Suzhou Talent Microwave,Inc
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Solid State High Power Amplifier Systems

9-9.5GHz/60dB Gain/60dBm Psat/380V AC

Model: TLPA9G9.5G-60-60-BC

TLPA9G9.5G-60-60-BC is a solid state high power amplifier systems provides high output power and high gain across the 9 to 9.5 GHz frequency range. The amplifier features a built-in 380V 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: 9-9.5 GHz
- Gain: 60dB Min
- Psat Output Power: 60dBm Min
- Protection:Over TEM,over/under voltage, load VSWR protection
- 50 Ohm Matched Input / Output

Electrical Characteristics:

Parameter	Symbol	Min	Typ	Max	Units
Frequency range	BW	9-9.5			GHz
Power Gain	GP	60			dB
Gain flatness	ΔGL		±1.5		dB
Gain adjust Range	ΔGR	20			dB
Gain adjust Step	ΔGS		0.5		dB
Output Psat	Psat	60			dBm
Output P1dB	P1dB		54		dB
Gain stability@24h	Gs			±0.25	dB
Spurious	Spur			-60	dBc
Harmonics@Pout=60dBm	HAM			-20	dBc
Input VSWR	VSWRin			1.25	:1
Output VSWR	VSWRout			1.5	:1
AC Voltage	Vac		380	420	V AC
Power Consumption@Psat	Pdiss		10	11	KW
Working Mode	MOD	CW/PULSE compatible			
Impedance	I/O-IMP	50			Ohms

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Mechanical Specifications:

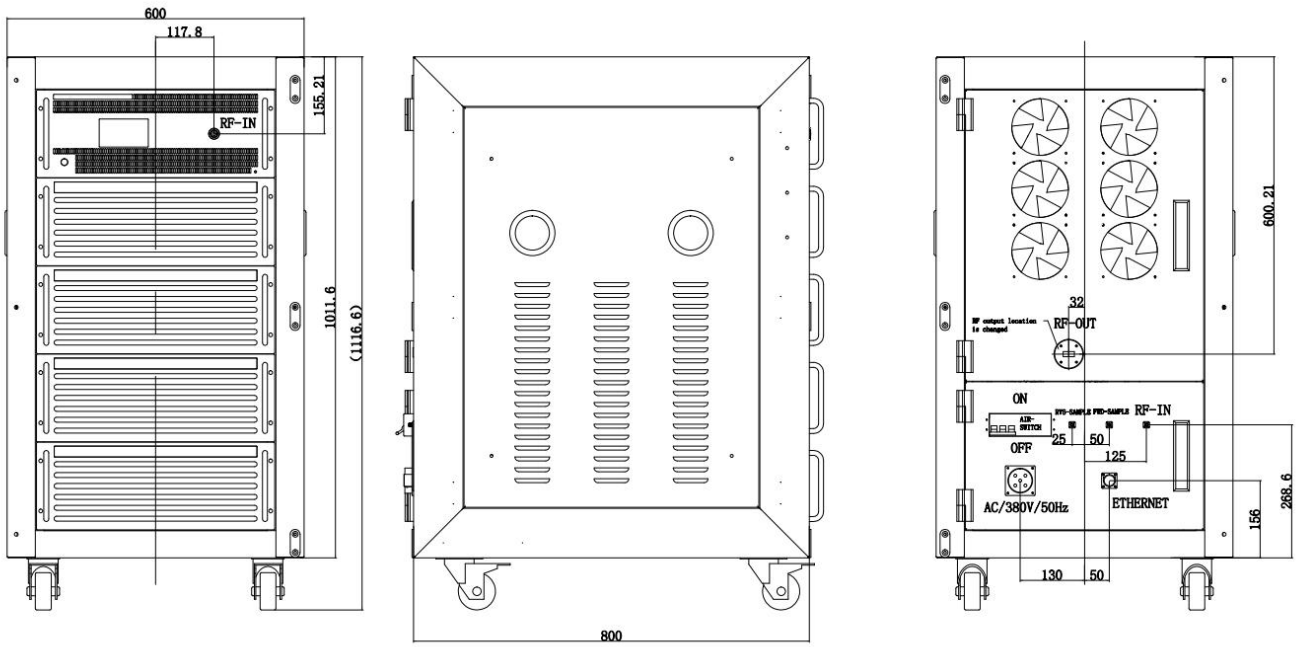
Parameter	Value	Units
Input /Output Connector	N Female/WR90	
Forward/Reverse Coupling	N Female/ N Female	
AC Supply Connector	Y50DX-3205	
Communication Connector	RS422/RJ45	
Front Panel LCD Screen Display	7 inch LCD Screen Display	
Size	20U	mm
Weight	≤250	Kg

Absolute Maximum Ratings:

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

Outline Drawing:

Unit:mm



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Key Features:

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

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature*	-10		+40	℃
Non-operating Temperature*	-20		+70	℃
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
TLPA9G9.5G-60-60-BC	Solid State High Power Amplifier Systems 9-9.5GHz,Gain:60dB,Psat:60 dBm,380V AC,Built in Fan Cooling	Rev.1.1

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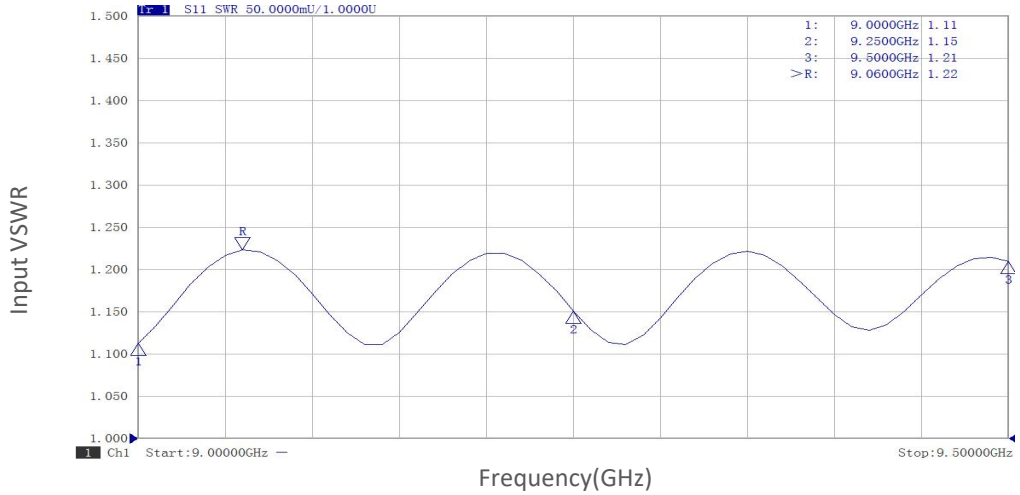
Typical Performance Data:

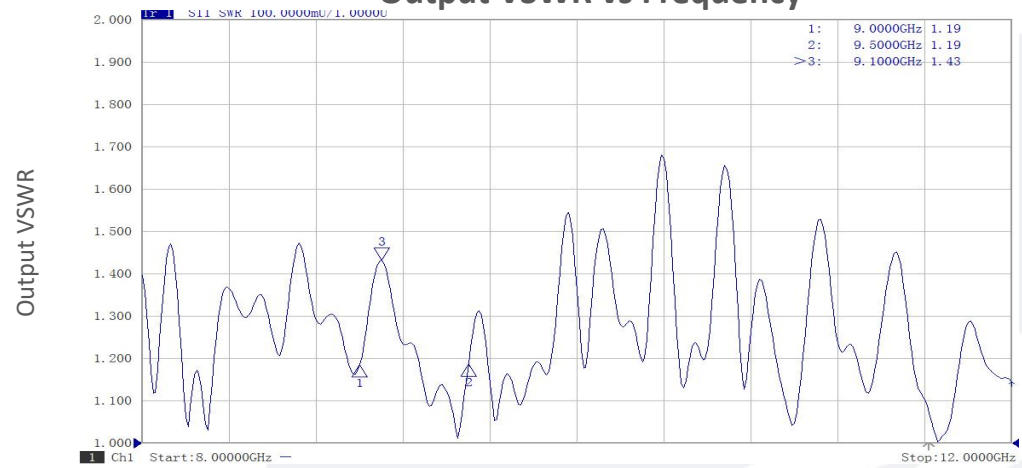
Input VSWR vs Frequency



Input VSWR

Frequency(GHz)

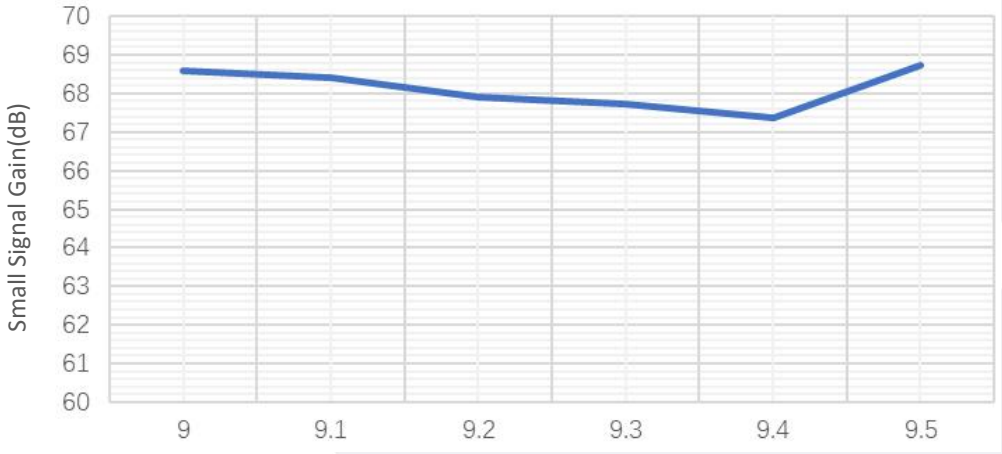
Output VSWR vs Frequency



Output VSWR

Frequency(GHz)

Small Signal Gain vs Frequency



Small Signal Gain(dB)

Frequency(GHz)

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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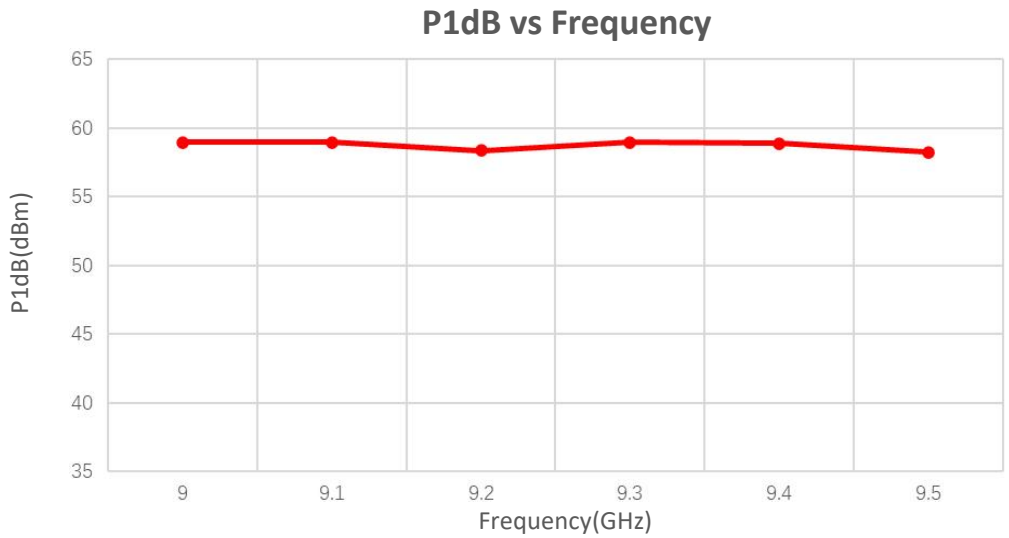

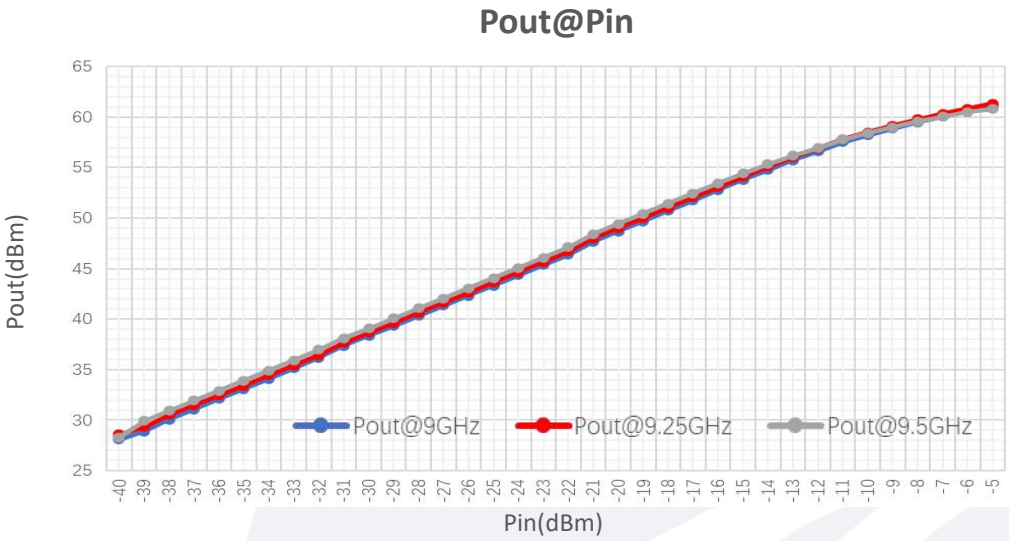

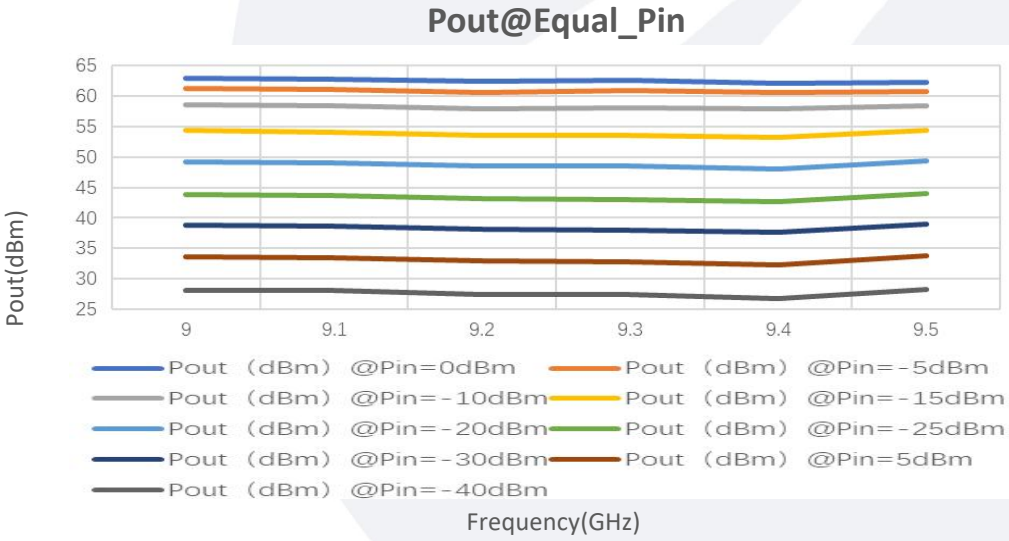

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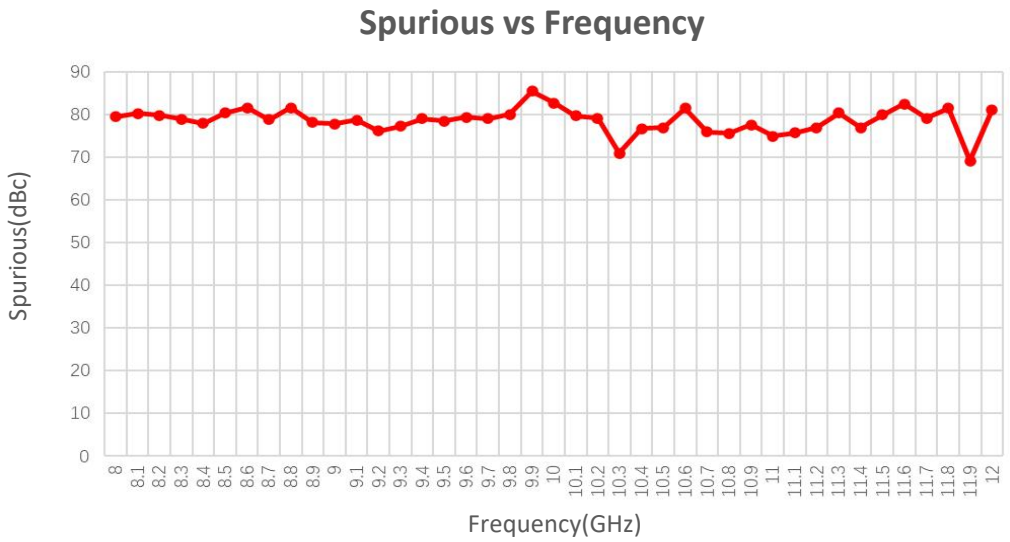

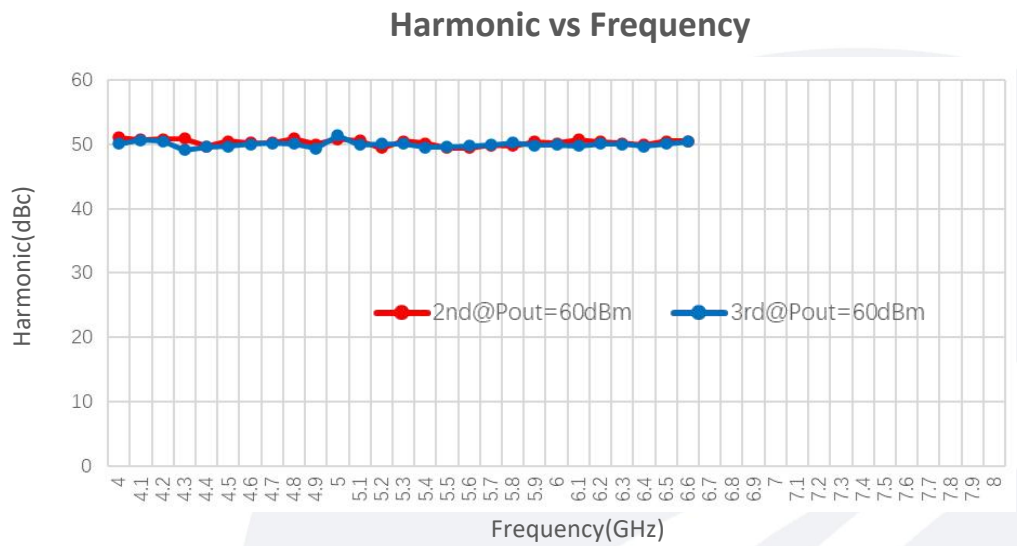

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