

Model:TLPA1.1G1.4G-53-53-BC
**Solid State High Power Amplifier Systems
 1.1-1.4GHz,Gain:53dB,Psat:53dBm**
Feature:

- Frequency range: 1.1-1.4GHz
- Gain: 53dB Min
- Psat Output Power: 53 dBm Min
- Protection:Over TEM,over voltage, over current ,over VSWR protection.
- Suitable for CW, AM, FM, Pulse
- 50 Ohm Matched Input / Output


Electrical Specifications:

Parameter	Symbo	Min	Typ	Max	Units
Frequency range	BW	1.1-1.4			GHz
Gain	GP	53	54		dB
Gain Flatness	Δ GL		± 1.0	± 2.0	dB
Output P1dB	P1dB		50		dBm
Output P1dB	Psat	53			dBm
Spurious	Spur			-60	dBc
Harmonics	HAM			-10	dBc
Input VSWR	VSWRin		1.5	2.0	:1
AC Voltage	Vac	110	220		V AC
DC Supply Current	Iac	5A@220V AC			A
Impedance	I/O-IMP	50			Ohms

Mechanical Specifications:

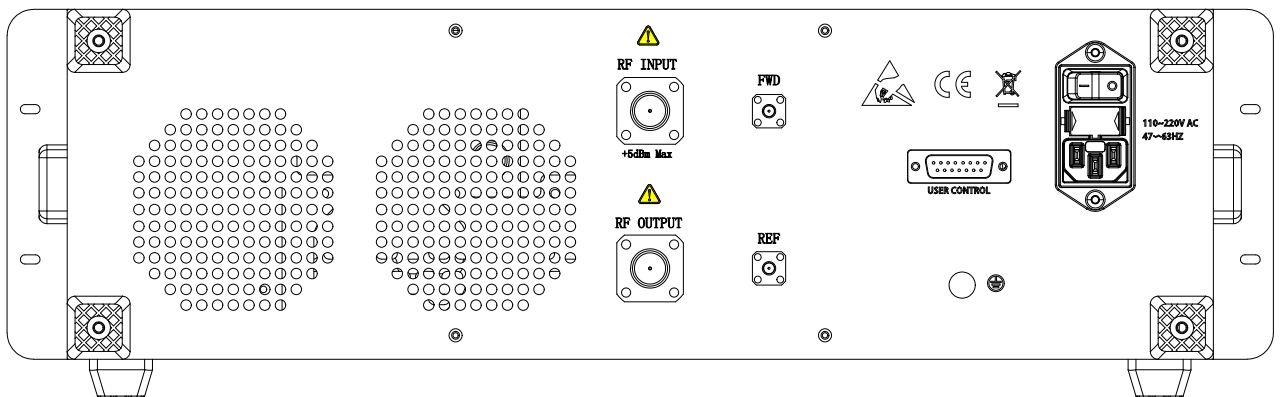
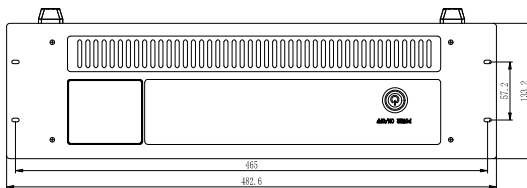
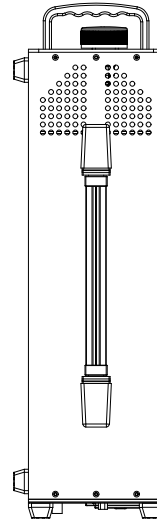
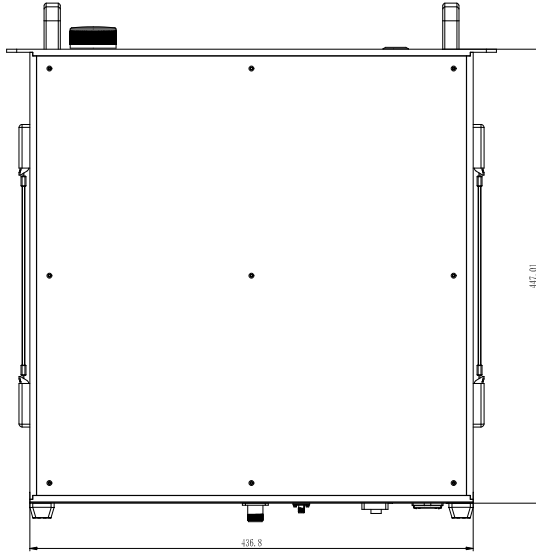
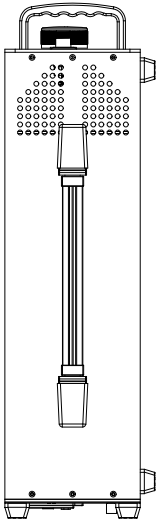
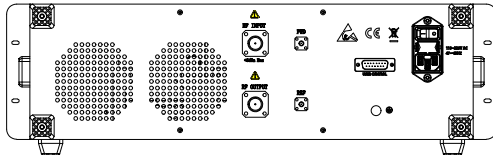
Parameter	Value	Units
Input /Output Connector	N Female/N Female	
Forward/Reverse Coupling	SMA Female/ SMA Female	-40dB
Size	3U*500	mm
Weight	≤ 17	Kg

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
Protection functions	1,Over TEM 2,Over voltage 3,Over current protection 4,Over VSWR
Cooling system	Built in Cooling system,forced air cooling

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature*	-20		+40	°C
Non-operating Temperature*	-30		+50	°C
Relative humidity		95		%
Altitude	10000			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			

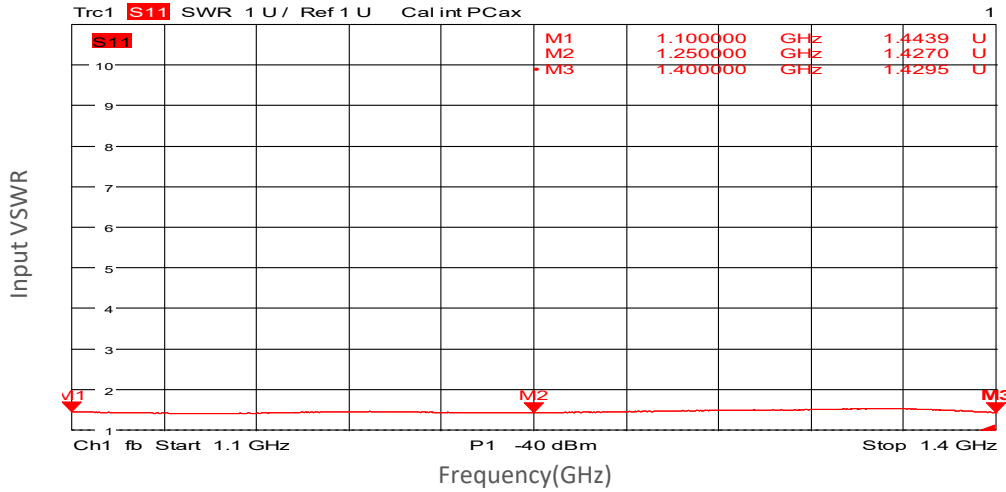
*Note: For a wider temperature range, please consult the manufacturer.

Ordering Information:

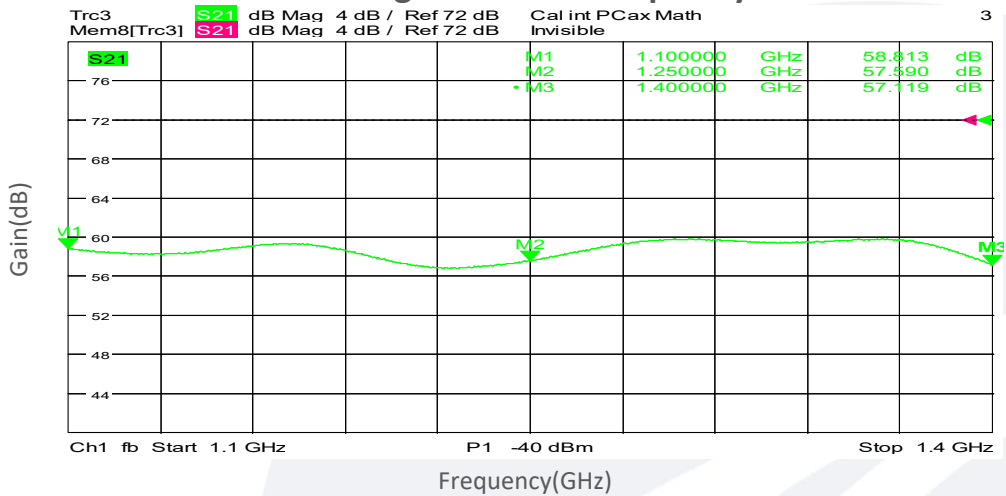
Part Number	Description	Revision
TLPA1.1G1.4G-53-53-BC	Solid State High Power Amplifier Systems 1.1-1.4GHz,Gain:53dB,Psat:53dBm,220V AC,Built in Fan Cooling	Rev.2.1

Typical Performance Data:

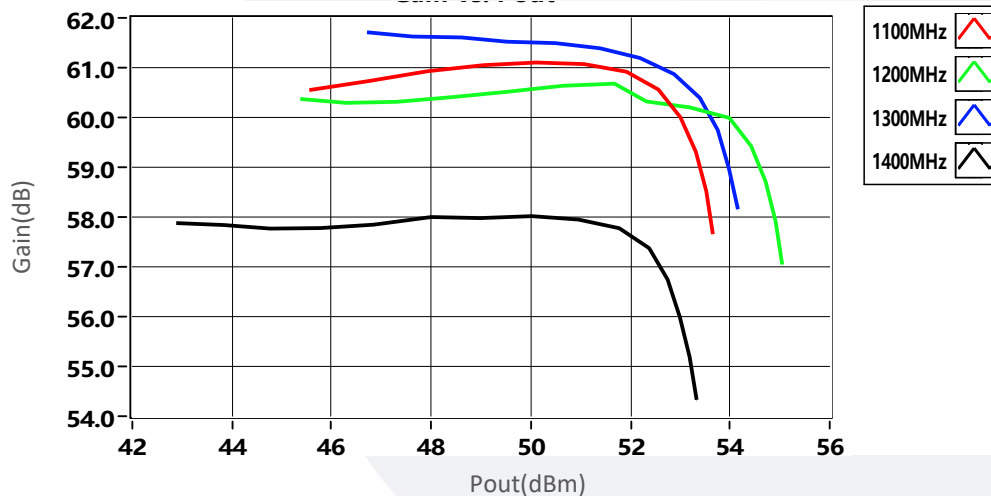
Input VSWR vs Frequency



Small Signal Gain vs Frequency



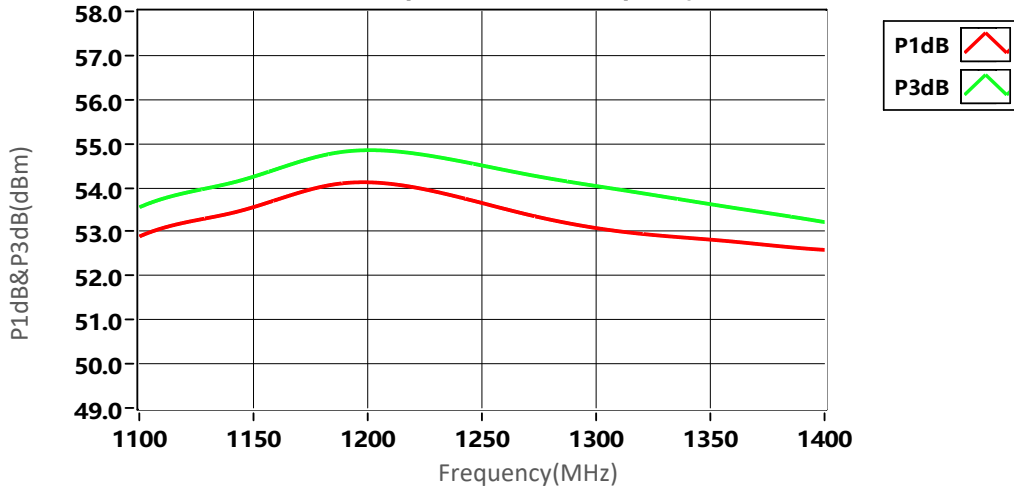
Gain vs Output Power



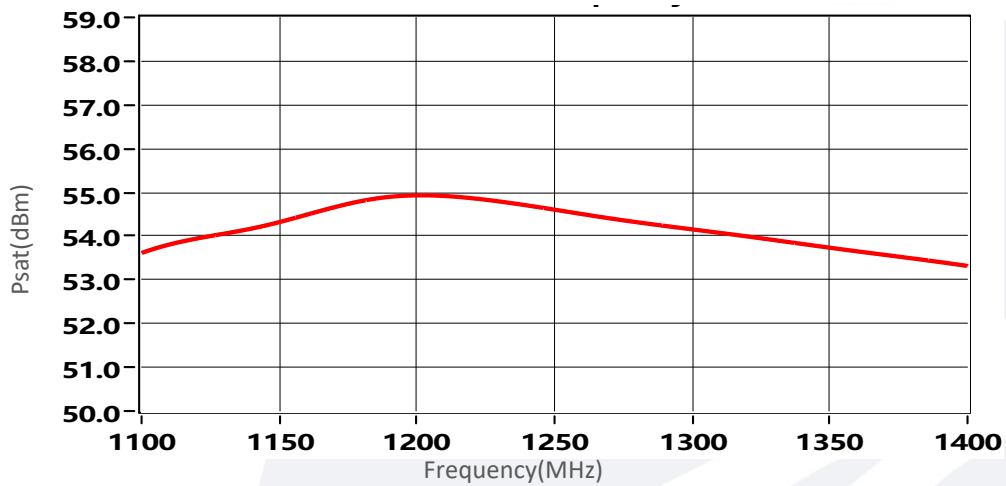
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

Typical Performance Data:

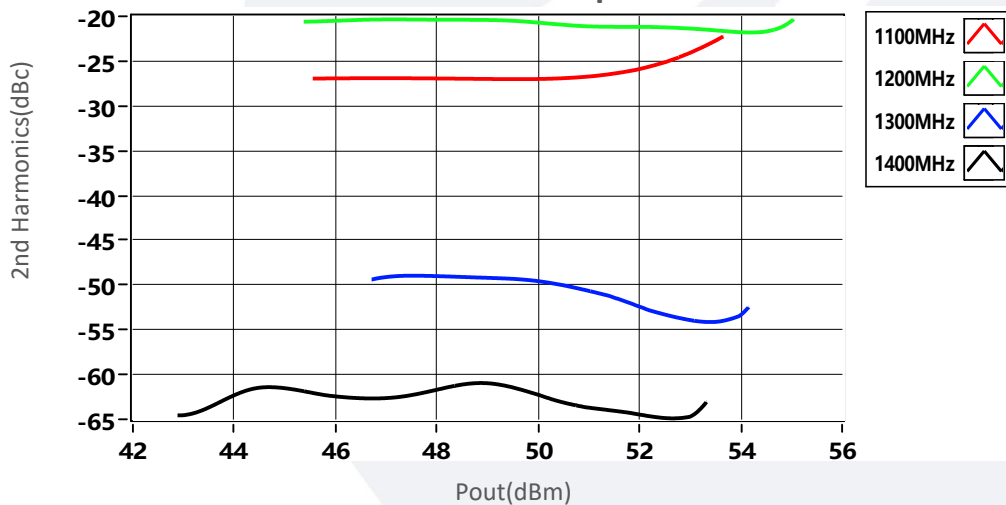
P1dB&P3dB vs Frequency



Psat vs Frequency



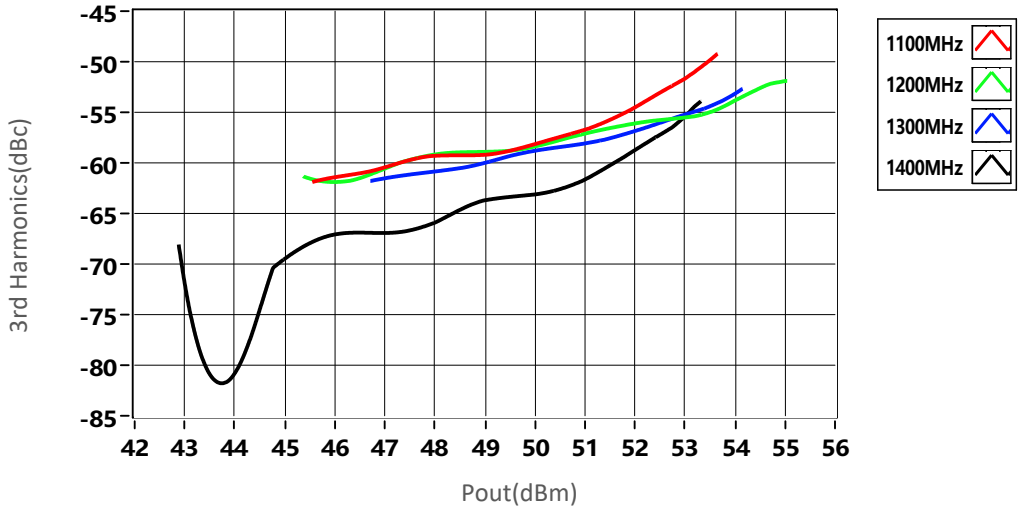
2nd Harmonics vs Output Power



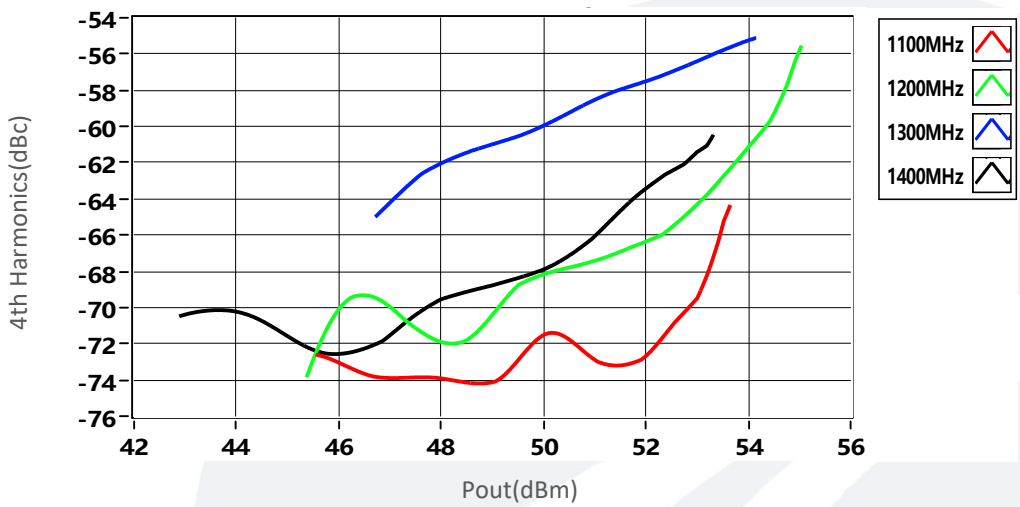
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Typical Performance Data:

3rd Harmonics vs Output Power



4th Harmonics vs Output Power



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