泰莱微波
Talent Microwave

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

Model:TLPA0.7G6G-53-50

Power Amplifier 0.7-6GHz,Gain:53dB,Psat:50dBm

Feature:

- Ultra Wide Band: 0.7-6 GHz
- Gain: 53 dB Min
- Psat Output Power: 50 dBm Min
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Electrical Specifications:

Parameter	Min	Typ	Max	Units
Frequency range		0.7-6		GHz
Small Signal Gain	53	56		dB
Gain Flatness		±4	±6	dB
Output Psat	50	51		dBm
Supurious			-60	dBc
Harmonic			-10	dBc
Input VSWR			2.0	:1
DC Voltage		+28		V DC
DC Supply Current		22		A
Impedance		50		Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/N Female	
DC Bias	D-SUB-15	
Size	270*160*27	mm
Weight	/	g

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+28 V
RF Input Power	+3 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Available 220V System Benchtop Amplifier

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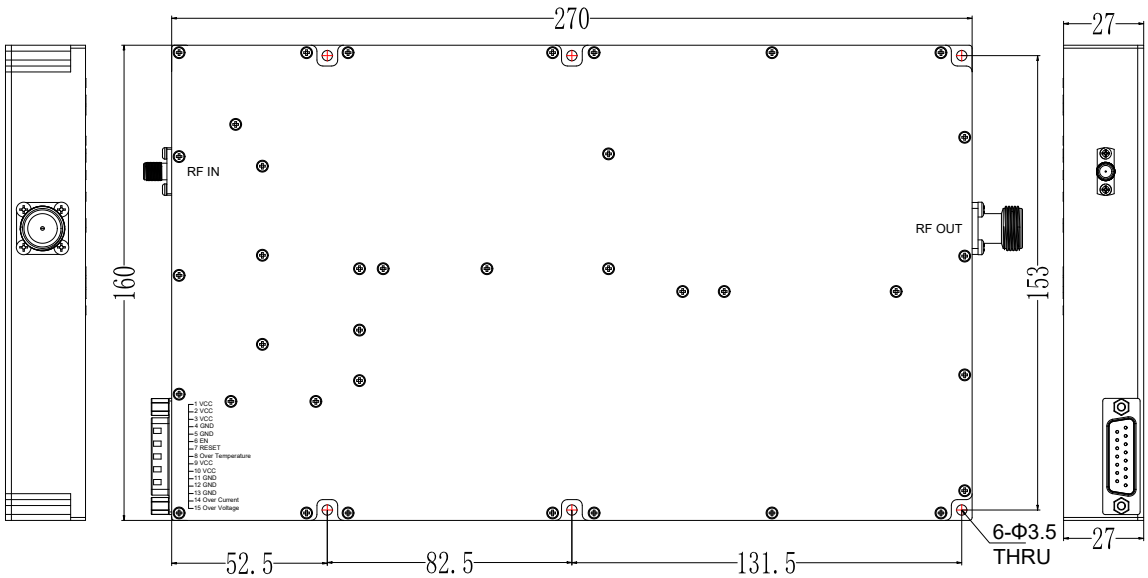
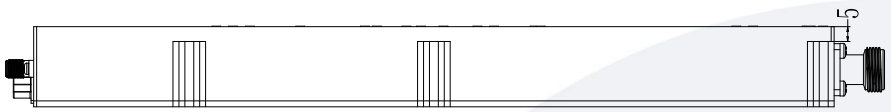
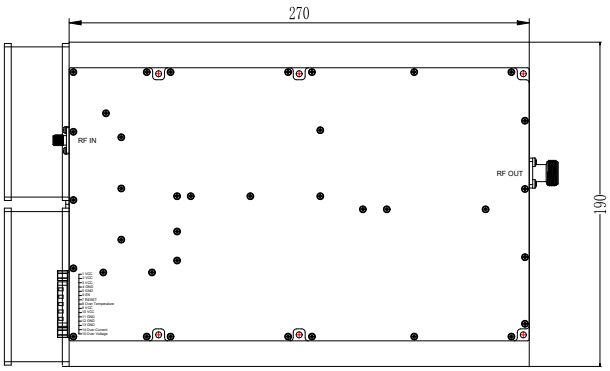
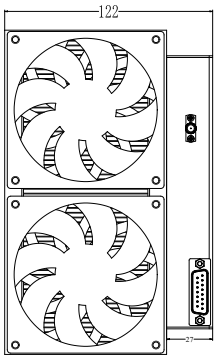
Outline Drawing:

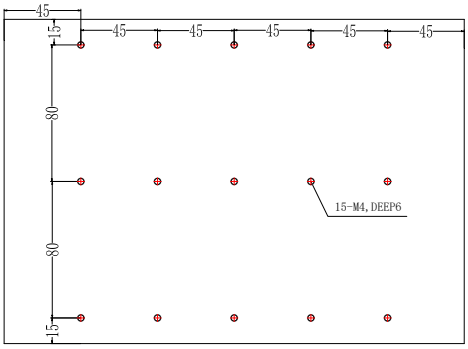
Unit: mm











OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

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D-sub,15-Pin,Female:

Pin #	Name	Function
1	VCC	+26.0-30.0VDC
2	VCC	+26.0-30.0VDC
3	VCC	+26.0-30.0VDC
4	GND	Ground
5	GND	Ground
6	EN	Amplifier Enable: TTL High (5V) (Internally Pulled-High)
7	RESET	Resets PA when logic LOW is applied and released (Internally Pulled-High)
8	Over Temperature	When the temperature of the case exceeds 70 ℃, the power amplifier will turn off and this pin will be pulled high. If the temperature of case drops to 60 ℃, the power amplifier will return to normal operation, and this pin will be pulled low.
9	VCC	+26.0-30.0VDC
10	VCC	+26.0-30.0VDC
11	GND	Ground
12	GND	Ground
13	GND	Ground
14	Over Current	Current FAULT:(TTL High= Fault, TTL Low =Normal)
15	Over Voltage	Voltage FAULT:(TTL High= Fault, TTL Low =Normal)

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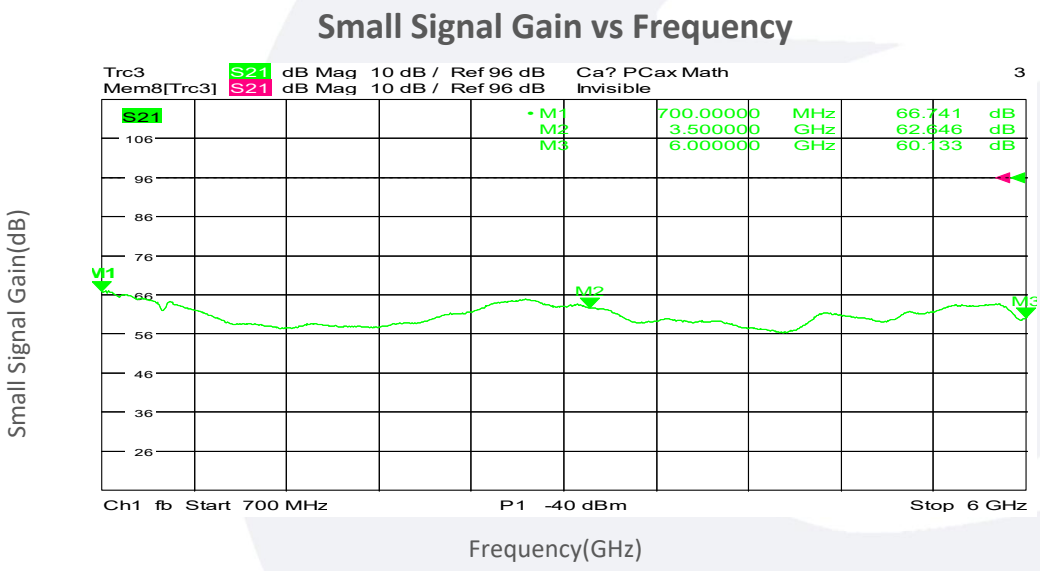
Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature	-40		+70	℃
Non-operating Temperature	-55		+125	℃
Relative humidity		95		%
Altitude	30,000			feet
Shock / Vibration(MIL-STD-810F)	20g,11ms,saw-tooth			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

Part Number	Description	Revision
TLPA0.7G6G-53-50	Power amplifier 0.7-6GHz,Gain:53dB,Psat:50dBm, +28V DC,Without Heatsink	Rev.1.0
TLPA0.7G6G-53-50 -HS	Power amplifier 0.7-6GHz,Gain:53dB,Psat:50dBm, +28V DC,With Heatsink	Rev.1.0

Typical Performance Data:



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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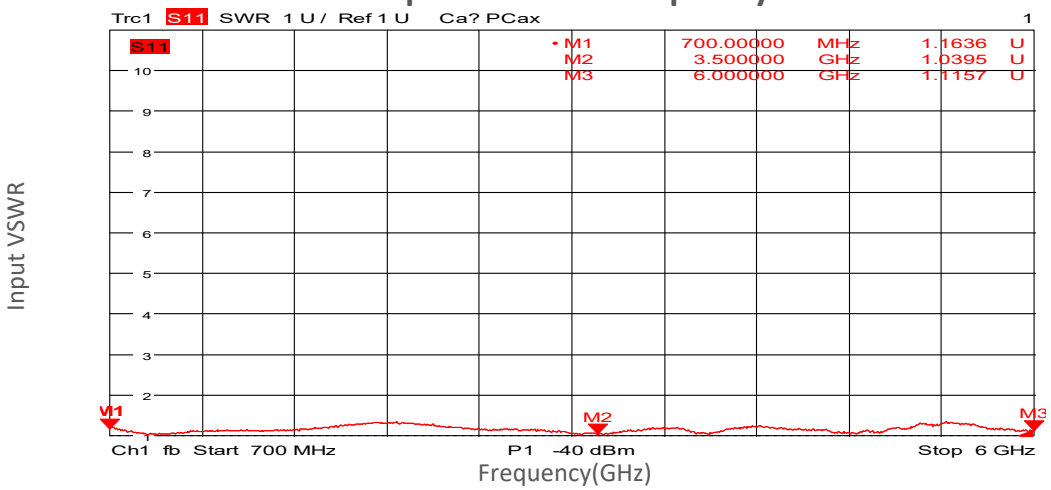
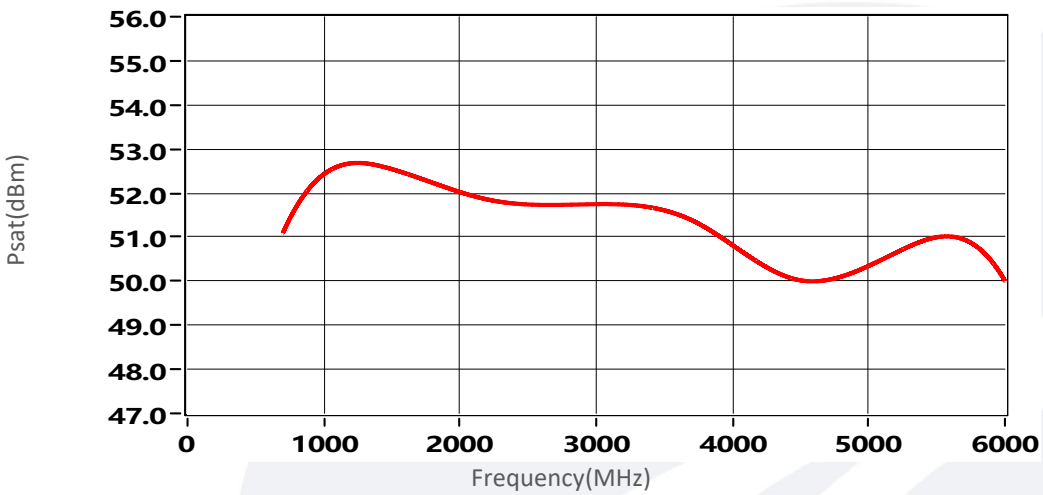
Typical Performance Data:

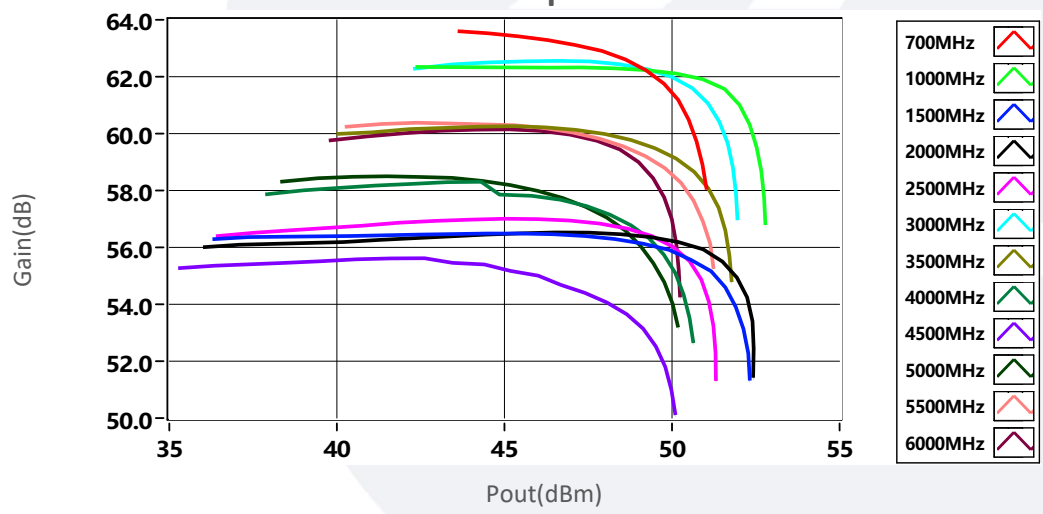
Input VSWR vs Frequency



Psat vs Frequency



Gain vs Output Power



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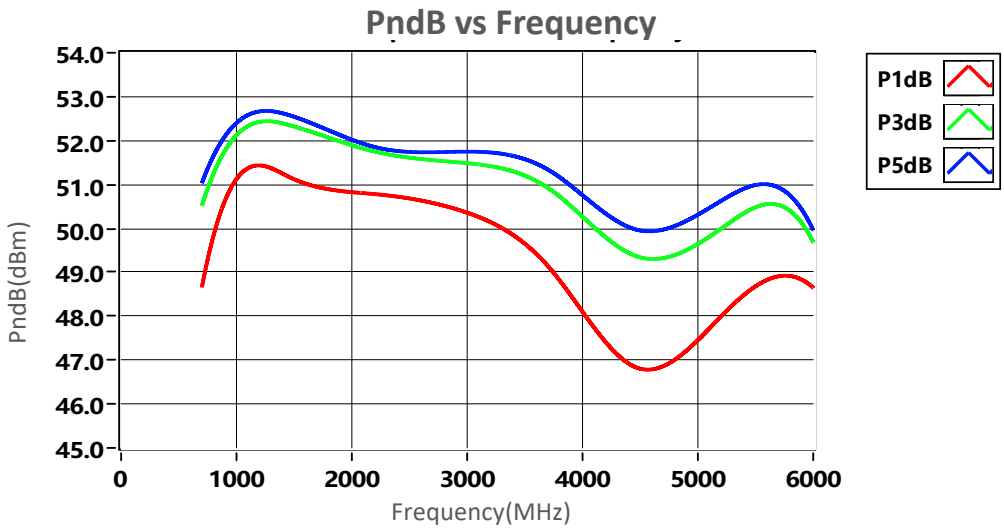

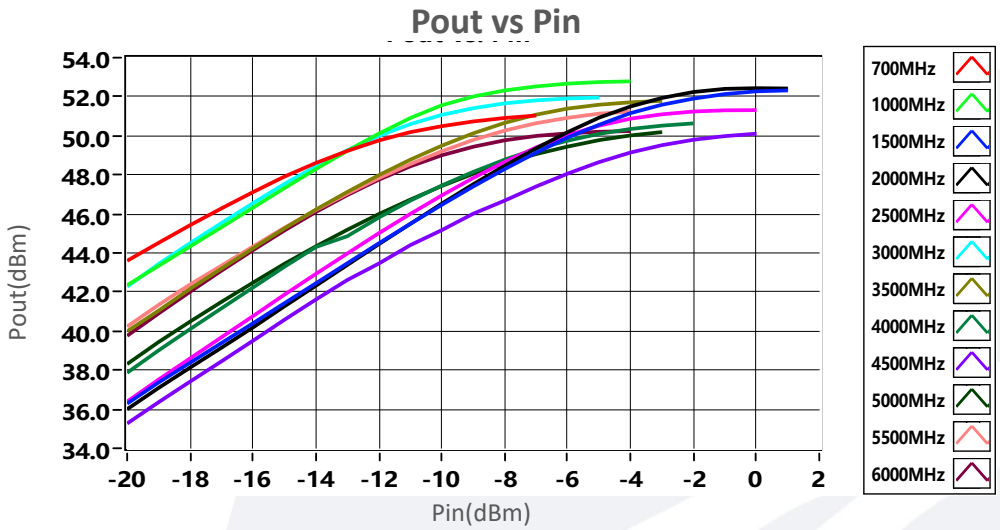

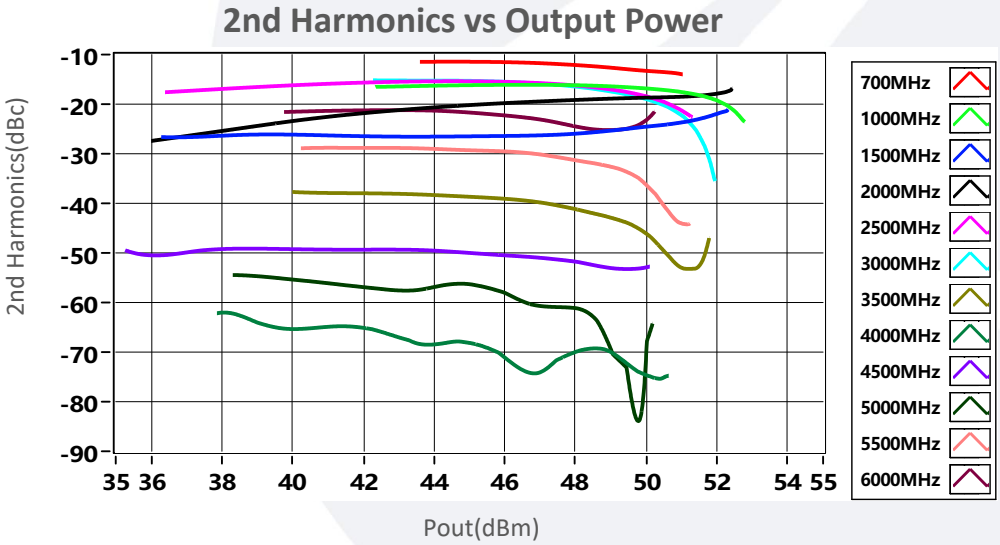

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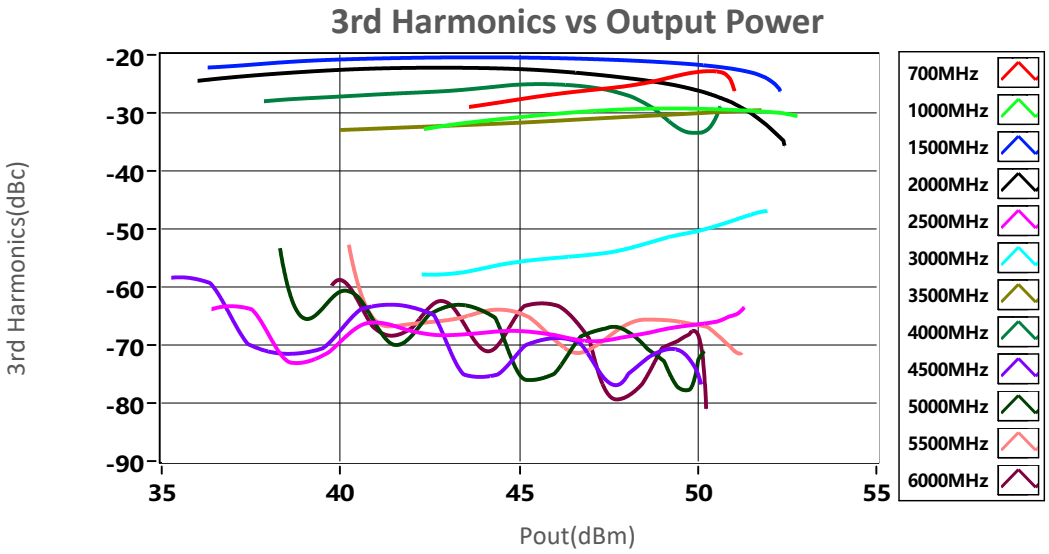

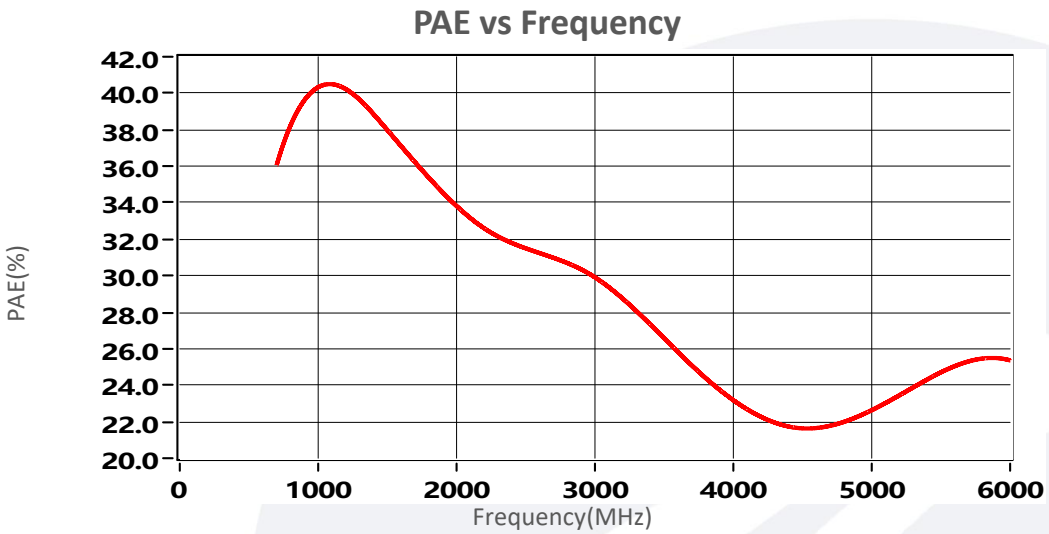

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