泰莱微波
Talent Microwave

Suzhou Talent Microwave,Inc
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Solid State High Power Amplifier Systems

0.5-6GHz/51dB Gain/51 dBm Psat/220V AC

Model: TLPA0.5G6G-51-51-BC

TLPA0.5G6G-51-51-BC is a solid state high power amplifier systems provides high output power and high gain across the 0.5 to 6 GHz frequency range. The amplifier features a built-in 220V power supply, making it easy to use in most lab environments. This model features thermal self protection, preventing damage to the amplifier and providing added reliability.

Features:

- Frequency range: 0.5-6GHz
- Gain: 51dB Min
- Psat Output Power: 51dBm Min
- Protection:Over TEM,over voltage, over current ,over VSWR protection
- 50 Ohm Matched Input / Output

Electrical Characteristics:

Parameter	Symbol	Min	Typ	Max	Units
Frequency range	BW		0.5-6		GHz
Power Gain	GP	51			dB
Gain flatness	ΔGL		±3.5		dB
Output P1dB	P1dB		47		dBm
Output Psat	Psat	51			dBm
Spurious@Pout=50dBm	Spur			-60	dBc
Harmonics@Pout=50dBm	HAM		-10		dBc
Input VSWR	VSWRin			2.0	:1
AC Voltage	Vac	110	220		V AC
Power Consumption	Pdiss			1800	W
Impedance	I/O-IMP		50		Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	N Female/N Female	
Front Panel LCD Screen Display	7 inch LCD Screen Display	
Size	19 Inch 4U	mm
Weight	≤35	Kg

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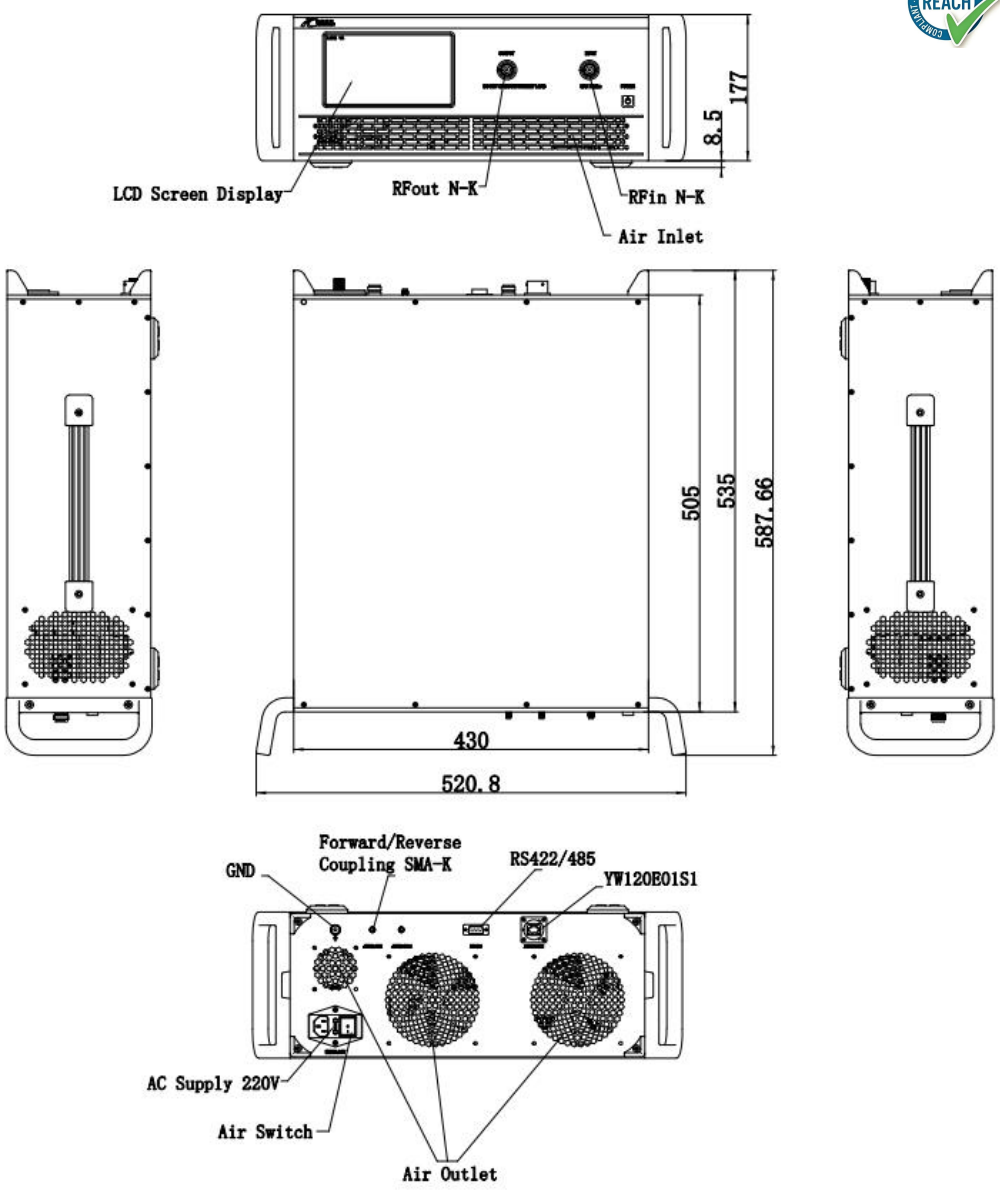
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	220 VAC
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm



Regulatory Compliance:

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Key Features:

Parameter	Advantages
Control functions	1, Power setting On/Off 2,ALC automatic level control
Protection functions	1,Over TEM 2,Over voltage 3,Over current 4,Over VSWR
Remote control	RS422/Ethernet
Cooling system	Built in Cooling system,forced air cooling

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature*	-20		+40	℃
Non-operating Temperature*	-30		+50	℃
Relative humidity		95		%
Altitude	10,000			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			

*Note: For a wider temperature range, please consult the manufacturer.

Ordering Information:

Base Number	Description	Revision
TLPA0.5G6G-51-51-BC	Solid State High Power Amplifier Systems 0.5-6GHz,Gain:50dB,Psat:50 dBm,220V AC,Built in Fan Cooling	Rev.1.1

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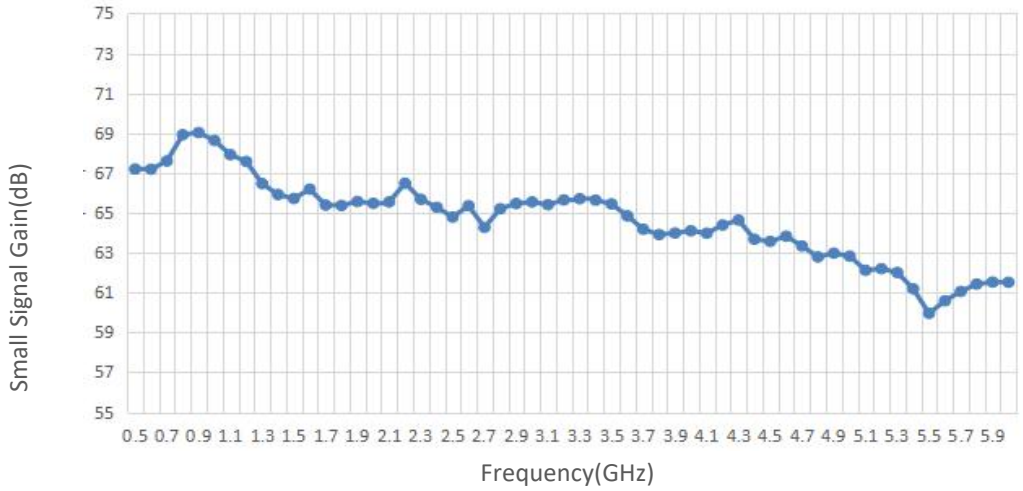
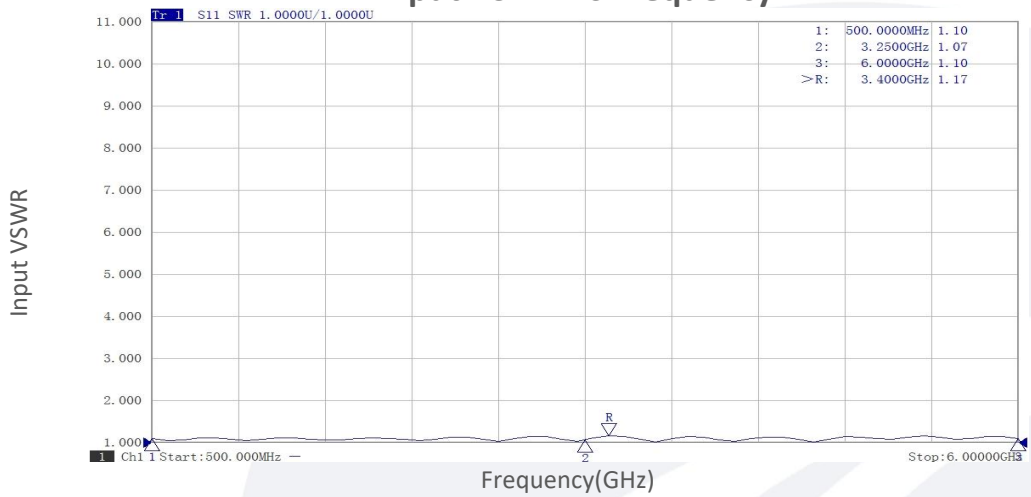
Typical Performance Data:

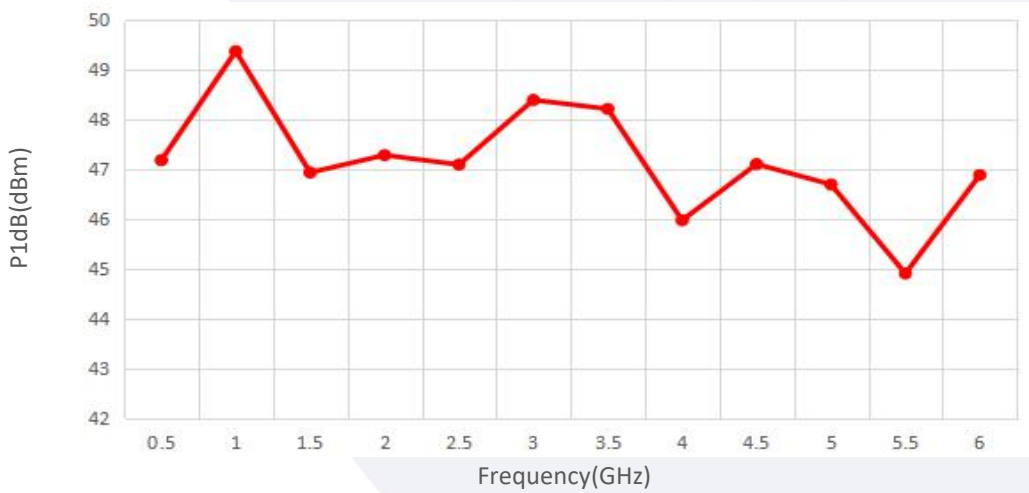
Small Signal Gain vs Frequency



Input VSWR vs Frequency



P1dB vs Frequency



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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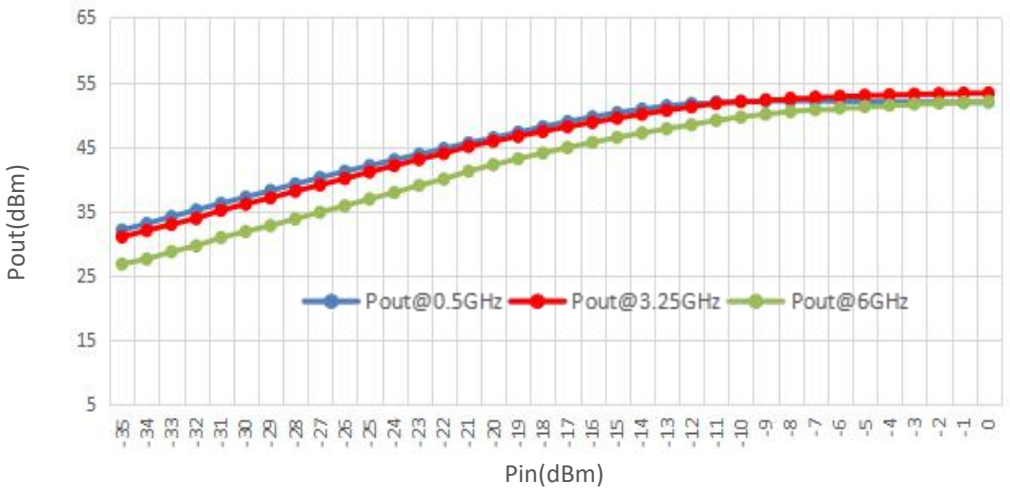
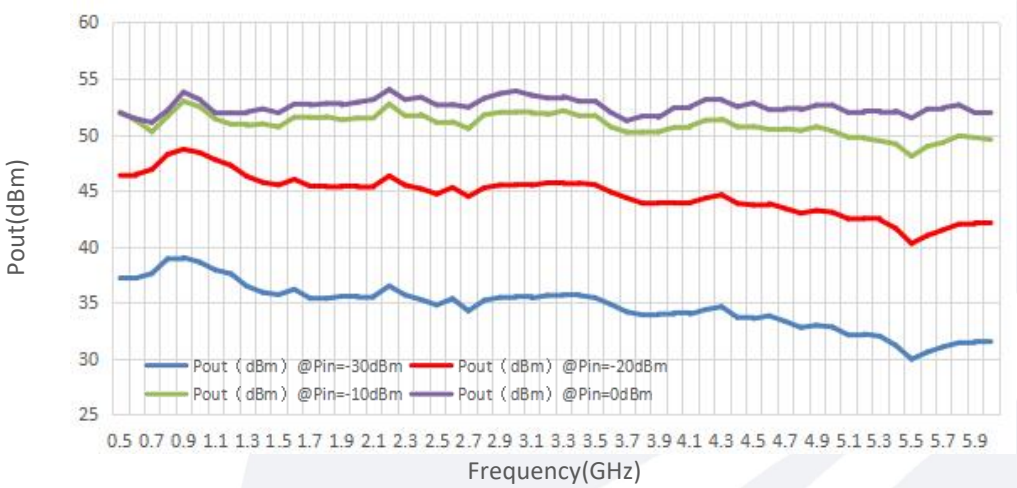
Typical Performance Data:

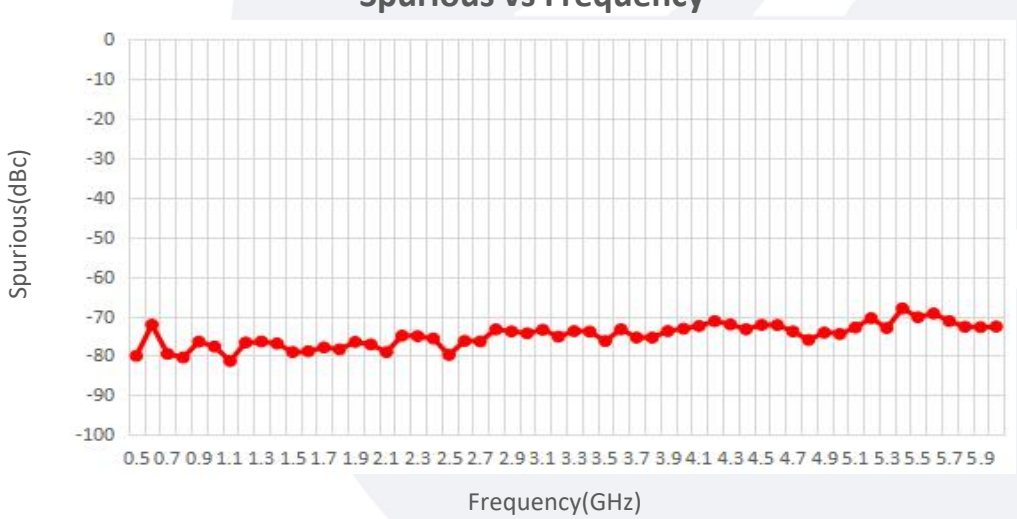
Pout@Pin



Pout@Equal_Pin



Spurious vs Frequency



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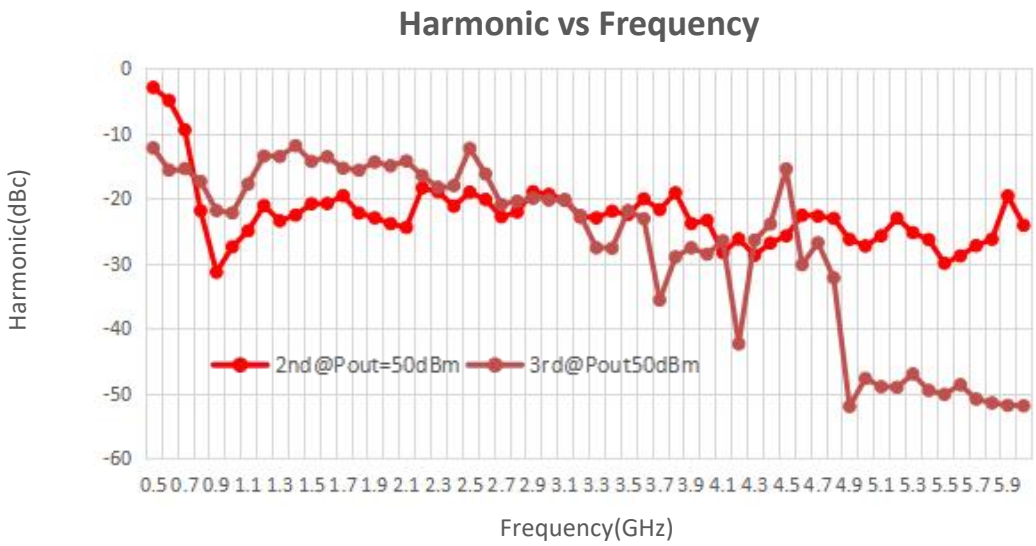

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