

## Solid State High Power Amplifier Systems

26.5-40GHz/53dB Gain/53dBm Psat/380V AC

Model: TLPA26.5G40G-53-53-BC

TLPA26.5G40G-53-53-BC is a solid state high power amplifier systems provides high output power and high gain across the 26.5 to 40 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: 26.5-40GHz
- Gain: 53dB Min
- Psat Output Power:53dBm 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	26.5-40			GHz
Power Gain	GP	53			dB
Gain flatness	$\Delta$ GL		$\pm 5$		dB
Output Psat	Psat	53			dBm
Spurious@Pout=53dBm	Spur			-50	dBc
Harmonics@Pout=53dBm	HAM			-20	dBc
Input VSWR	VSWRin			2	:1
AC Voltage	Vac		380		V AC
Power Consumption	Pdiss			5000	W
Impedance	I/O-IMP	50			Ohms

### Mechanical Specifications:

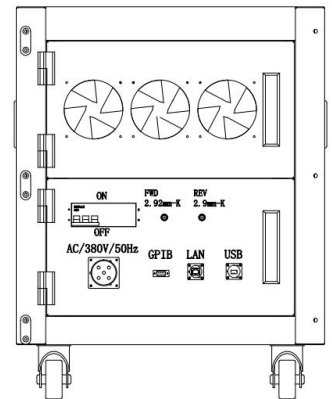
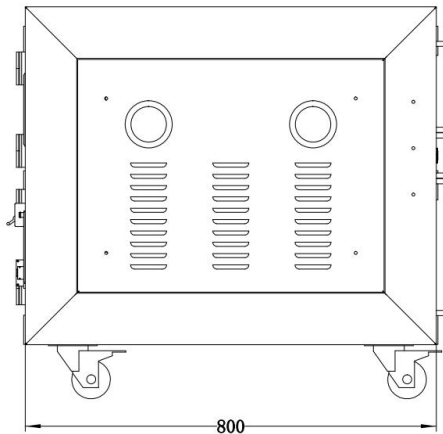
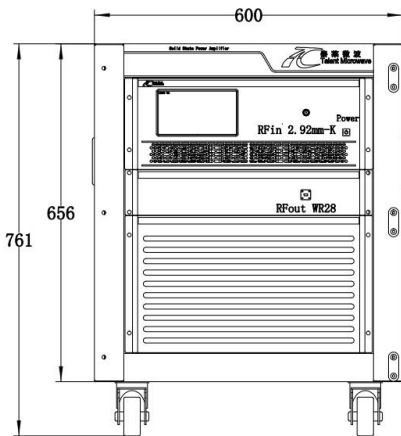
Parameter	Value	Units
Input /Output Connector	2.92 Female/WR-28	
Forward/Reverse Coupling	2.92mm Female/ 2.92mm Female	
Communication Connector	RJ45/DB9	
Front Panel LCD Screen Display	7 inch LCD Screen Display	
Size	12U	
Weight	$\leq 150$	Kg

### 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 4, Over VSWR
Remote control	RS422/LAN/GPIB/USB
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	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			

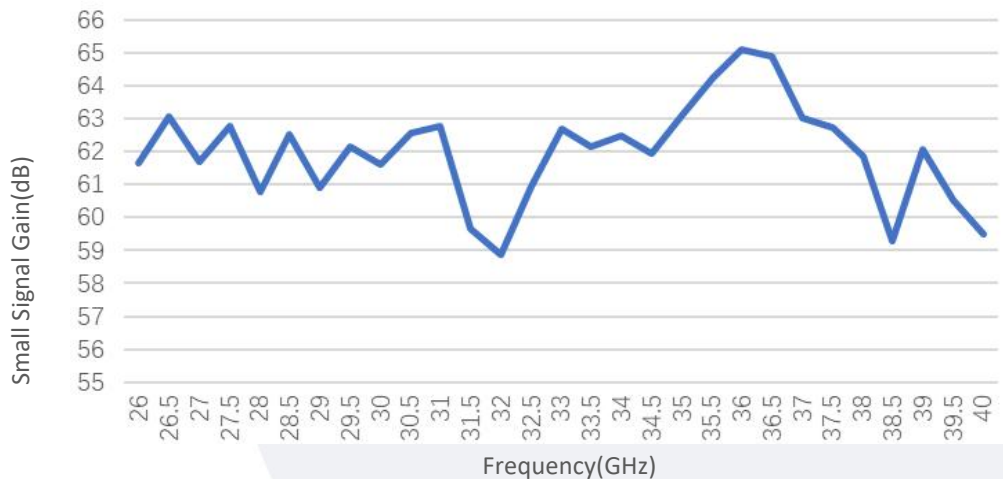
\*Note: For a wider temperature range, please consult the manufacturer.

### Ordering Information:

Base Number	Description	Revision
TLPA26.5G40G-53-53-BC	Solid State High Power Amplifier Systems 26.5-40GHz, Gain:53dB, Psat:53 dBm, 380V AC, Built in Fan Cooling	Rev.1.1

### Typical Performance Data:

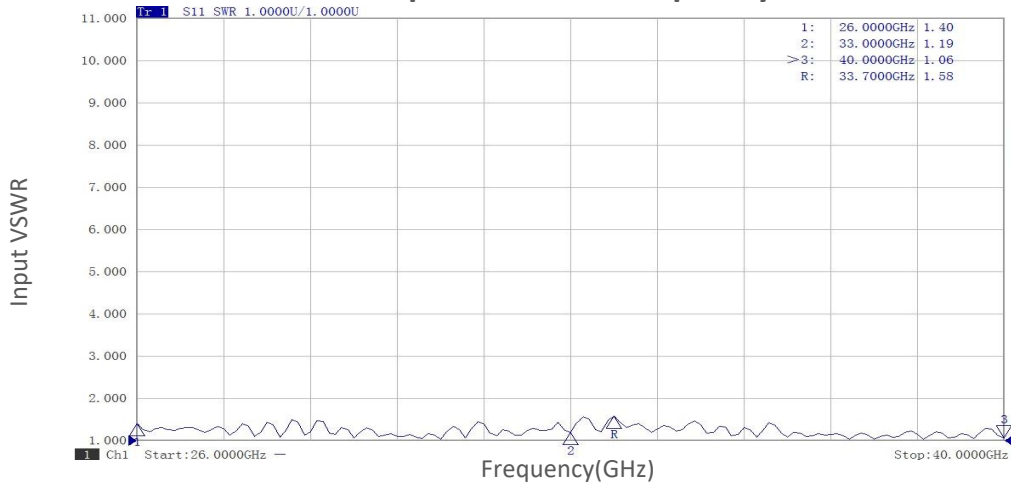
Small Signal Gain vs Frequency



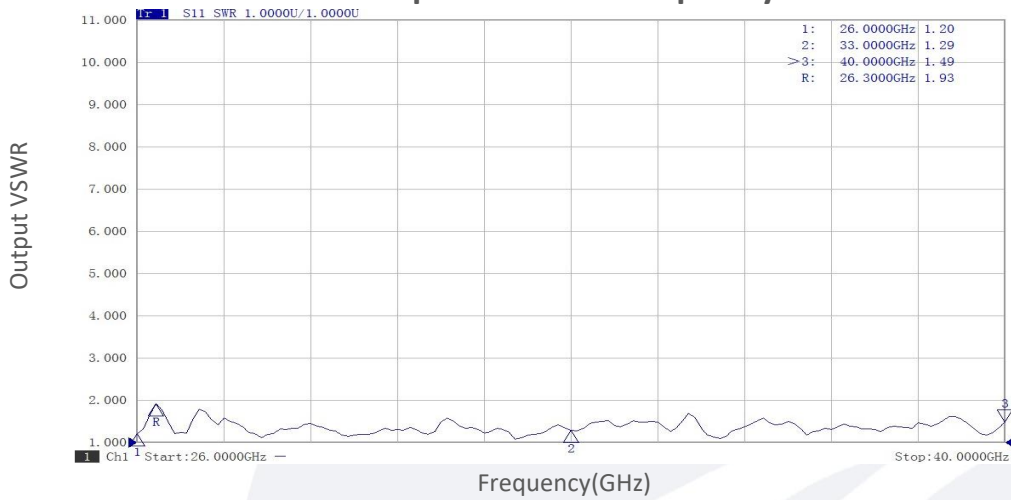
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

## Typical Performance Data:

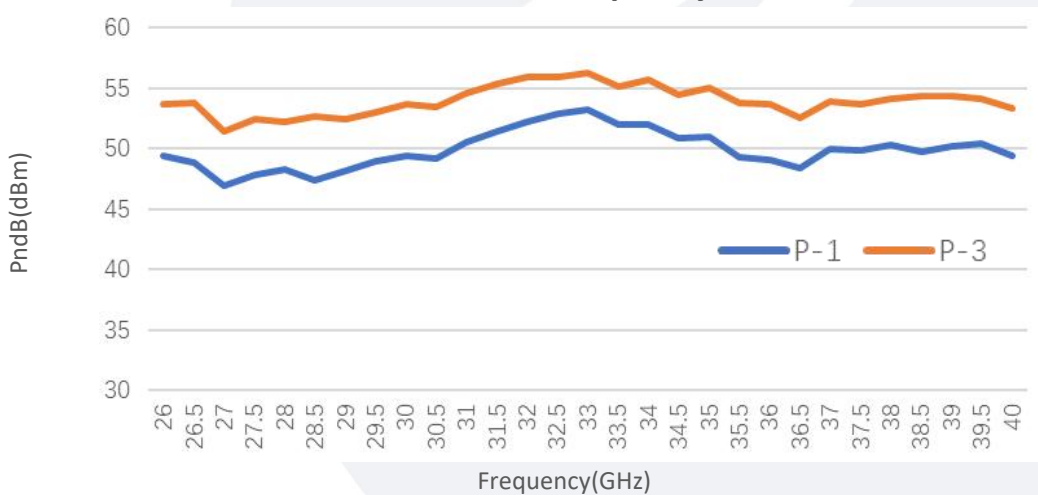
### Input VSWR vs Frequency



### Output VSWR vs Frequency

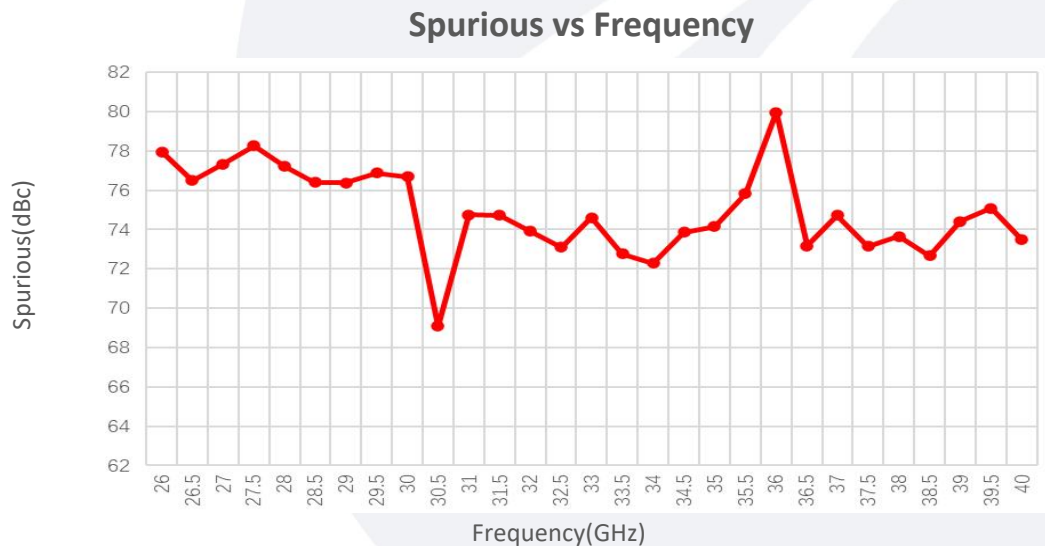
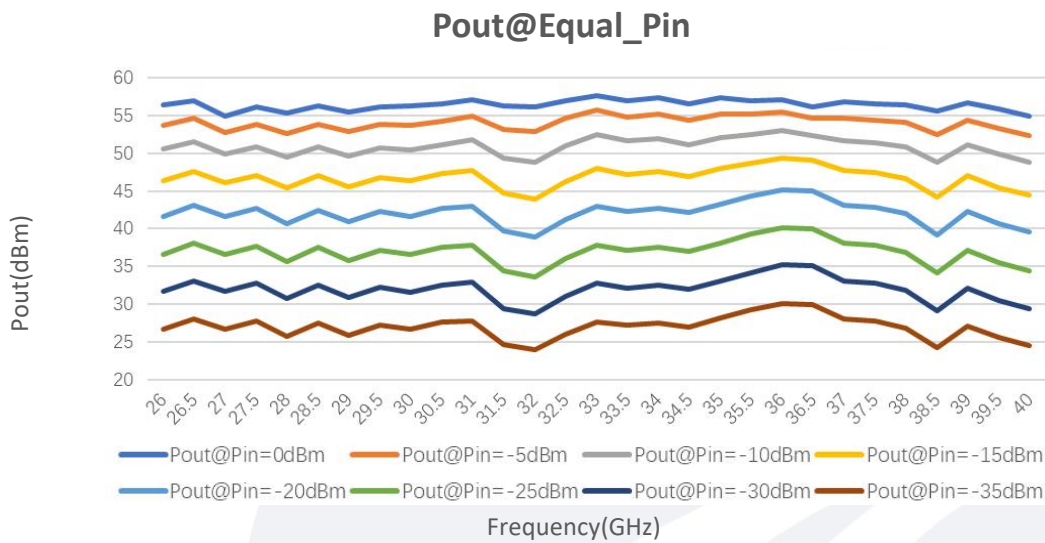
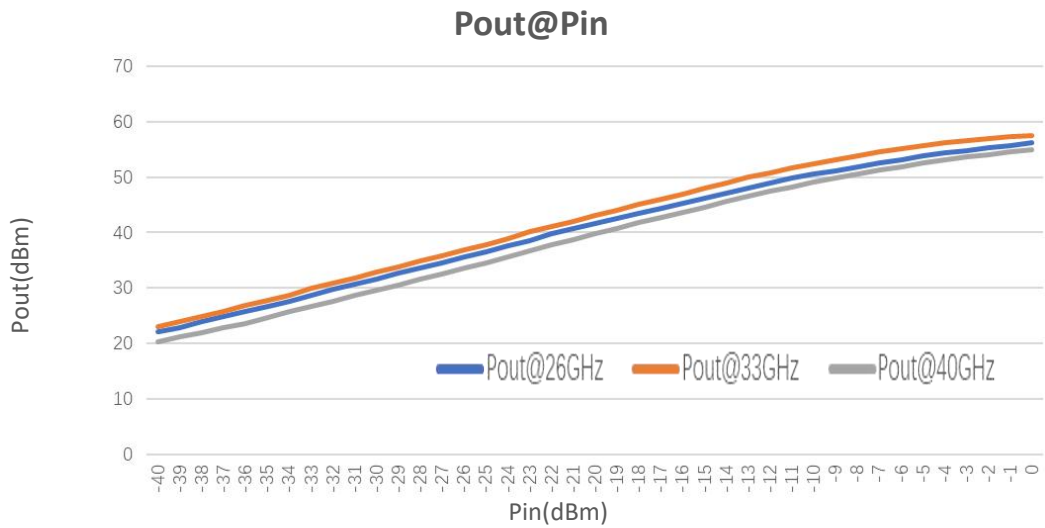


### PndB vs Frequency



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