

Model:TLPA0.1G20G-25-31

Power Amplifier

0.1-20GHz,Gain:25dB,Psat:31dBm

Feature:

- Ultra Wide Band: 0.1-20GHz
- Gain:25dB Min
- Psat Output Power:31dBm Min
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Electrical Specifications:

Parameter	Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	Units
Frequency range	0.1-0.4			0.4-0.6			0.6-20			GHz
Gain	24	25		24	25		25	27		dB
Gain Flatness		±1			±1			±2		dB
Output P1dB	26	28		28	30		28	30.5		dBm
Output Psat	29	30		30	32		30	32		dBm
Input VSWR		2.2			2			2		:1
Output VSWR		2.2			2			2		
DC Voltage	+8									V DC
DC Supply Current	1300									mA
Impedance	50									Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	TBD	
Size	44*52*13	mm
Weight	/	g

Absolute Maximum Ratings:

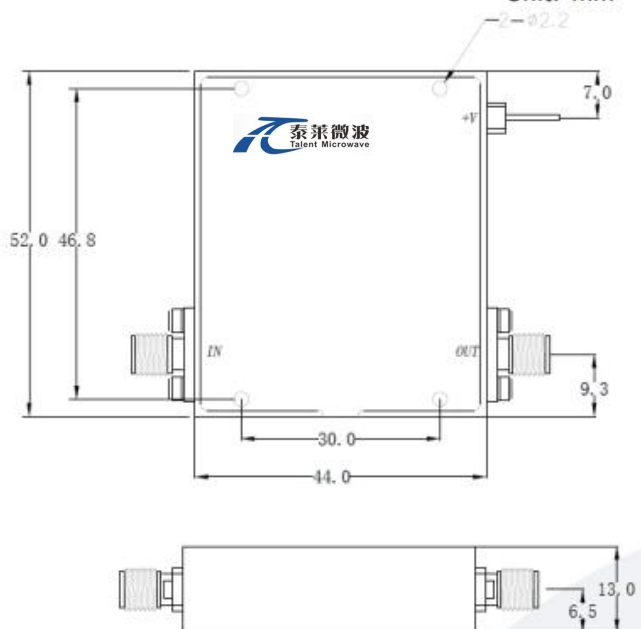
Parameter	Value
Supply Bias Voltage	TBD
RF Input Power	10dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Available 220V System
Benchtop Amplifier

Outline Drawing:

Unit: mm



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



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

Environmental Conditions:

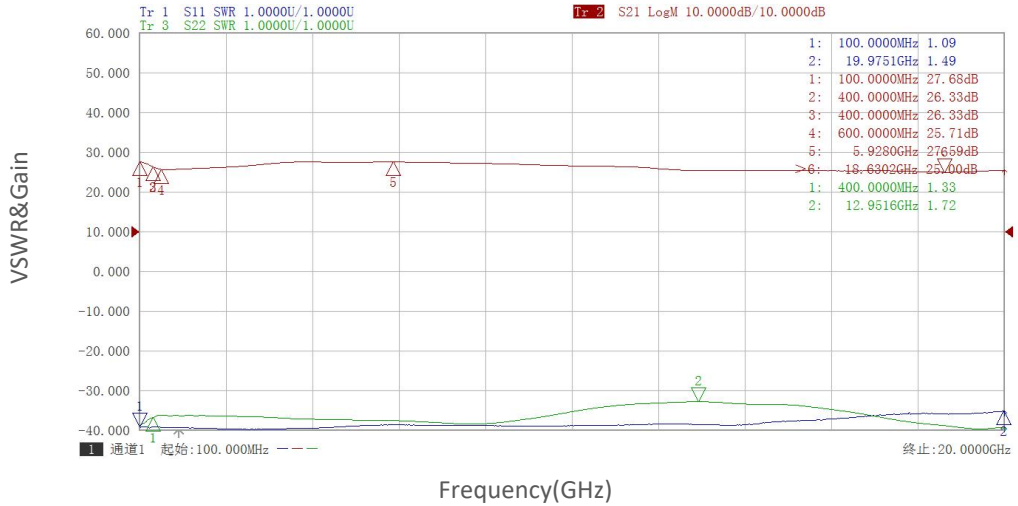
Parameter	Min	Typ	Max	Units
Operating Temperature	-45		+85	°C
Non-operating Temperature	-55		+125	°C
Relative humidity		95		%
Altitude	30,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

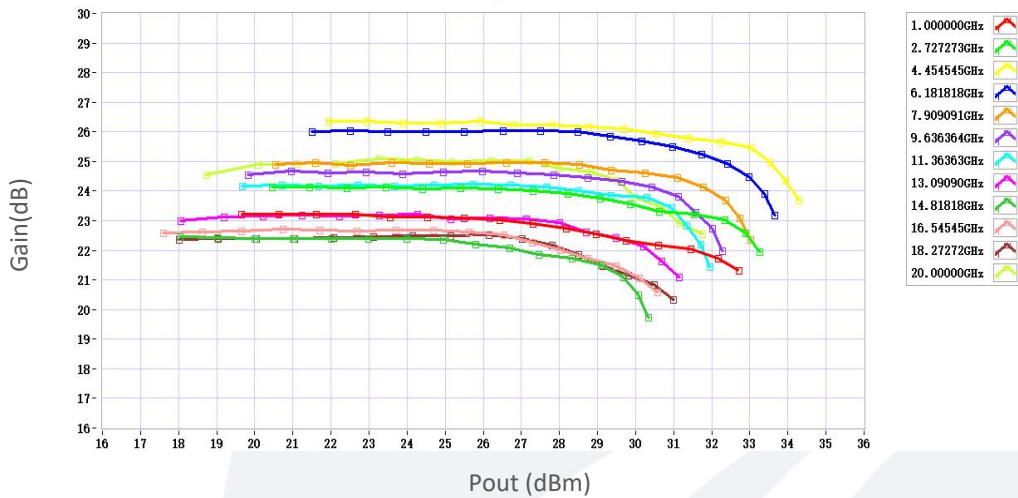
Part Number	Description	Revision
TLPA0.1G20G-25-31	Power amplifier 0.1-20GHz, Gain:25dB, Psat:31dBm, +8V DC, Without Heatsink.	Rev.1.1

Typical Performance Data:

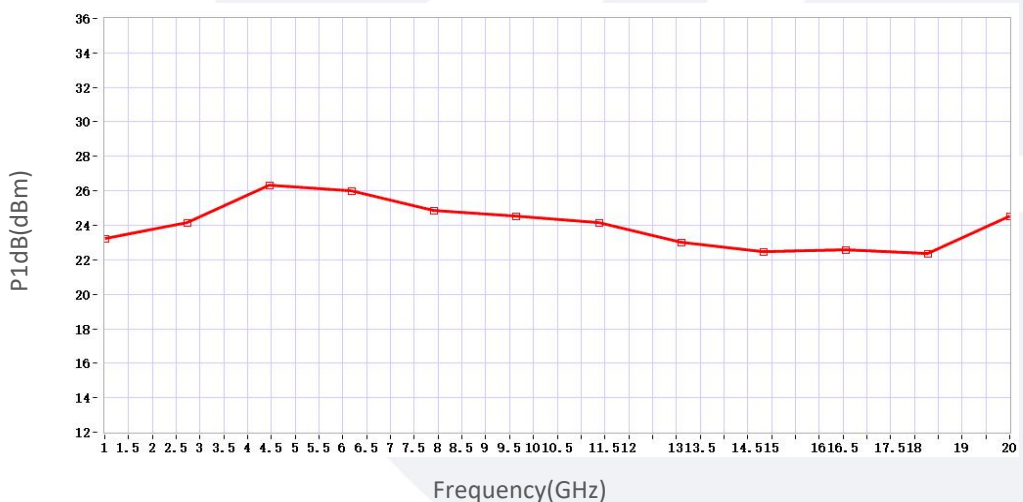
VSWR&Gain vs Frequency



Gain vs Output Power

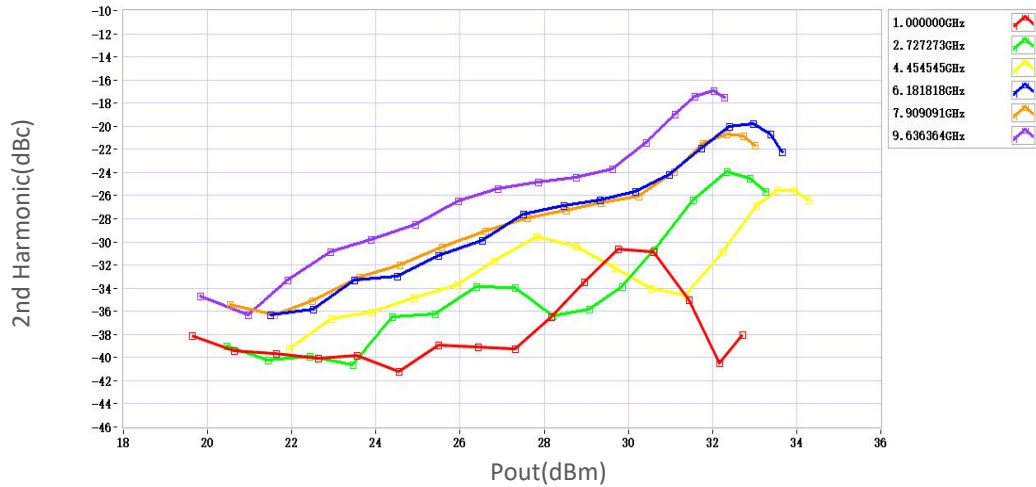


P1dB vs Frequency



Typical Performance Data:

2nd Harmonic vs Output Power



3rd Harmonic vs Output Power

