

Solid State High Power Amplifier Systems

18-40GHz /47dB Gain/48 dBm Psat/220V AC

Model: TLPA18G40G-47-48-BC

TLPA18G40G-47-48-BC is a solid state high power amplifier systems provides high output power and high gain across the 18 to 40 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: 18-40GHz
- Gain: 47dB Min
- Psat Output Power:48dBm 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	18-40			GHz
Gain	GP	47			dB
Gain flatness	Δ GL		± 5		dB
Output Psat	Psat	47	48		dBm
精度	ALC			± 0.5	dB
Spurious	Spur			-50	dBc
Harmonics	HAM			-15	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:

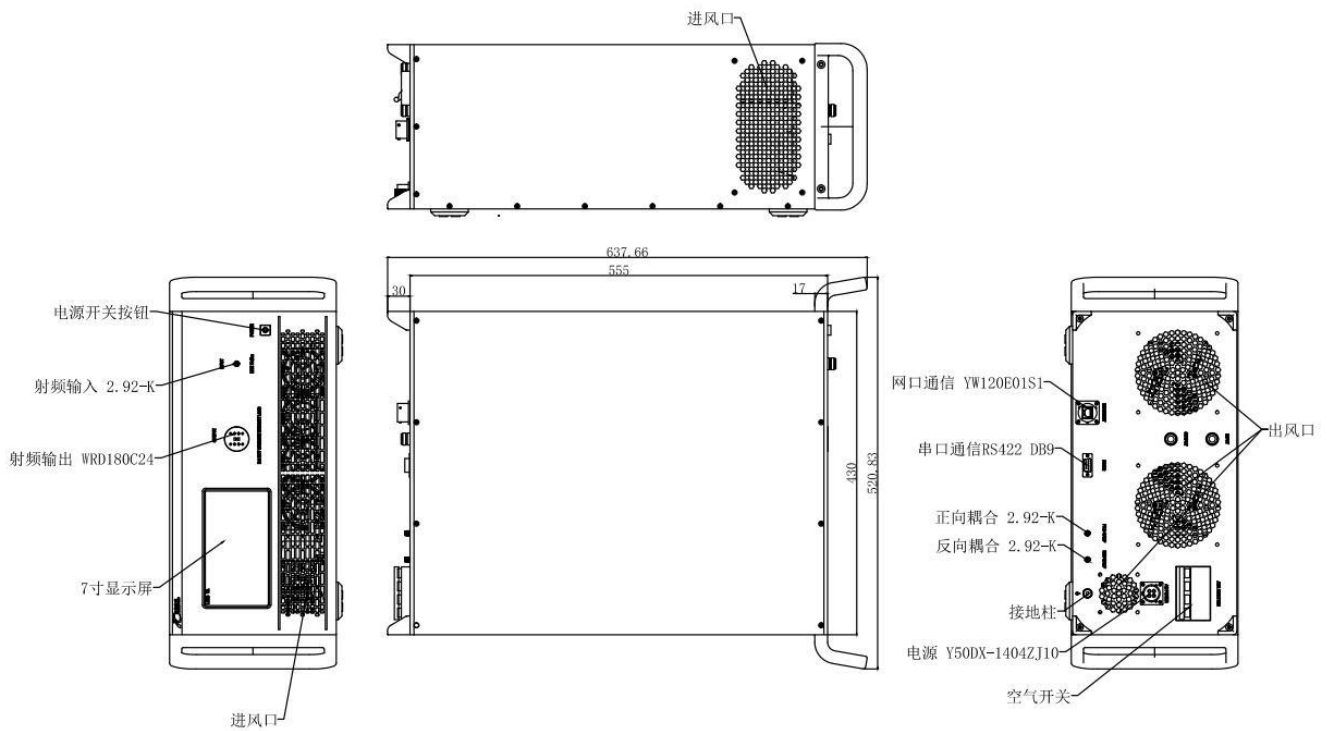
Parameter	Value	Units
Input /Output Connector	2.92mm Female WRD180	
Communication Connector	RJ45/DB9	
Size	19 Inch 5U	
Weight	45	Kg

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/LAN
Protection functions	1,Over TEM 2,Over voltage 3,Over current 4,Over VSWR
Control functions	1, Power On/Off 2,RF On/Off 3,Gain Adjustment
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		+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.

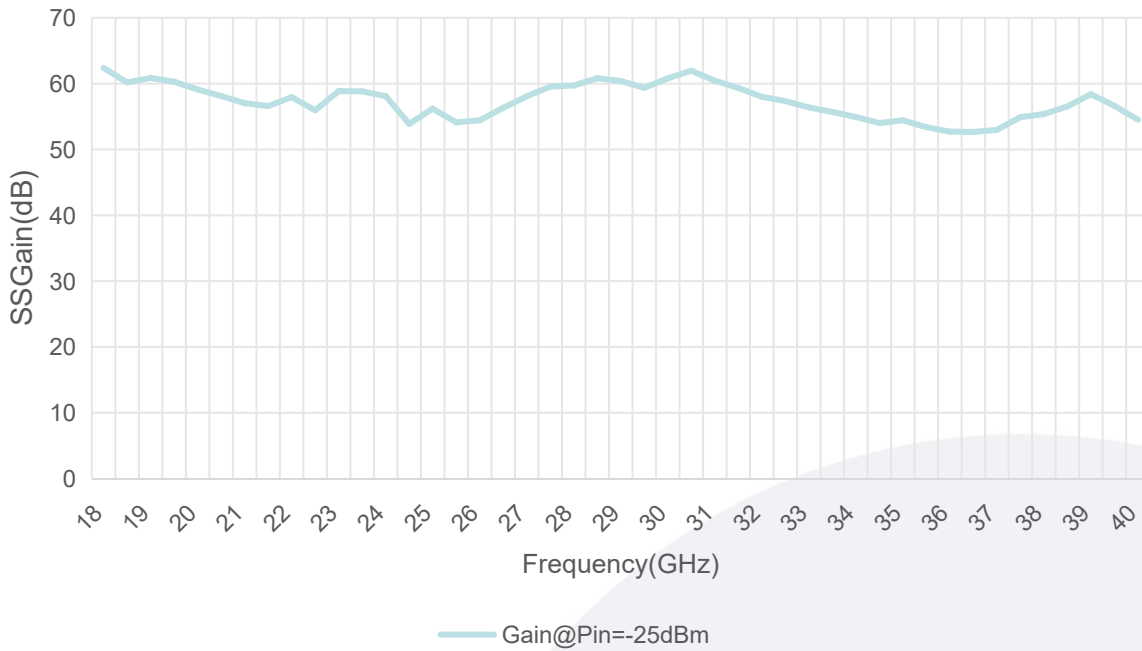
Ordering Information:

Base Number	Description	Revision
TLPA18G40G-47-48-BC	Solid State High Power Amplifier Systems 18-40GHz,Gain:47dB,Psat:48dBm,220V AC,Built in Fan Cooling	Rev.1.1

Typical Performance Data:

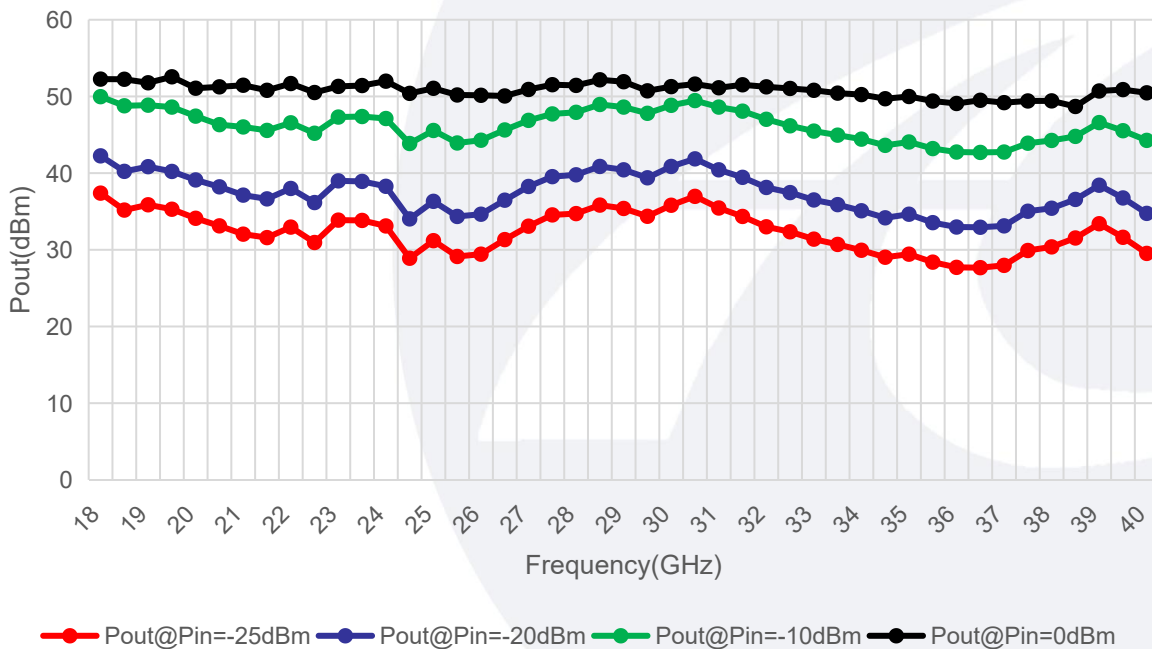
1. Gain

SSGain(dB)



2. Output Power

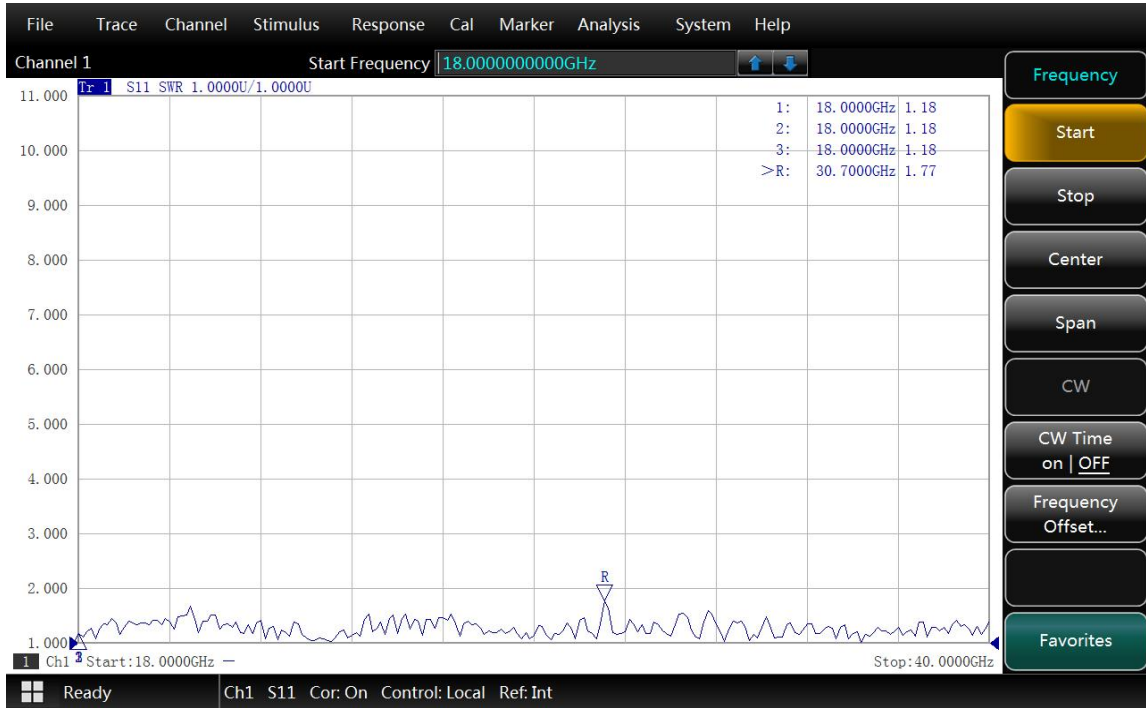
Pout@Equal-Pin



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.

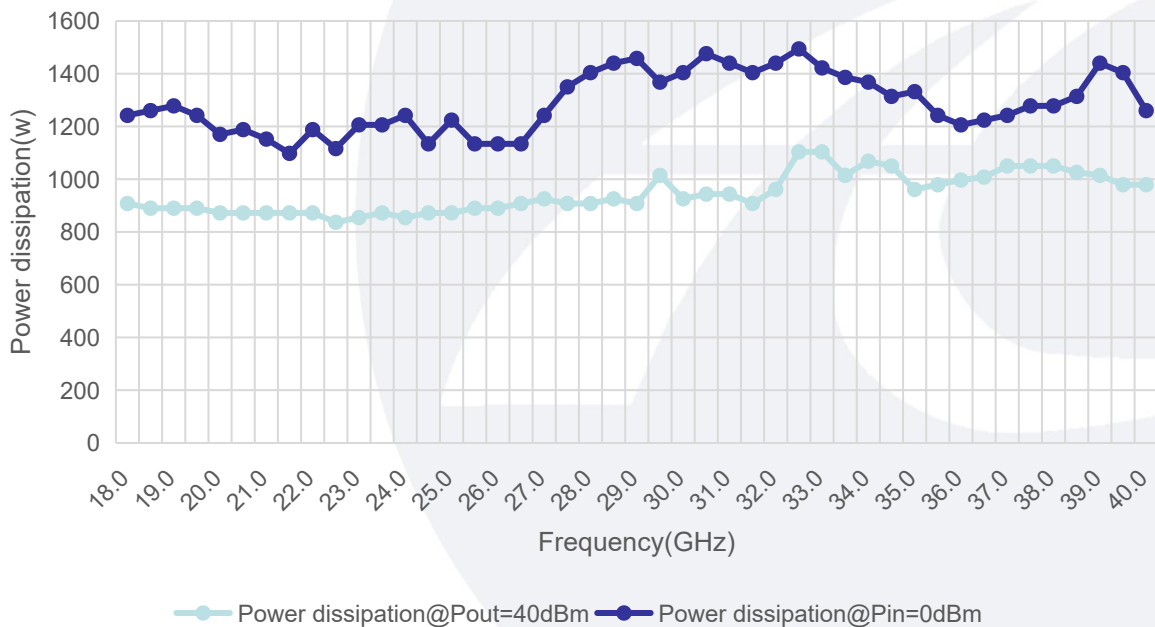
Typical Performance Data:

3. Input VSWR



4. Power Dissipation

Power dissipation



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