

Solid State High Power Amplifier Systems

6-10 GHz /50dB Gain/50 dBm Psat/220 V AC

Model: TLPA6G10G-50-50-BC

TLPA6G10G-50-50-BC is a solid state high power amplifier systems provides high output power and high gain across the 6 to 10 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:

- Wide Band: 6-10GHz
- Gain: 50dB Min
- Psat Output Power:50dBm 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	6-10			GHz
Gain	GP	50			dB
Gain flatness	ΔGL		± 3		dB
Output Psat	Psat	50			dBm
Output P1dB	P1dB		45		dBm
Spurious	Spur			-60	dBc
Harmonics	HAM			-50	dBc
Input VSWR	VSWRin			2.0	:1
AC Voltage	Vac	220			V AC
Power Consumption	Pdiss	1000@Max			W
Impedance	I/O-IMP	50			Ohms

Mechanical Specifications:

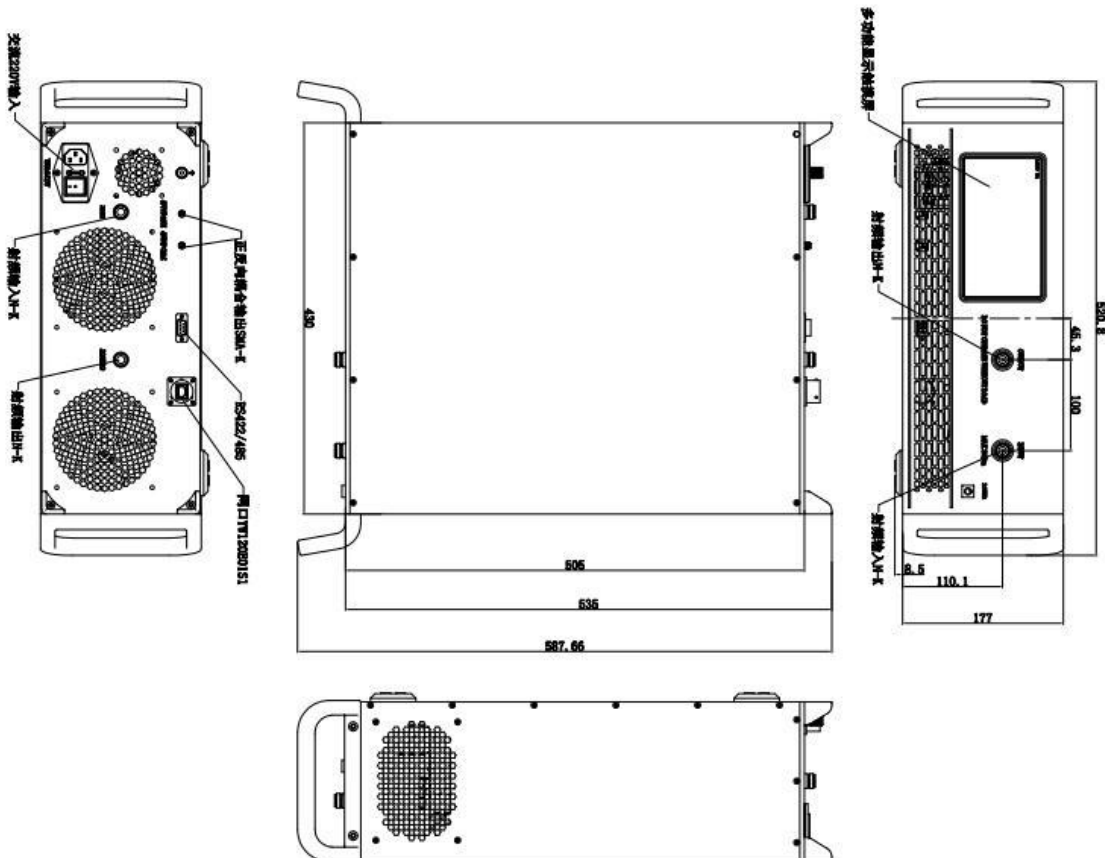
Parameter	Value	Units
Input /Output Connector	N Female/N Female	
Size	19 Inch 4U	
Weight	≤35	Kg

Absolute Maximum Ratings:

Parameter	Value
RF Input Power	5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm



Key Features:

Parameter	Advantages
Control	RS422/Ethernet,LCD Screen Display
Protection functions	1,Over TEM 2,Over voltage 3,Over current protection 4,Over VSWR
Control functions	1,Power setting On/Off 2,ALC
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	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			

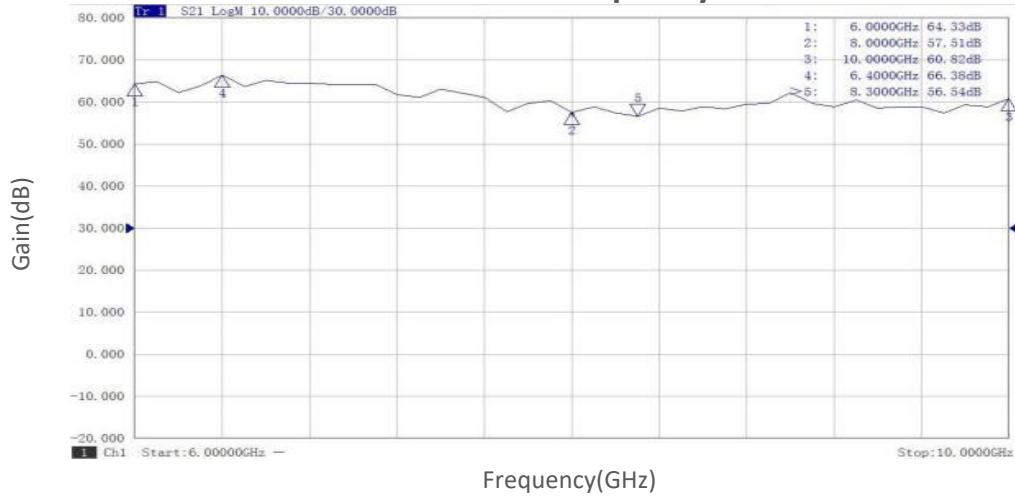
*Note: For a wider temperature range, please consult the manufacturer.

Ordering Information:

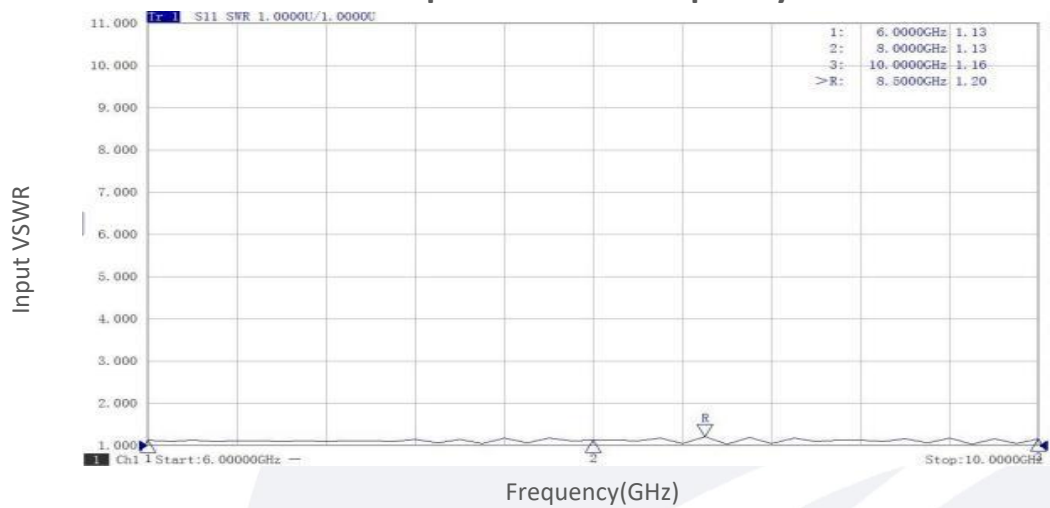
Base Number	Description	Revision
TLPA6G10G-50-50-BC	Solid State High Power Amplifier Systems 6-10GHz,Gain:50dB,Psat:50dBm,220V AC,Built in Fan Cooling	Rev.1.0

Typical Performance Data:

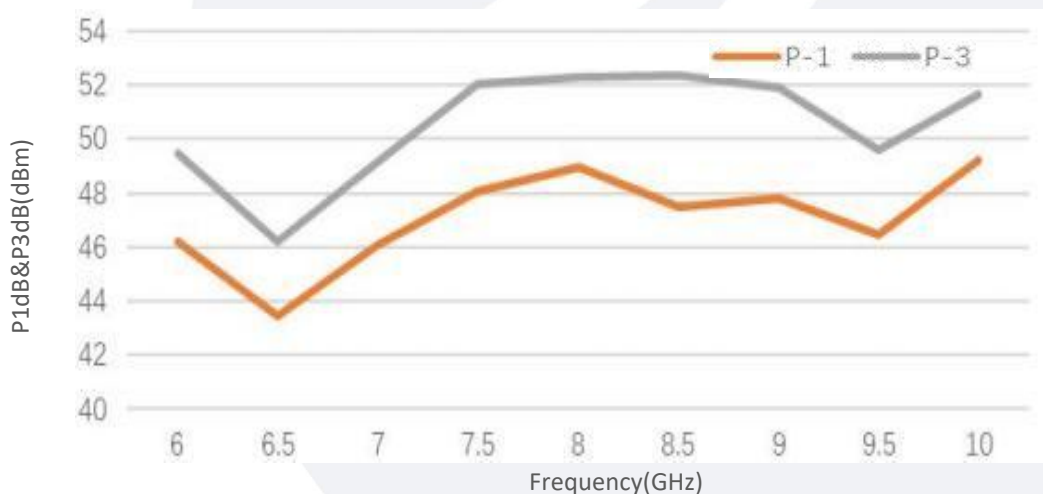
Gain vs Frequency



Input VSWR vs Frequency

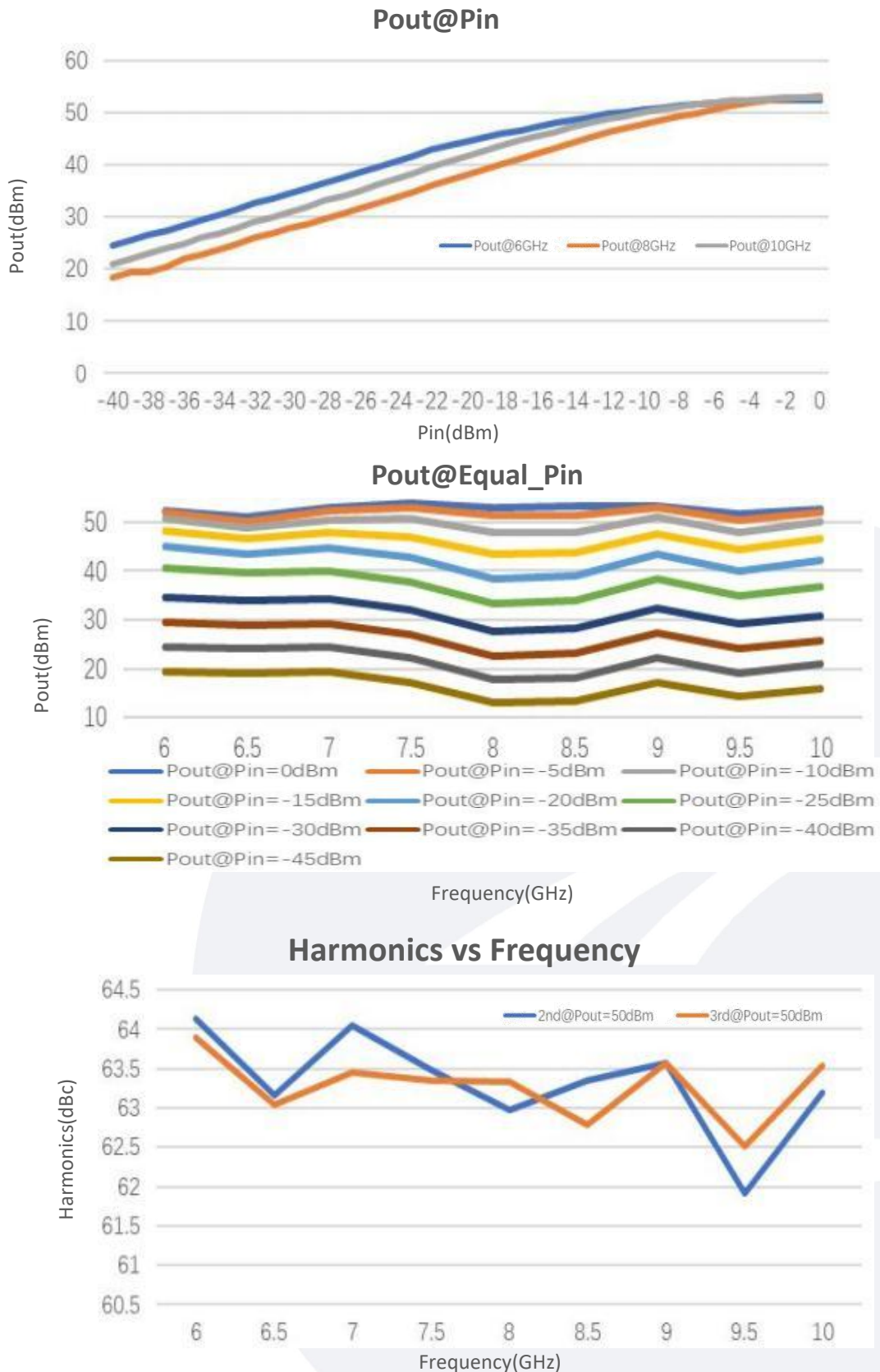


P1dB&P3dB vs Frequency



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.

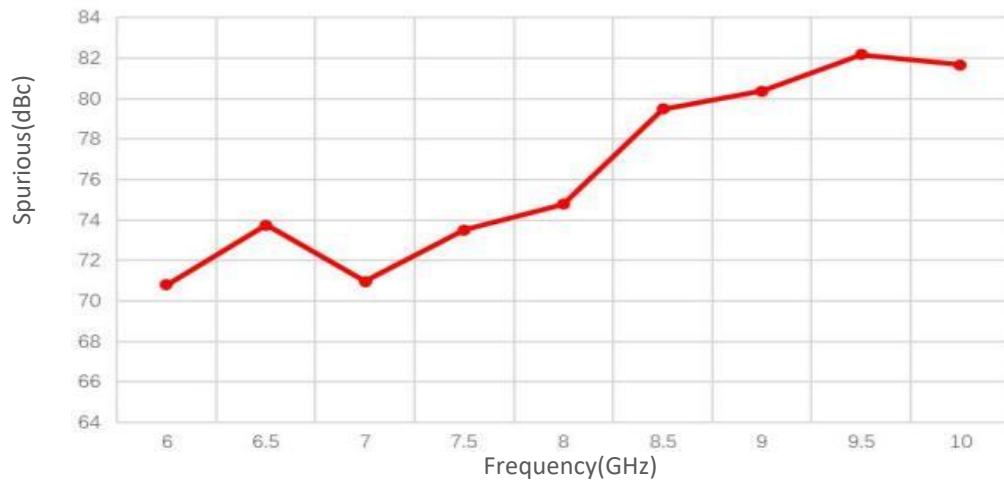
Typical Performance Data:



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:

Spurious 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.