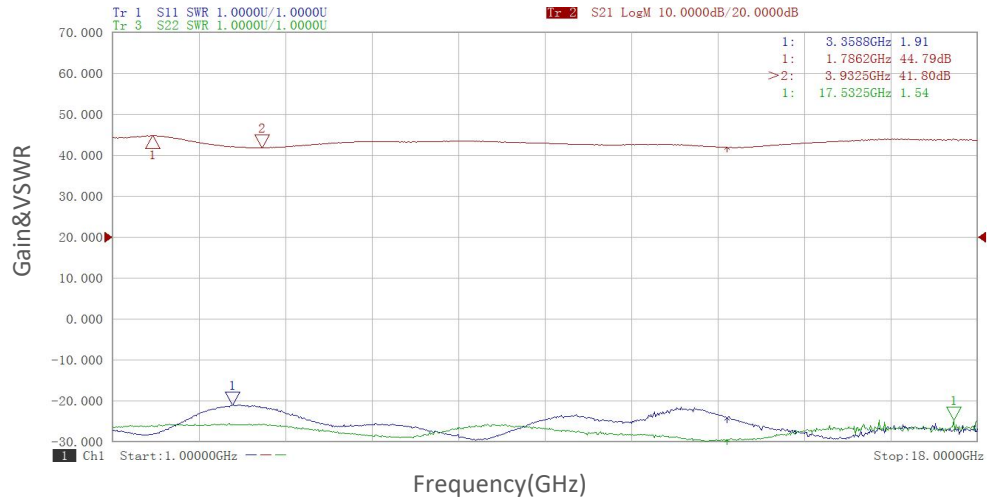
Parameter	Min	Typ	Max	Units
Operating Temperature	-45		+85	°C
Non-operating Temperature	-55		+125	°C
Relative humidity		95		%
Altitude	30,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

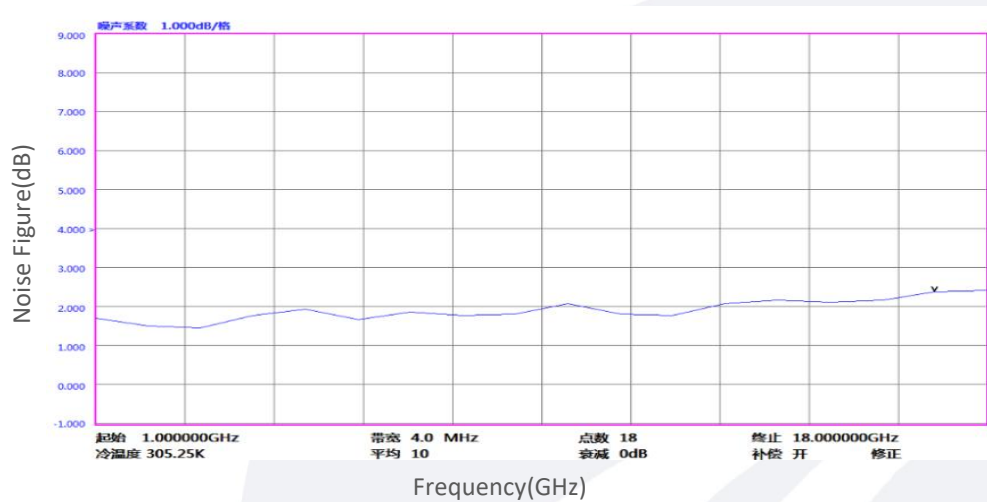
Part Number	Description	Revision
TLPA1G18G-40-30	Power amplifier 1-18GHz,Gain:40dB,P1dB:27dBm,+15V DC,Without Heatsink.	Rev.1.1
TLPA1G18G-40-30-HS	Power amplifier 1-18GHz,Gain:40dB,P1dB:27dBm,+15V DC,With Heatsink.	Rev.1.1

Typical Performance Data:

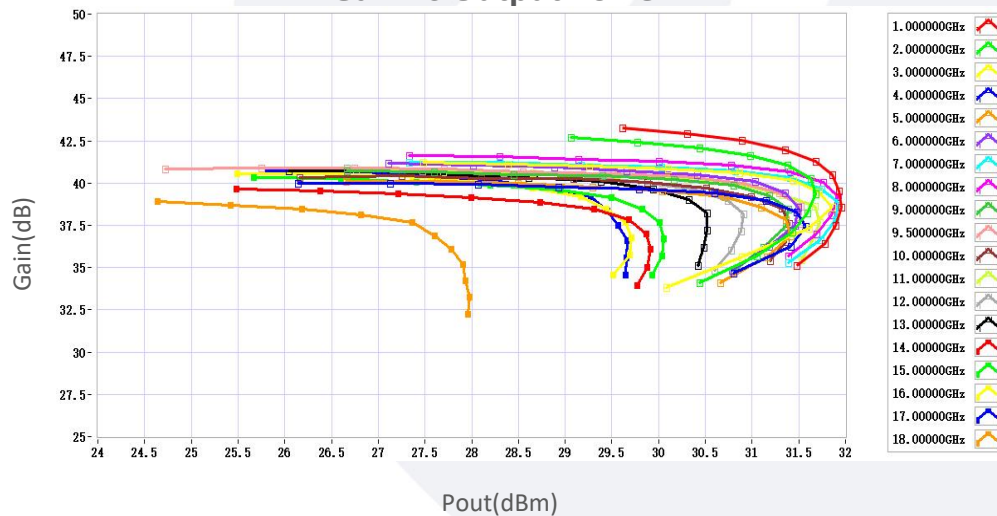
Gain&VSWR vs Frequency



Noise Figure vs Frequency

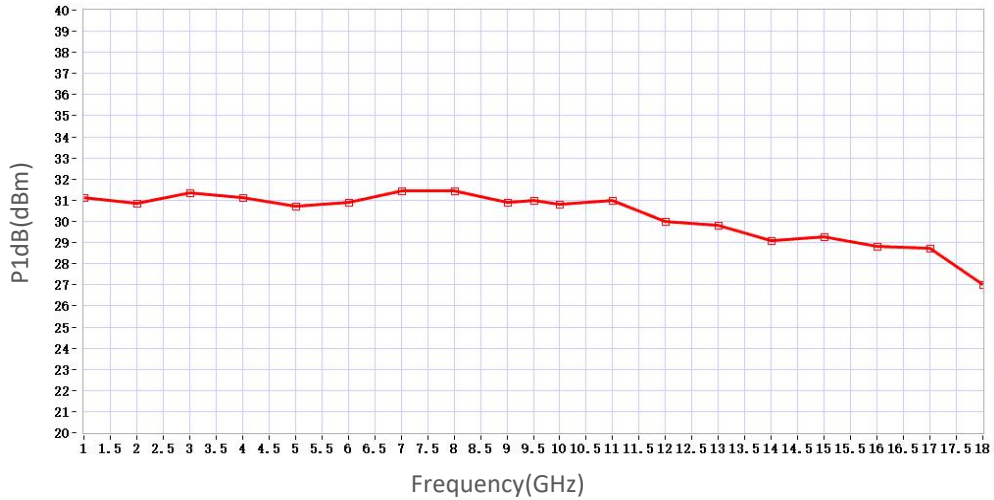


Gain vs Output Power

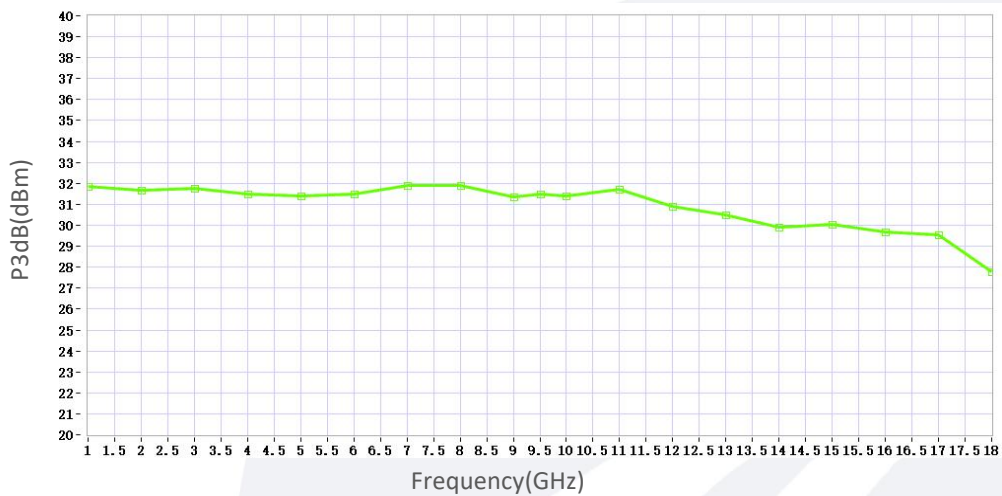


Typical Performance Data:

P1dB vs Frequency



P3dB vs Frequency



Psat vs Frequency

