

Solid State High Power Amplifier Systems

2-18 GHz /50dB Gain/50 dBm Psat/220V AC

Model: TLPA2G18G-50-50-BC

TLPA2G18G-50-50-BC is a solid state high power amplifier systems provides high output power and high gain across the 2 to 18 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: 2-18GHz
- 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	2-18			GHz
Power Gain	GP	50			dB
Gain flatness	ΔGL		±4		dB
Output Psat	Psat	50	51		dBm
Spurious@Pout=50dBm	Spur			-50	dBc
Harmonics@Pout=50dBm	HAM			-10	dBc
Input VSWR	VSWRin			2.0	:1
AC Voltage	Vac		220		V AC
Power Consumption	Pdiss	2000@Max			W
Impedance	I/O-IMP	50			Ohms

Mechanical Specifications:

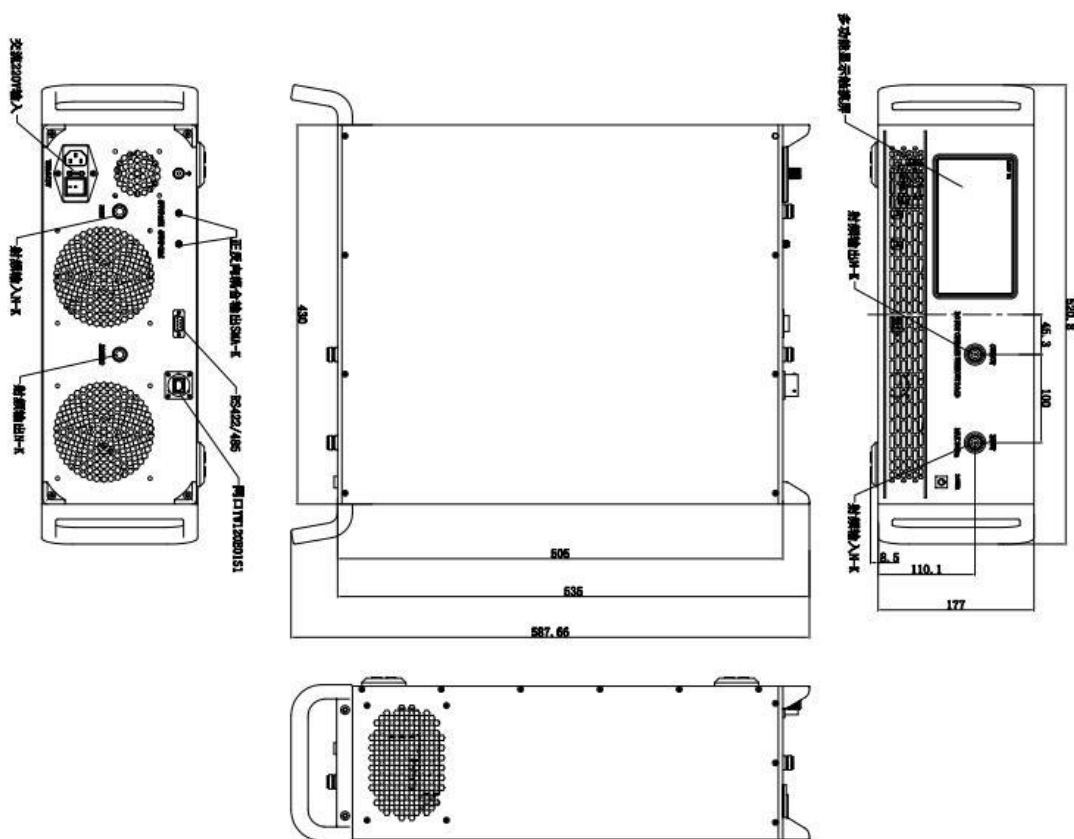
Parameter	Value	Units
Input /Output Connector	N Female/N Female	
Network port Communication	RJ-45/DB9	
Size	19 inch 4U	mm
Weight	35	Kg

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 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
Display functions	1, Display the current, FWD/RVS power 2, Display fault information
Cooling system	Built in Cooling system, forced air cooling

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature*	-20		+50	°C
Non-operating Temperature*	-40		+85	°C
Relative humidity		95		%
Altitude	10,000			feet
Shock / Vibration(MIL-STD-810F)	Normal Truck Trans			

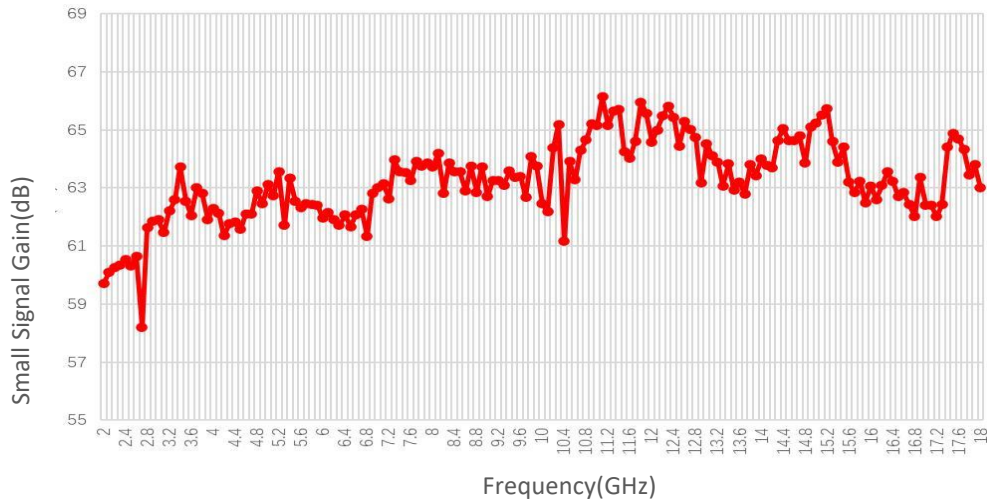
*Note: For a wider temperature range, please consult the manufacturer.

Ordering Information:

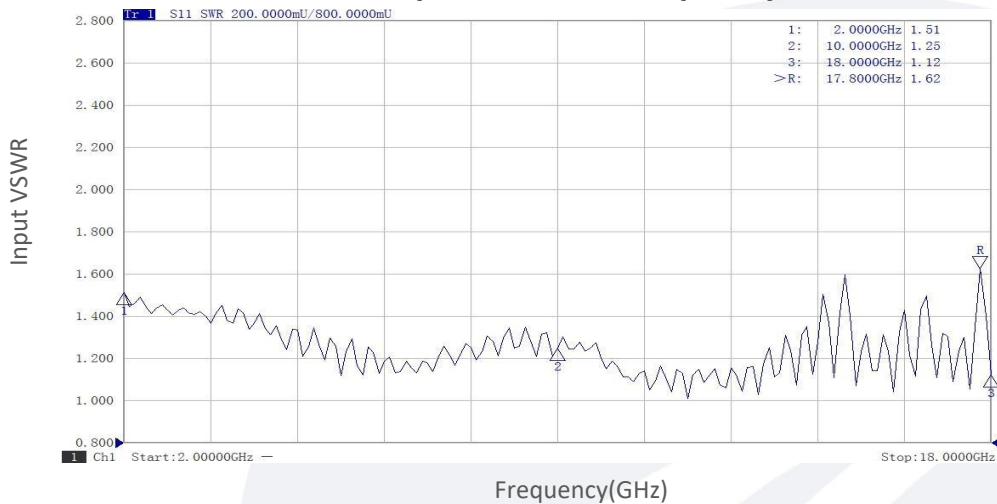
Base Number	Description	Revision
TLPA2G18G-50-50-BC	Solid State High Power Amplifier Systems 2-18GHz, Gain: 50dB, Psat: 50 dBm, 220V AC, Built in Fan Cooling	Rev.1.0

Typical Performance Data:

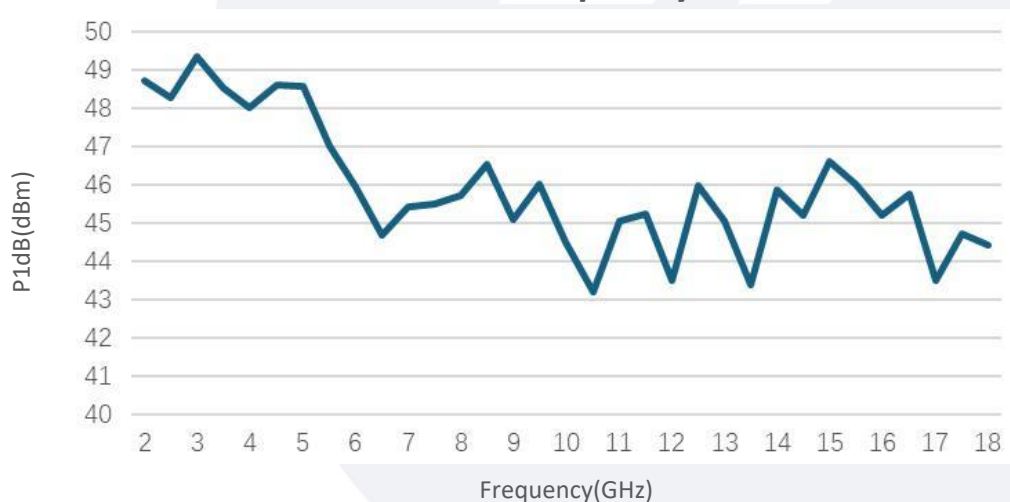
Small Signal Gain vs Frequency



Input VSWR vs Frequency

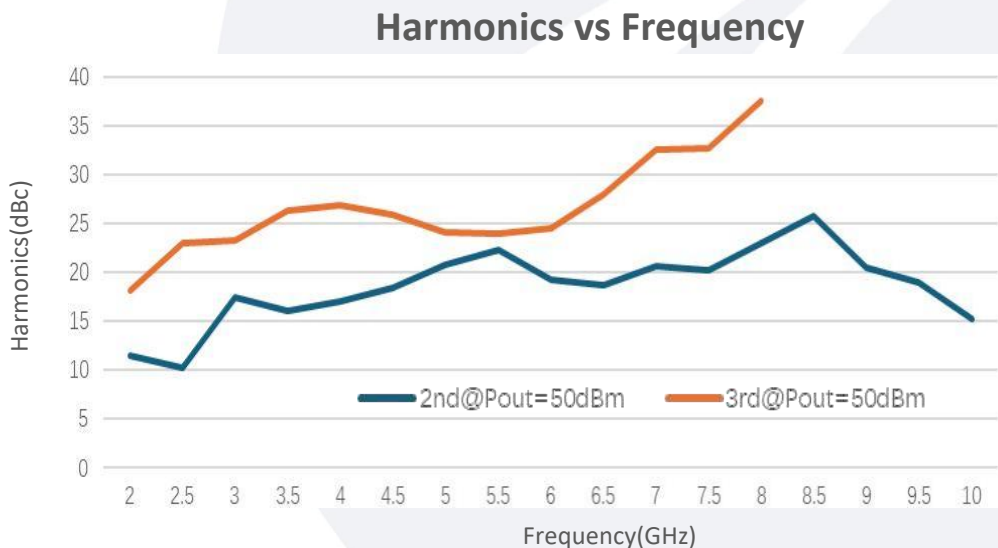
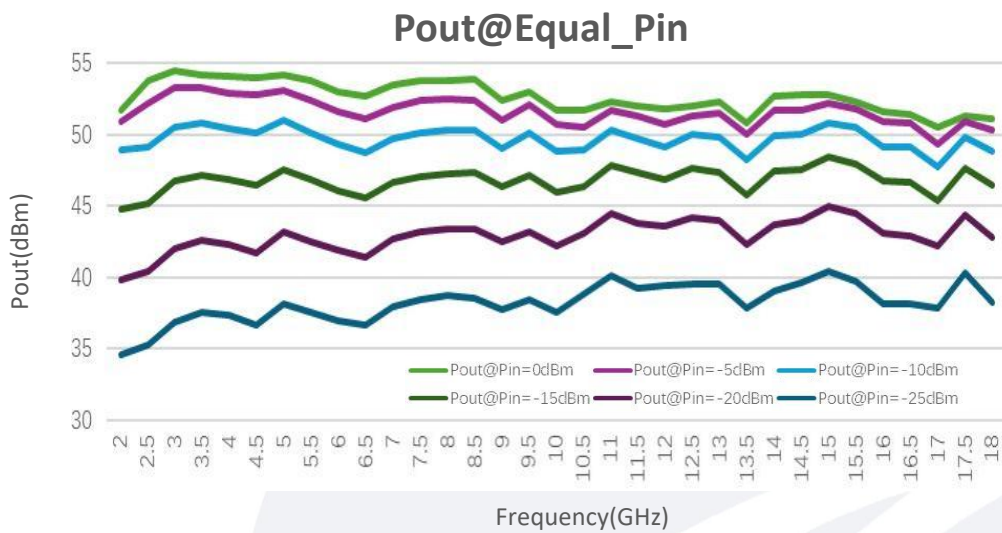
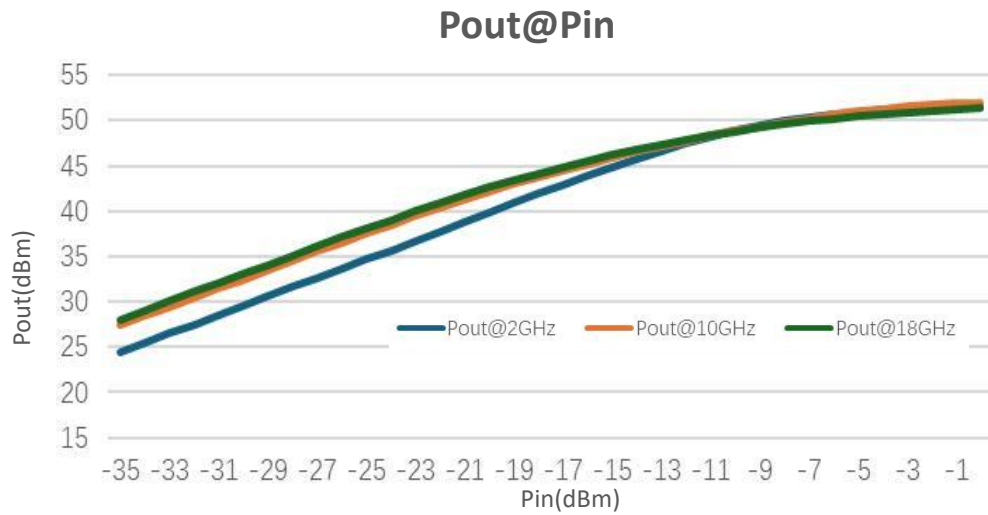


P1dB vs Frequency



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.

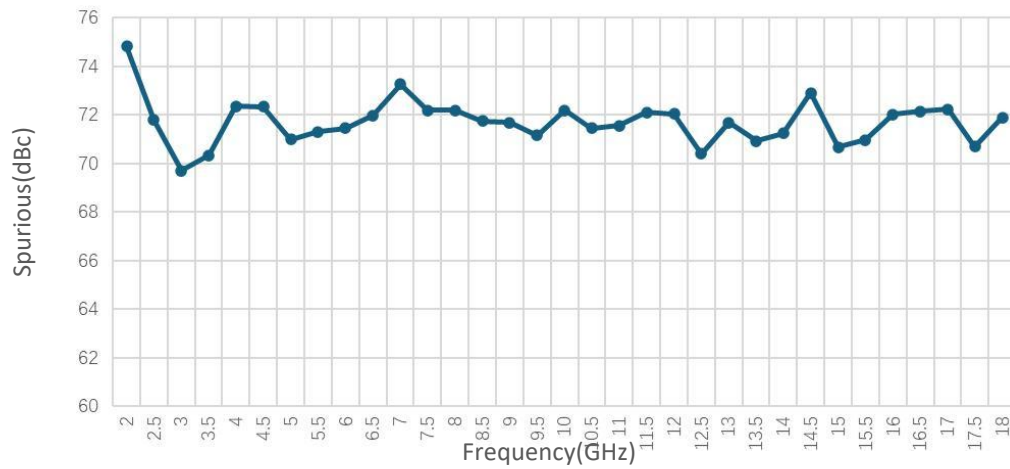
Typical Performance Data:



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Typical Performance Data:

Spurious vs Frequency



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