

Model:TLPA1G6G-52-50

Power Amplifier 1-6GHz,Gain:52dB,Psat:50dBm

Feature:

- Ultra Wide Band: 1-6GHz
- Gain:52dB Typ
- Psat Output Power:50dBm Min
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Electrical Specifications:

Parameter	Min	Typ	Max	Units
Frequency range	1-6			GHz
Small Signal Gain	50	52		dB
Gain Flatness		±3	±5	dB
Output Psat	50	51		dBm
Harmonics		-12		dBc
Input VSWR		1.5	2	:1
DC Voltage		+36		V DC
DC Supply Current		3	22	A
Impedance	50			Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/N Female	
DC Bias	DB15	
Size	270*160*27	mm
Weight	250	g

Absolute Maximum Ratings:

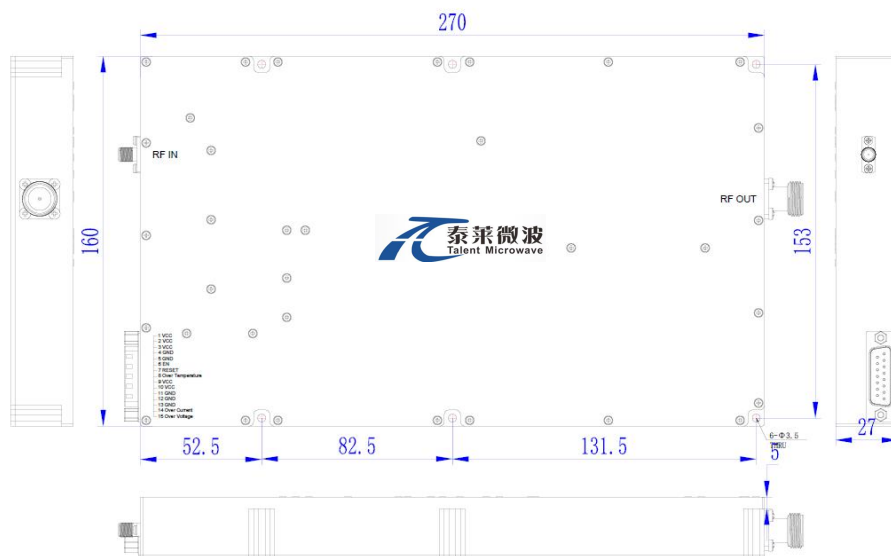
Parameter	Value
Supply Bias Voltage	+38V
RF Input Power	5dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Available 220V System
Benchtop Amplifier

Outline Drawing:

Unit: mm



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



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

Environmental Conditions:

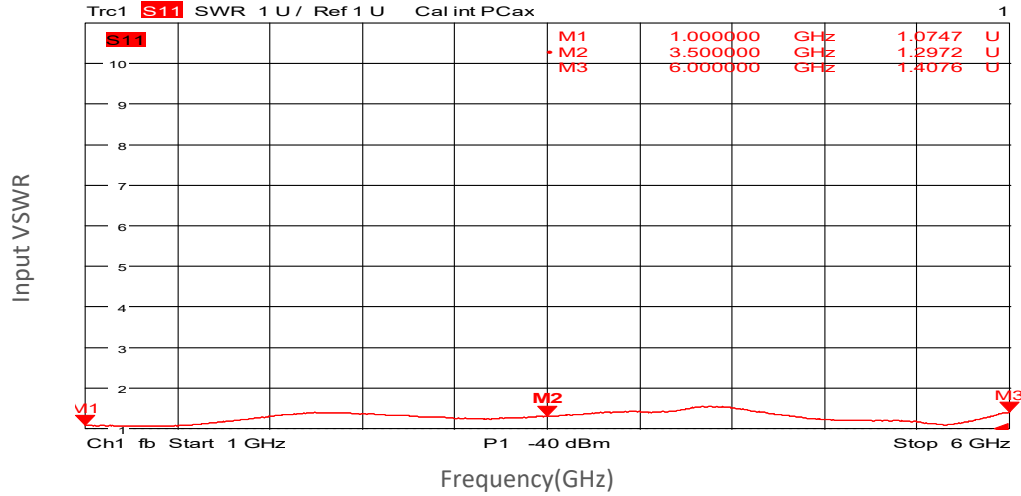
Parameter	Min	Typ	Max	Units
Operating Temperature	-45		+85	°C
Non-operating Temperature	-55		+125	°C
Relative humidity		95		%
Altitude	30,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

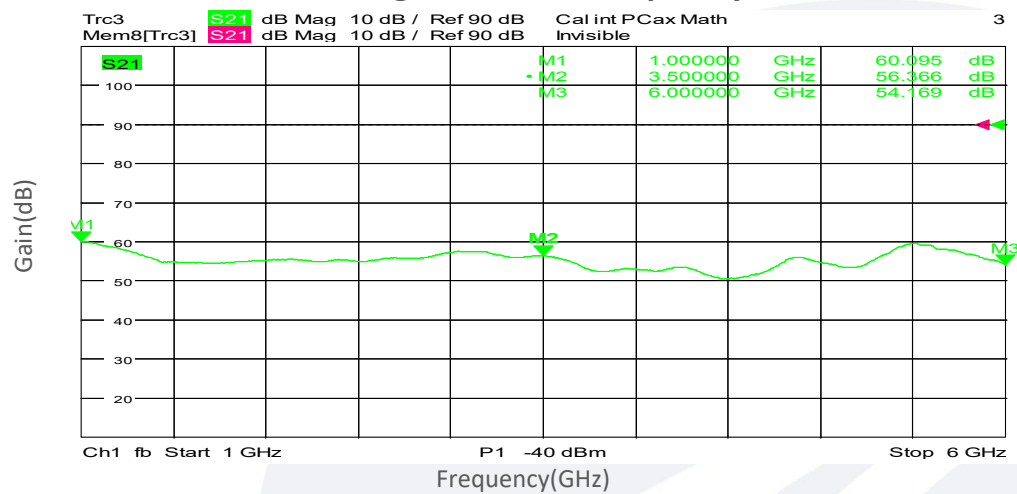
Part Number	Description	Revision
TLPA1G6G-52-50	Power amplifier 1-6GHz,Gain:52dB,Psat:50dBm,+36V DC,Without Heatsink.	Rev.1.1
TLPA1G6G-52-50-HS	Power amplifier 1-6GHz,Gain:52dB,Psat:50dBm,+36V DC.With Heatsink.	Rev.1.1

Typical Performance Data:

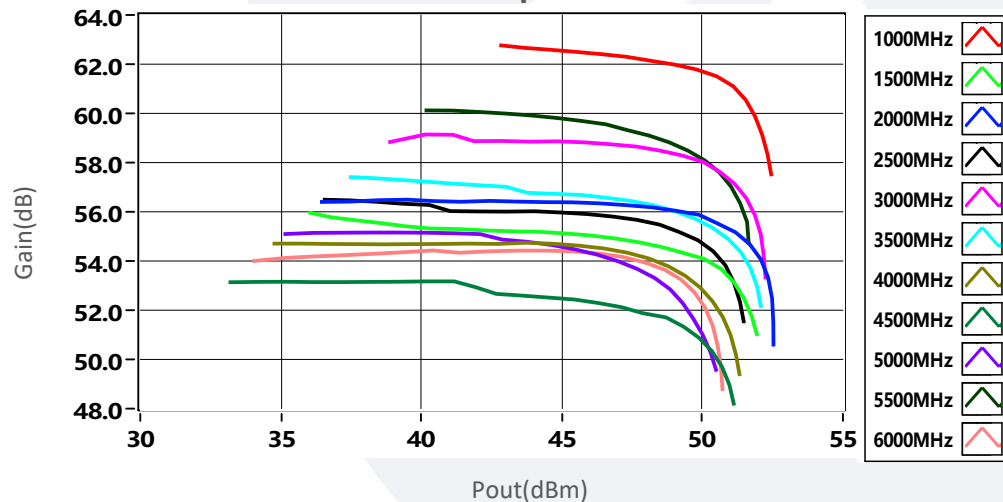
Input VSWR vs Frequency



Small Signal Gain vs Frequency



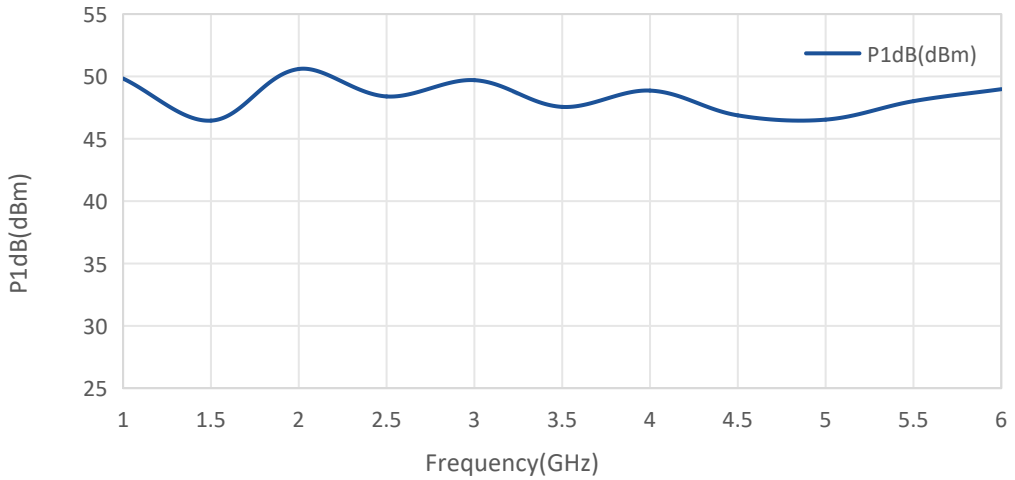
Gain vs Output Power



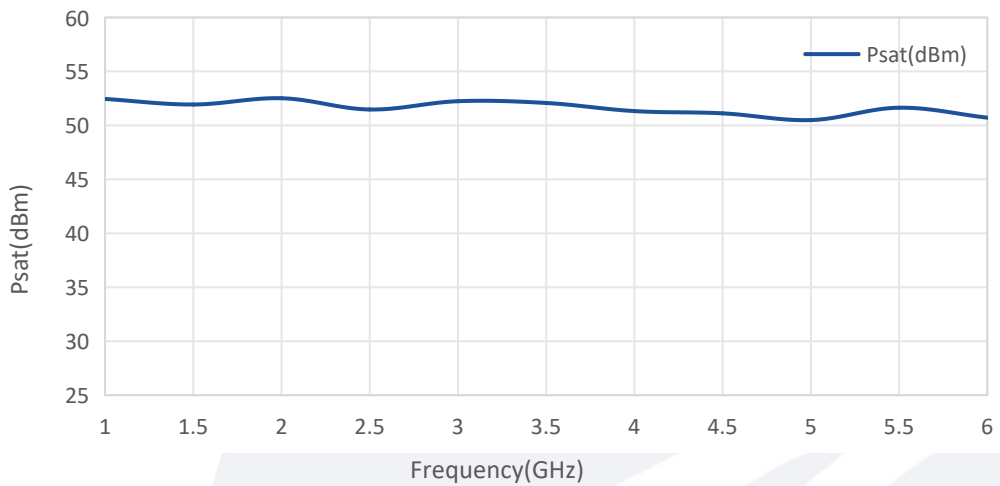
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

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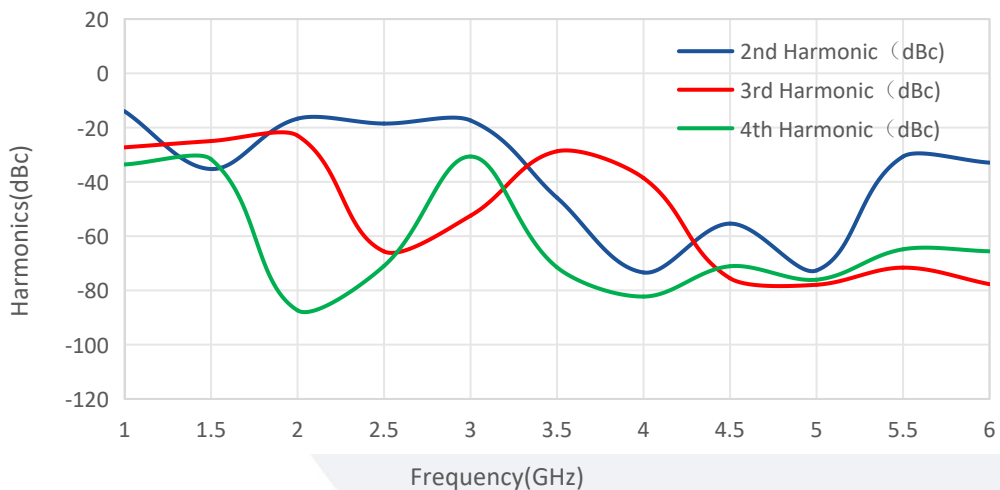
P1dB vs Frequency



Psat vs Frequency



Harmonics vs Frequency



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