

Model: TLPA100M2G-20-30

Power Amplifier
0.1-2GHz, Gain:20dB, P1dB:27dBm

Feature:

- Ultra Wide Band: 0.1-2GHz
- Gain:20dB Min
- P1dB Output Power: 27dBm Min
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Electrical Specifications:

Parameter	Min	Typ	Max	Units
Frequency range	0.1-2			GHz
Gain	20	22		dB
Gain Flatness		±0.5	±0.75	dB
Output P1dB	27	28		dBm
Harmonics		-20		dBc
Input VSWR		1.5	2	:1
DC Voltage		+12	+13	V DC
DC Supply Current		700	1000	mA
Impedance	50			Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	Solder Pin	
Size	120*70*15	mm
Weight	200	g

Absolute Maximum Ratings:

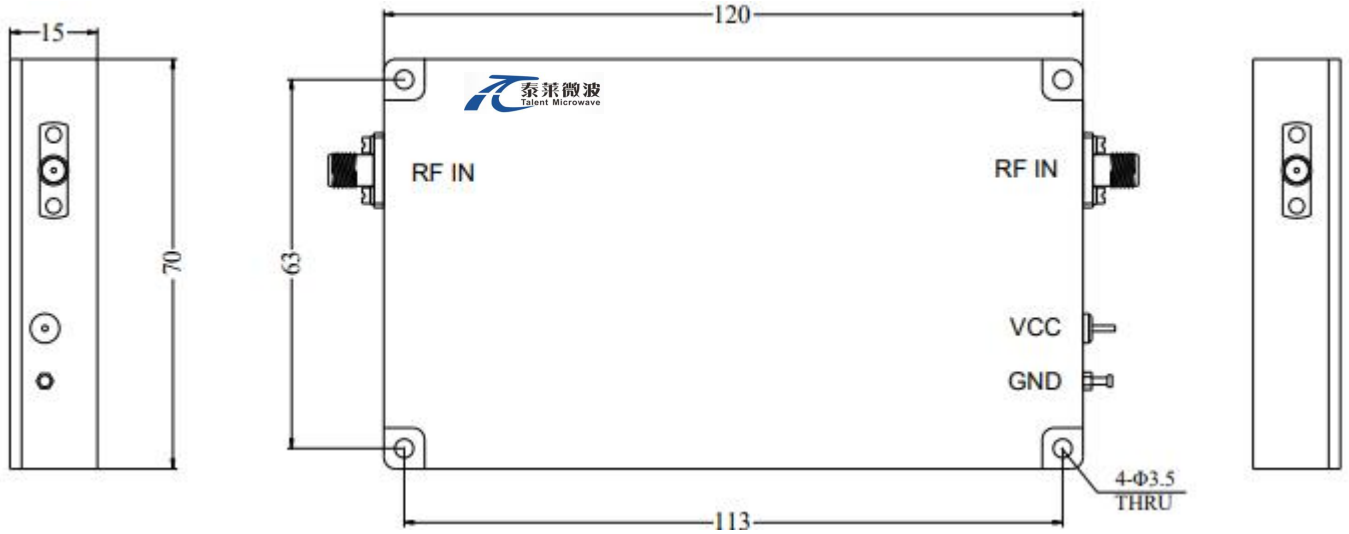
Parameter	Value
Supply Bias Voltage	+13V
RF Input Power	16dBm
ESD sensitivity (HBm)	Class 0, passed 150V



**Available 220V System
Benchtop Amplifier**

Outline Drawing:

Unit: mm



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



Environmental Conditions:

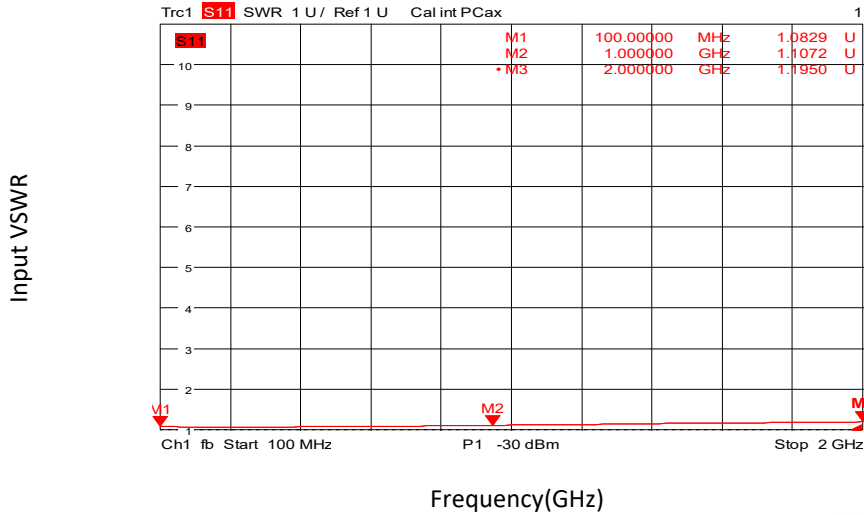
Parameter	Min	Typ	Max	Units
Operating Temperature	-45		+85	°C
Non-operating Temperature	-55		+125	°C
Relative humidity		95		%
Altitude	30,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

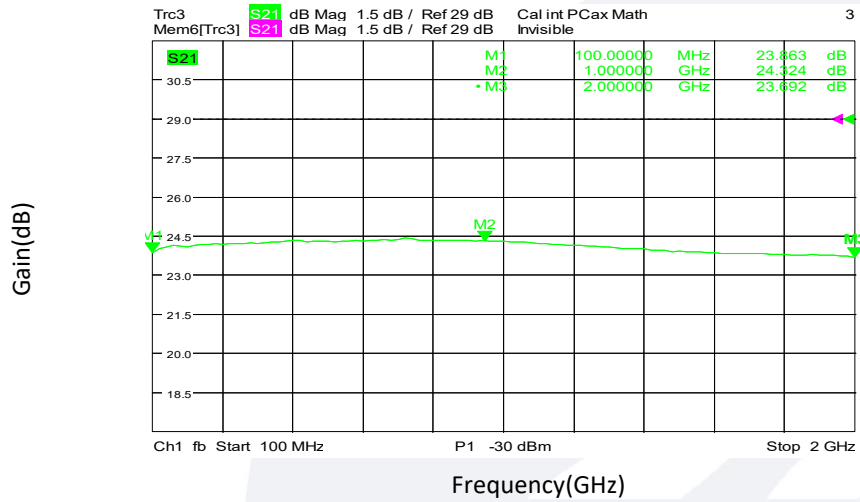
Part Number	Description	Revision
TLPA100M2G-20-30	Power amplifier 0.1-2.0GHz,Gain:20dB,P1dB:27dBm,+12V DC,Without Heatsink.	Rev.1.1
TLPA100M2G-20-30-HS	Power amplifier 0.1-2.0GHz,Gain:20dB,P1dB:27dBm,+12V DC,With Heatsink.	Rev.1.1

Typical Performance Data:

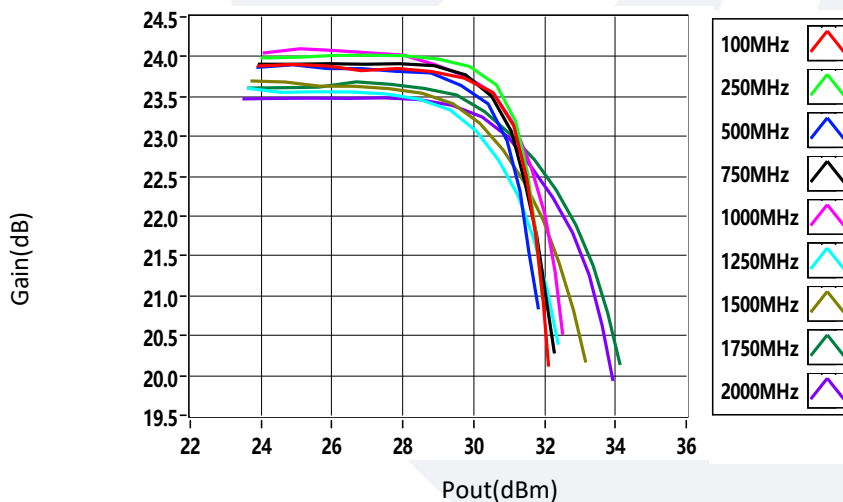
Input VSWR vs Frequency



Gain vs Frequency

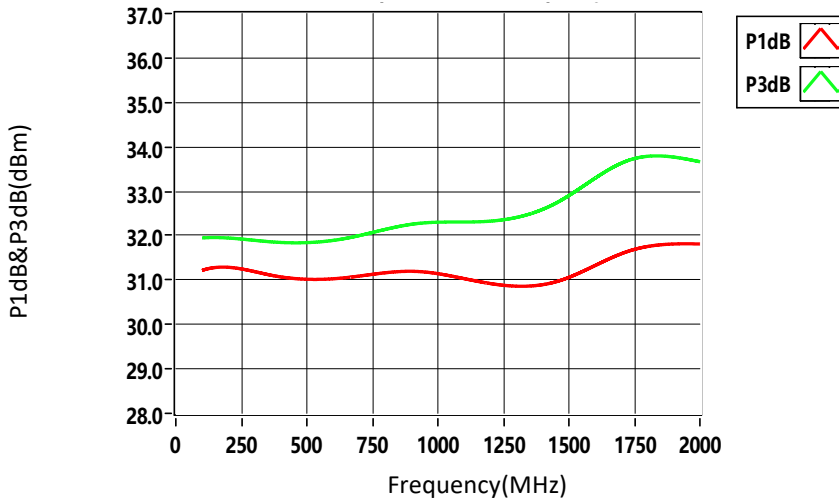


Gain vs Output Power

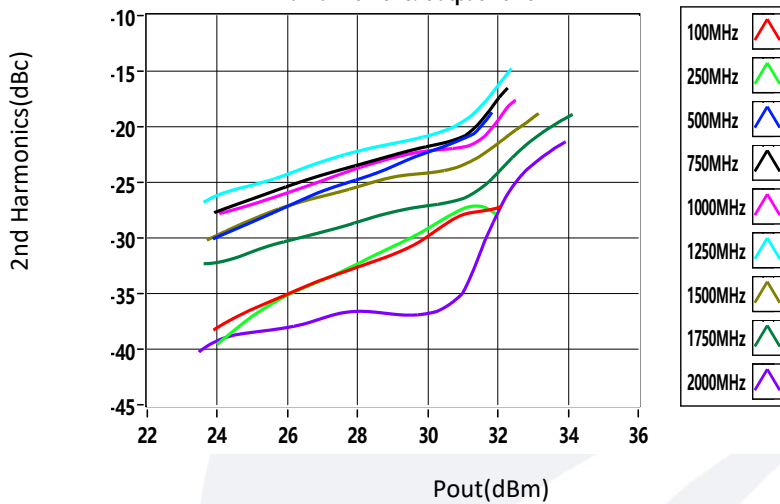


Typical Performance Data:

P1dB&P3dB vs Frequency



2nd Harmonics VS Output Power



3rd Harmonics VS Output Power

