

## Solid State High Power Amplifier Systems

26.5-40GHz/40dB Gain/40dBm Psat/220V AC

Model: TLPA26.5G40G-40-40-BC

TLPA26.5G40G-40-40-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 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:

- Frequency range: 26.5-40GHz
- Gain: 40dB Min
- Psat Output Power: 40dBm 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      | 40   |     |      | dB    |
| Output Psat       | Psat    | 40   |     |      | dBm   |
| Output P1dB       | P1dB    |      | 37  |      | dBm   |
| ALC accuracy      | ALC     |      |     | ±0.5 | dB    |
| Spurious          | Spur    |      |     | -50  | dBc   |
| Harmonics         | HAM     |      |     | -25  | dBc   |
| Input VSWR        | VSWRin  |      |     | 2.0  | :1    |
| ALC Voltage       | Vac     |      | 220 |      | V AC  |
| Power Consumption | Pdiss   |      |     | 150  | W     |
| Impedance         | I/O-IMP | 50   |     |      | Ohms  |

### Mechanical Specifications:

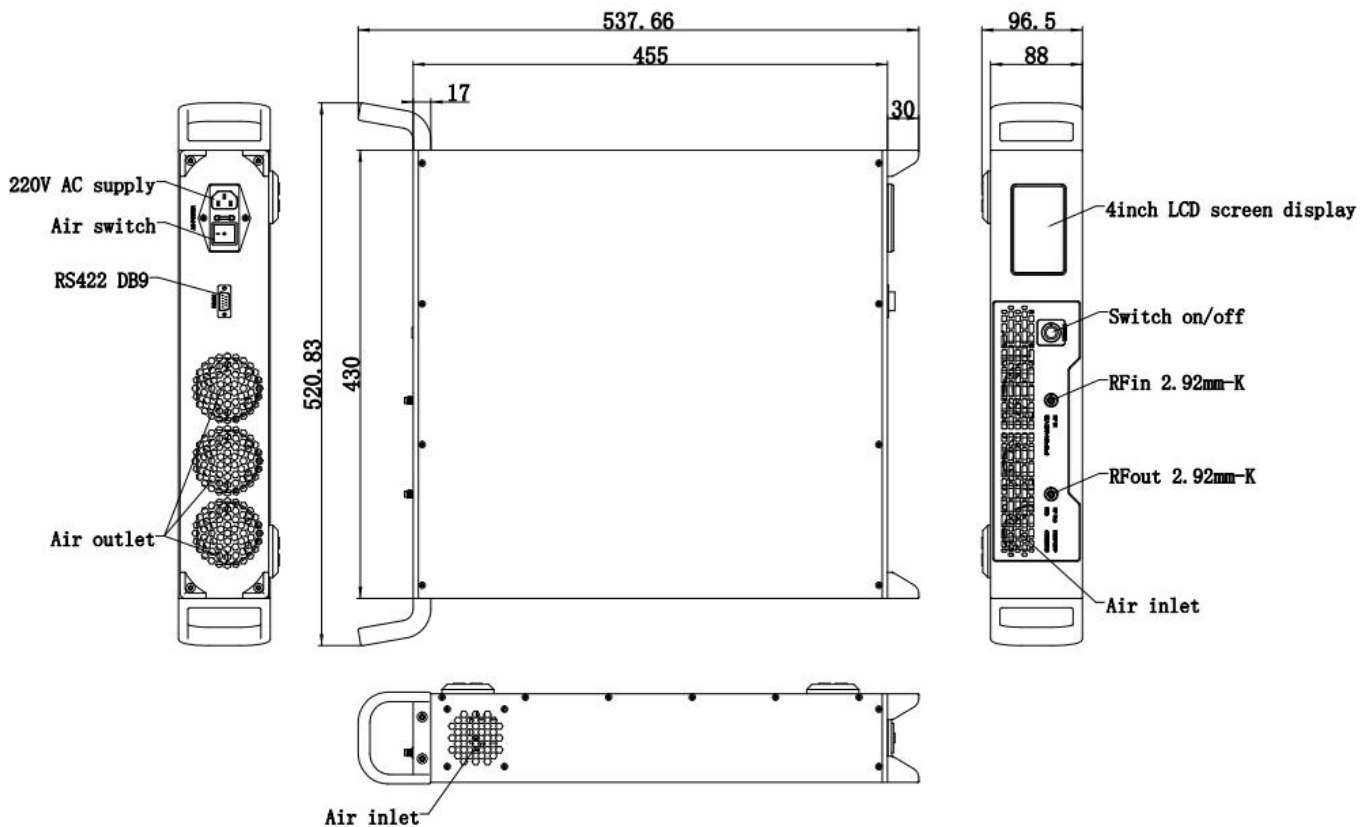
| Parameter                      | Value                       | Units |
|--------------------------------|-----------------------------|-------|
| Input /Output Connector        | 2.92mm Female/2.92mm Female |       |
| Front Panel LCD Screen Display | 4 inch LCD Screen Display   |       |
| Size                           | 19 Inch 2U                  |       |
| Weight                         | ≤20                         | 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<br>2, ALC automatic level control         |
| Protection functions | 1, Over TEM<br>2, Over voltage<br>3, Over current<br>4, Over VSWR |
| Remote control       | RS422                                                             |
| Cooling system       | Built in Cooling system, forced air cooling                       |

## Environmental Conditions:

| Parameter                       | Min                                                 | Typ | Max | Units |
|---------------------------------|-----------------------------------------------------|-----|-----|-------|
| Operating Temperature*          | -20                                                 |     | +50 | °C    |
| Non-operating Temperature*      | -30                                                 |     | +60 | °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 |     |     |       |

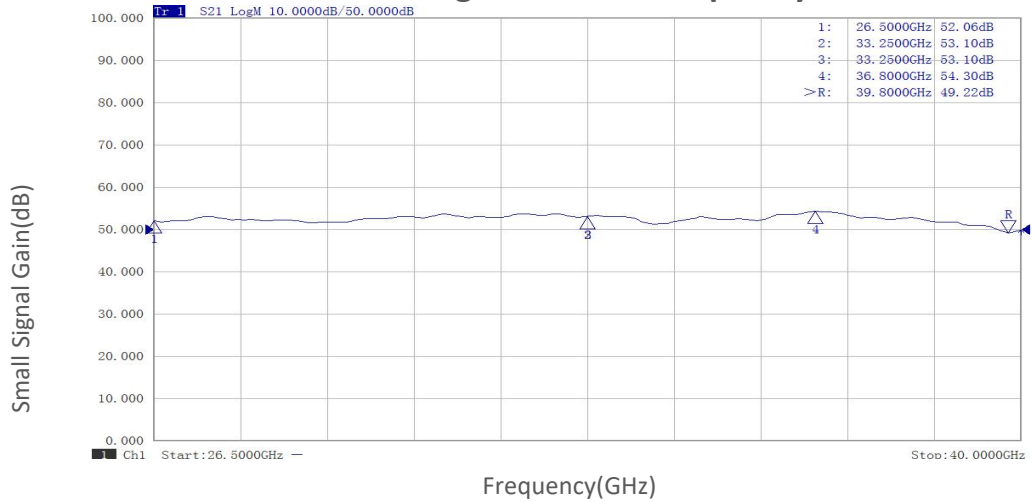
\*Note: For a wider temperature range, please consult the manufacturer.

## Ordering Information:

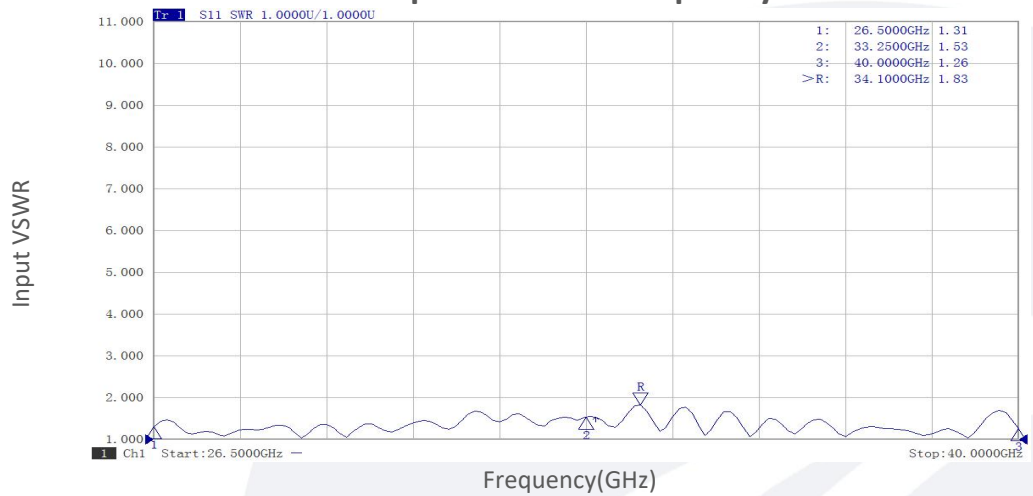
| Base Number           | Description                                                                                               | Revision |
|-----------------------|-----------------------------------------------------------------------------------------------------------|----------|
| TLPA26.5G40G-40-40-BC | Solid State High Power Amplifier Systems 26.5-40GHz, Gain:40dB, Psat:40dBm, 220V AC, Built in Fan Cooling | Rev.1.1  |

## 典型曲线 Typical Performance Data:

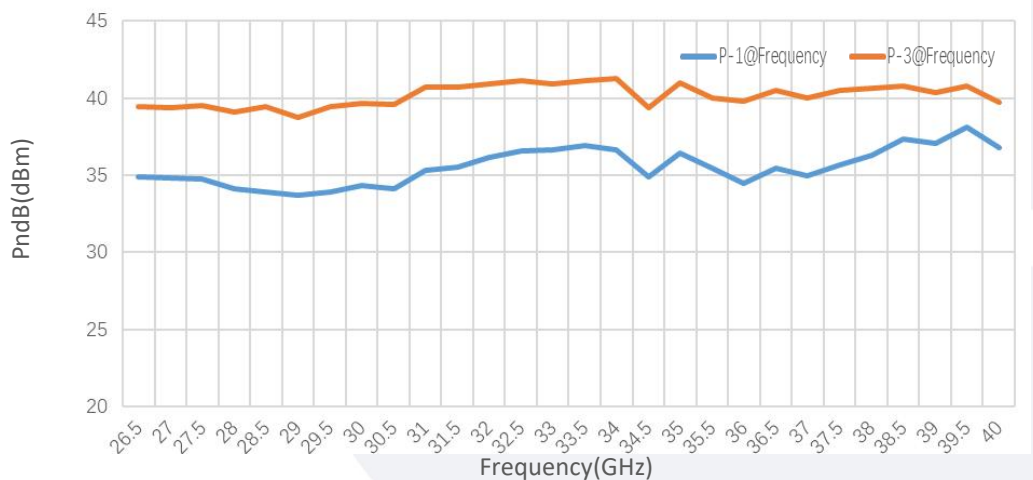
### Small Signal Gain vs Frequency



### Input VSWR vs Frequency



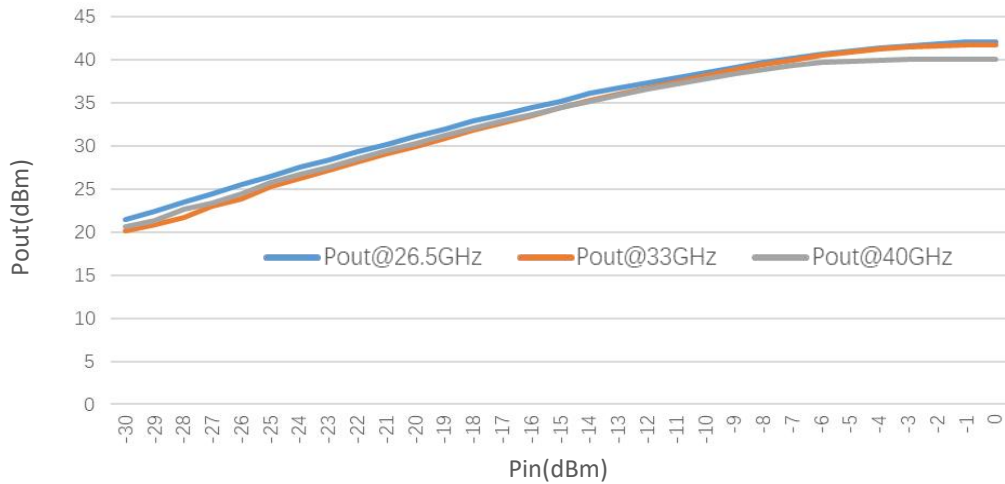
### PndB vs Frequency



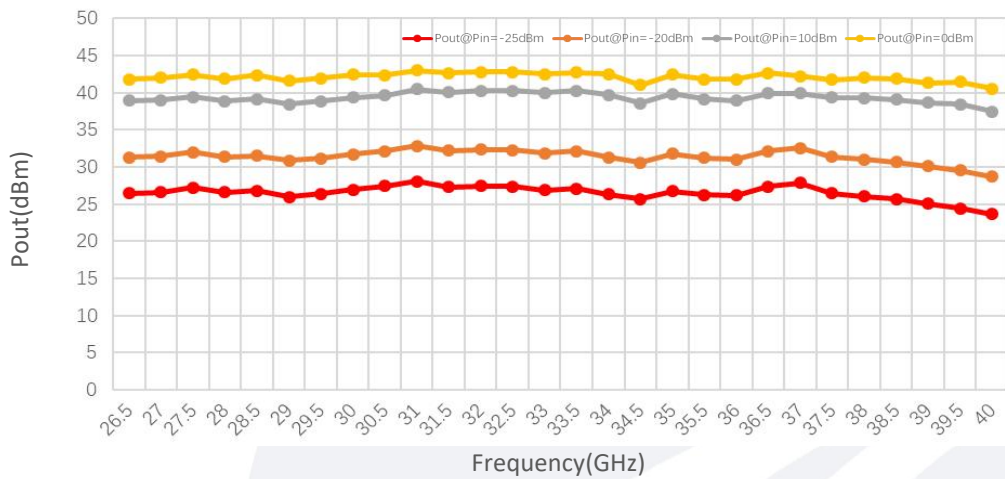
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

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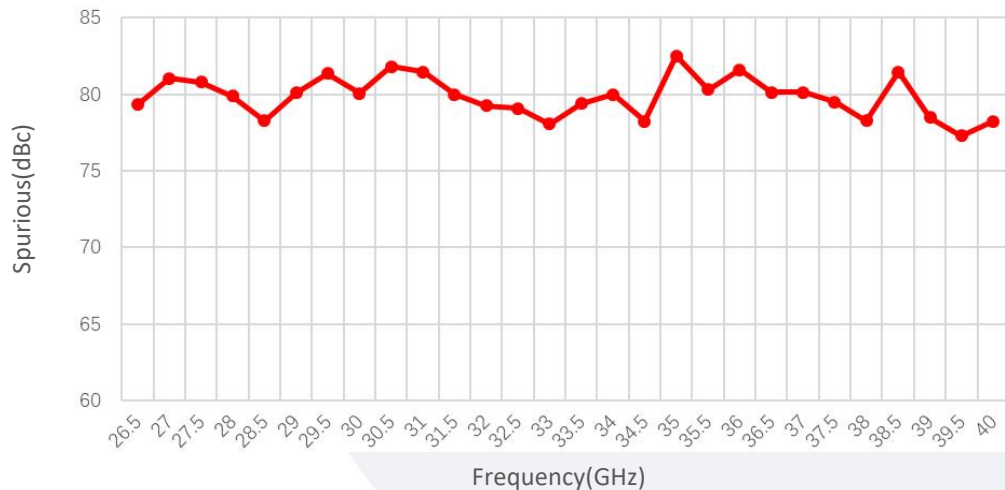
**Pout@Pin**



**Pout@Equal\_Pin**



**Spurious 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.