泰莱微波
Talent Microwave

Suzhou Talent Microwave,Inc
+86-0512-62657975
sales@talentmw.com
www.talentmw.com

Model:TLPA0.5G6G-40-40-A

Power Amplifier
0.5-6GHz,Gain:40dB,Psat:40dBm

Feature:

- Ultra Wide Band: 0.5-6GHz
- Gain:40dB Min
- Psat Output Power:40dBm Min
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Electrical Specifications:

Parameter	Min	Typ	Max	Units
Frequency range		0.5-6		GHz
Small Signal Gain	40	43		dB
Gain Flatness		±2.5	±3.5	dB
Output P1dB	37	38		dBm
Output Psat	40			dBm
Spurious		-60		dBc
Harmonics		-15	-11	dBc
Input VSWR		1.5	2.5	:1
DC Voltage		+30		V DC
DC Supply Current		0.5	2	A
Impedance		50		Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	Solder Pin	
Size	125*95*12	mm
Weight	/	g

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+32V
RF Input Power	8dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Available 220V System Benchtop Amplifier

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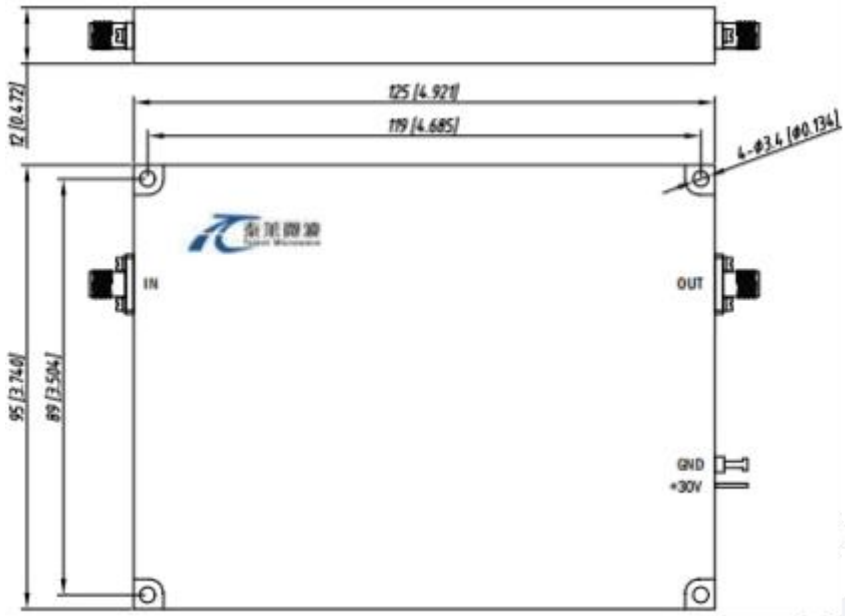
Outline Drawing:

Unit: mm



***Heat Sink Required During Operation

OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature	-30		+70	℃
Non-operating Temperature	-45		+85	℃
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
TLPA0.5G6G-40-40	Power amplifier 0.5-6GHz,Gain:40dB,Psat:40dBm,+30V DC,Without Heatsink.	Rev.1.0
TLPA0.5G6G-40-40-HS	Power amplifier 0.5-6GHz,Gain:40dB,Psat:40dBm,+30V DC,With Heatsink.	Rev.1.0

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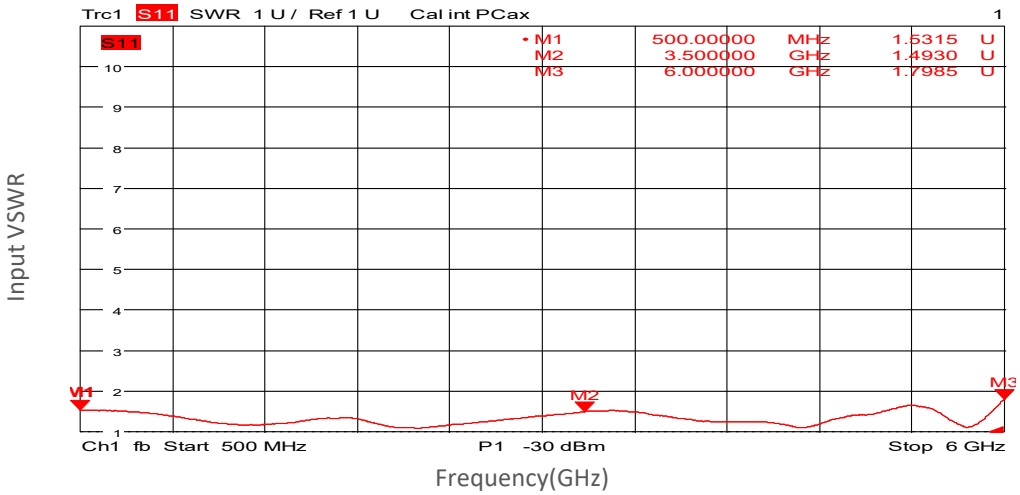
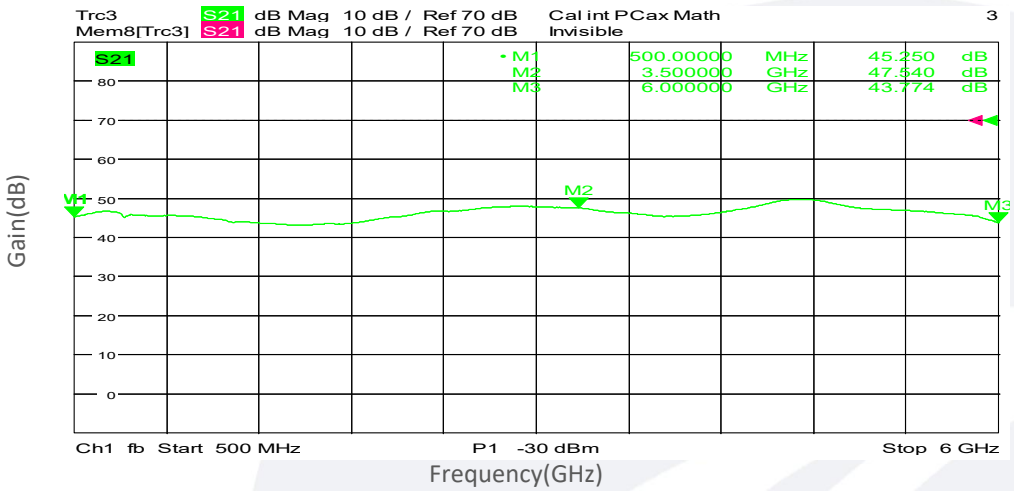
Typical Performance Data:

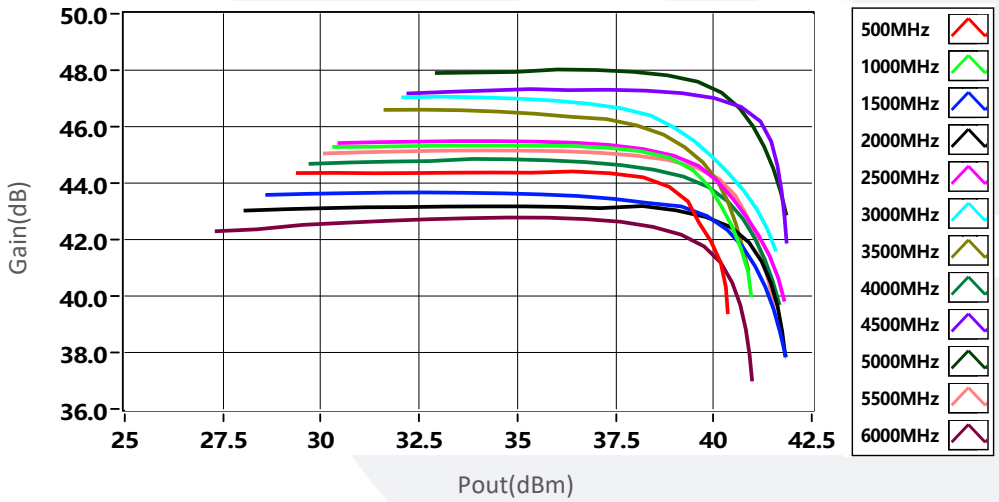
Input VSWR vs Frequency



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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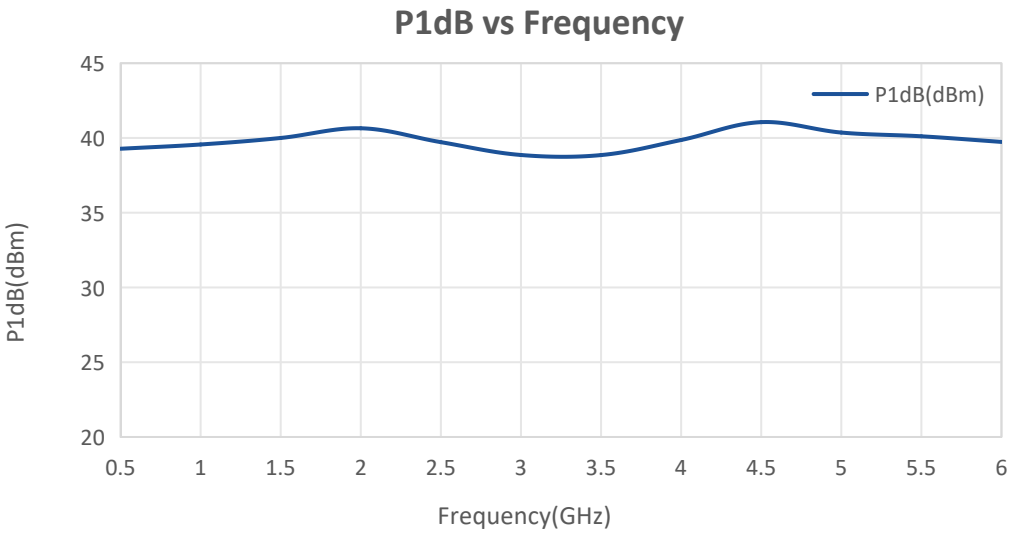

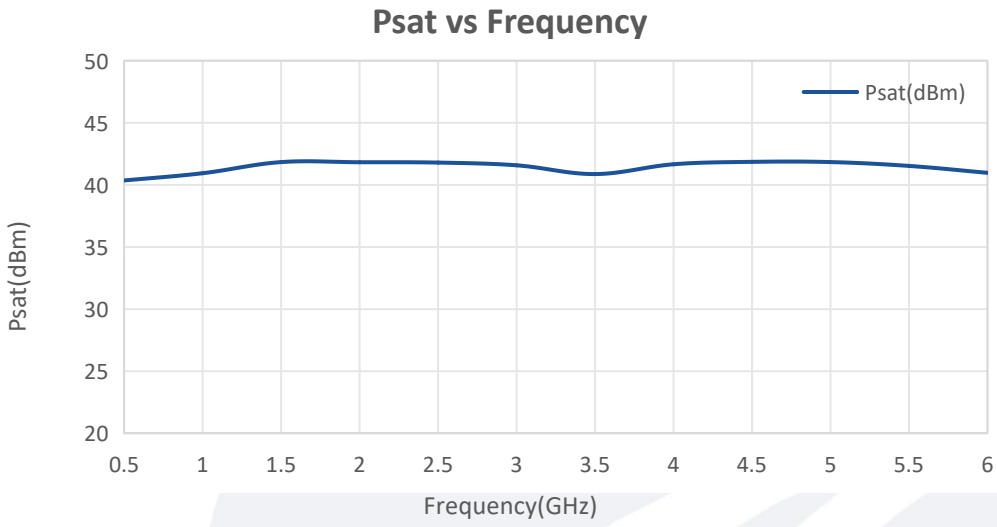

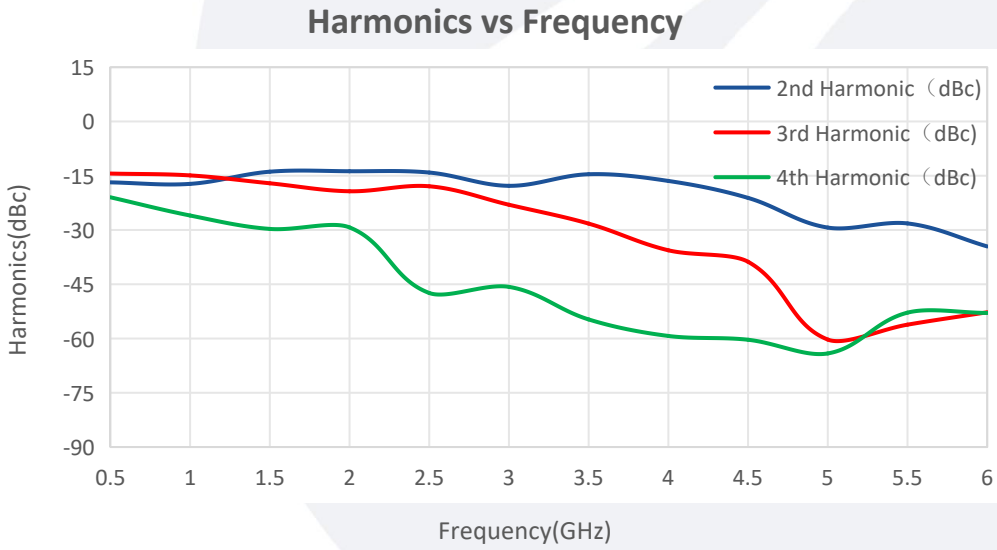

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