

**Model:TLPA0.5G6G-51-51-BC**
**Solid State High Power Amplifier Systems  
 0.5-6GHz,Gain:51dB,Psat:51 dBm,220V AC**
**Feature:**

- Wide Band: 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 Specifications:**

Parameter	Symbol	Min	Typ	Max	Units
Frequency range	BW	0.5-6			GHz
Small Signal Gain	SSGP	51			dB
Gain flatness	$\Delta$ GL		$\pm 3.5$		dB
Output Psat	Psat	51			dBm
Output P1dB	P1dB		47		dBm
Spurious@Pout=51dBm	Spur			-60	dBc
Harmonics@Pout=51dBm	HAM		-10		dBc
Input VSWR	VSWRin			2.0	:1
AC Voltage	Vac	220			V AC
Power Consumption	Pdiss	1800@Max			Watts
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*550 depth	mm
Weight	35	Kg

**Absolute Maximum Ratings:**

Parameter	Value
RF Input Power	10 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

**Outline Drawing:**

Unit: mm



**Key Features:**



OBSERVE PRECAUTIONS  
ELECTROSTATIC SENSITIVE  
DEVICES

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 protection 4, Over VSWR
Remote Control	RS422/Ethernet
Cooling system	Built in Cooling system, forced air cooling

### Environmental Conditions:

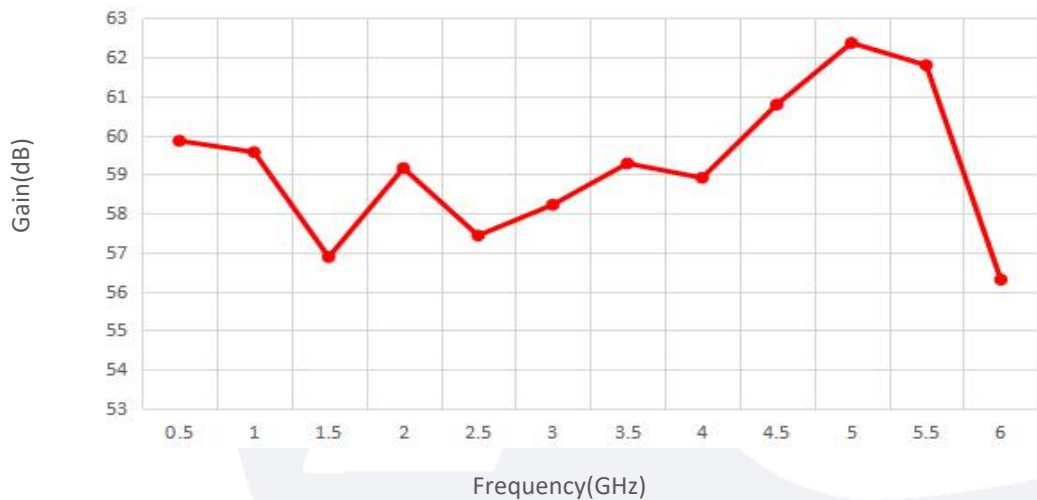
Parameter	Min	Typ	Max	Units
Operating Temperature	-20		+50	°C
Non-operating Temperature	-45		+65	°C
Relative humidity		95		%
Altitude	50000			feet
Shock / Vibration(MIL-STD- 810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

### Ordering Information:

Part Number	Description	Revision
TLPA0.5G6G-51-51-BC	Solid State High Power Amplifier Systems 0.5-6GHz,Gain:51dB,Psat:51 dBm,220V AC,Built in Fan Cooling	Rev.1.0

### 典型曲线 Typical Performance Data:

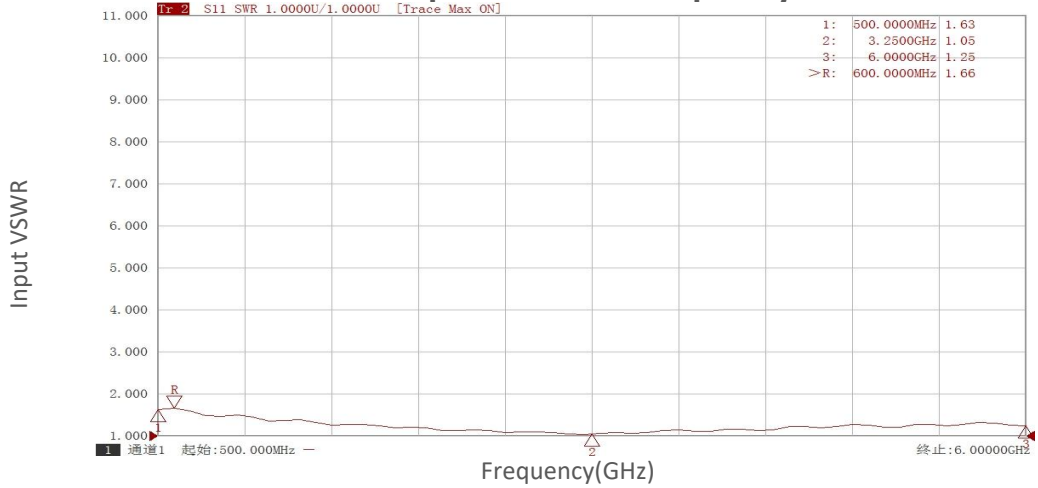
Small Signal Gain vs Frequency



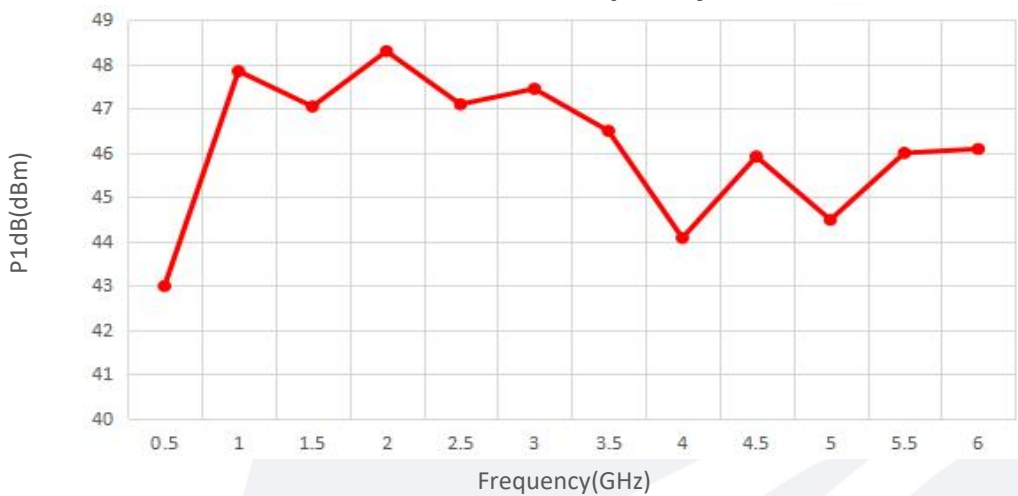
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

Typical Performance Data:

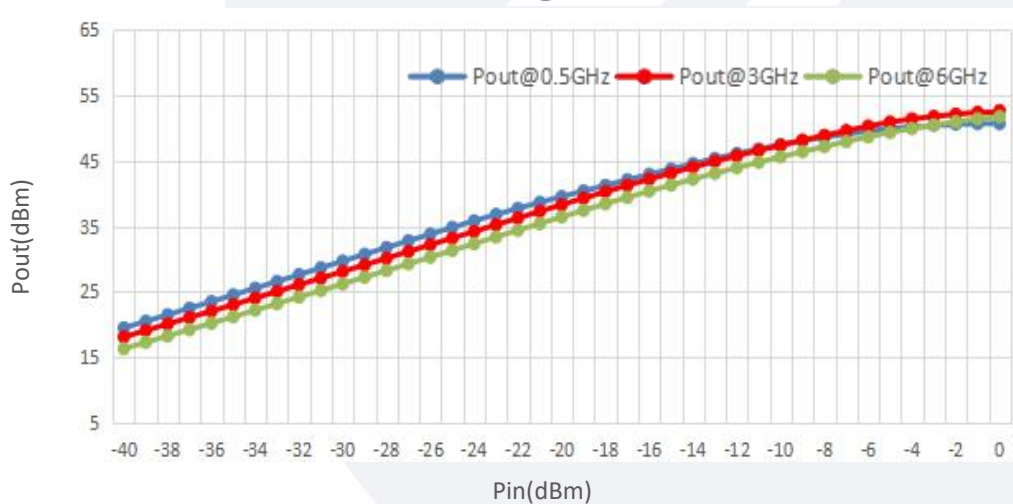
Input VSWR vs Frequency



P1dB vs Frequency



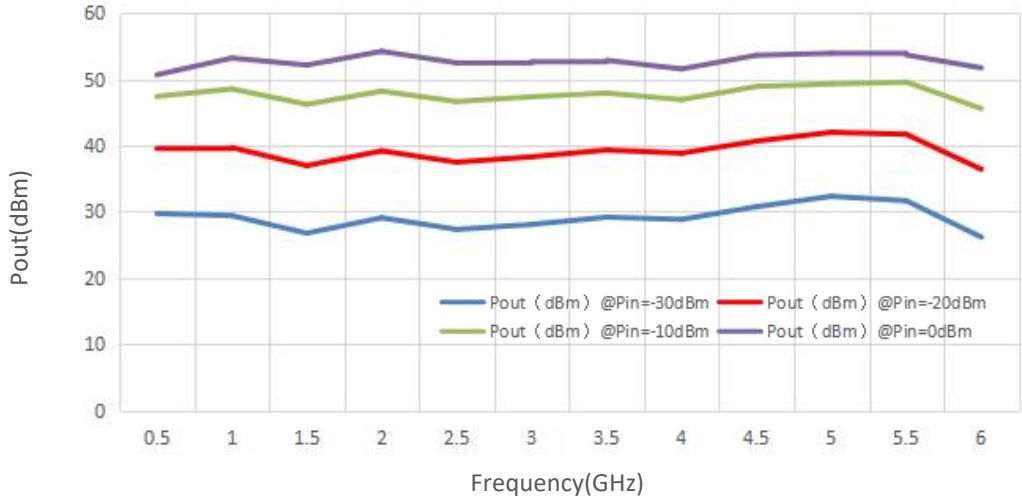
Pout@Pin



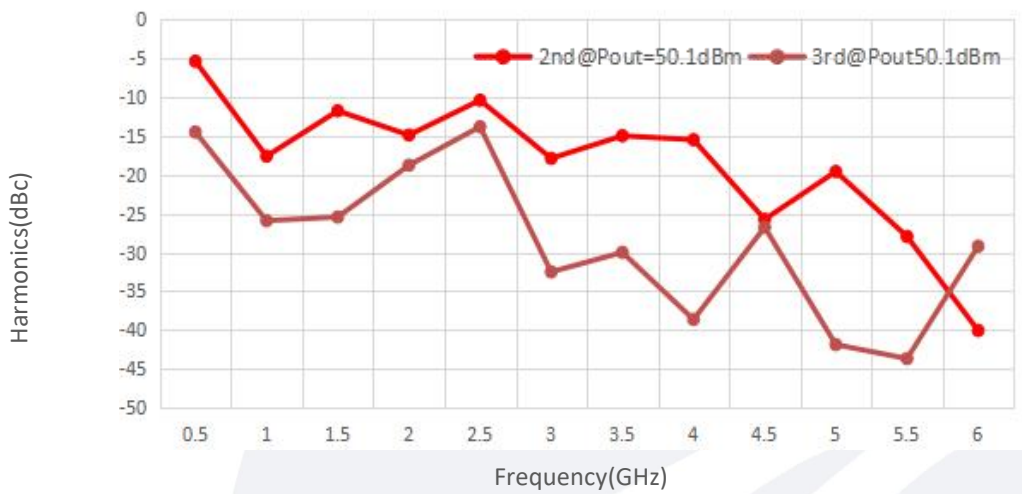
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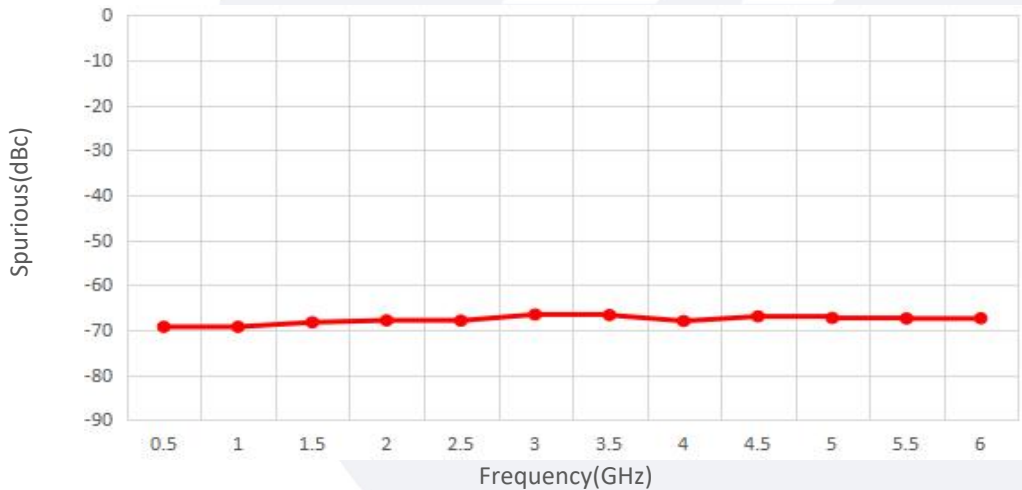
Pout@Equal\_Pin



Harmonics vs Frequency



Spurious vs Frequency



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