

## Model:TLPA4G8G-50-44

## Power Amplifier 4-8GHz,Gain:50dB,Psat:44dBm

### Feature:

- Ultra Wide Band: 4-8GHz
- Gain: 50dB Min
- Psat Output Power: 44 dBm Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

### Electrical Specifications:

| Parameter         | Min  | Typ  | Max | Units |
|-------------------|------|------|-----|-------|
| Frequency range   | 4-8  |      |     | GHz   |
| Gain              | 50   | 52   |     | dB    |
| Gain Flatness     |      | ±3   | ±4  | dB    |
| Output P1dB       | 43   | 43.5 |     | dBm   |
| Output Psat       | 43.5 | 44   |     | dBm   |
| Input VSWR        |      | 1.5  | 2.0 | :1    |
| DC Voltage        |      | 28   |     | V DC  |
| DC Supply Current |      | 2    | 10  | A     |
| Impedance         | 50   |      |     | Ohms  |

### Mechanical Specifications:

| Parameter               | Value      | Units |
|-------------------------|------------|-------|
| Input /Output Connector | SMA Female |       |
| DC Bias                 | Solder Pin |       |
| Size                    | 140*80*15  | mm    |
| Weight                  | 200        | g     |

### Absolute Maximum Ratings:

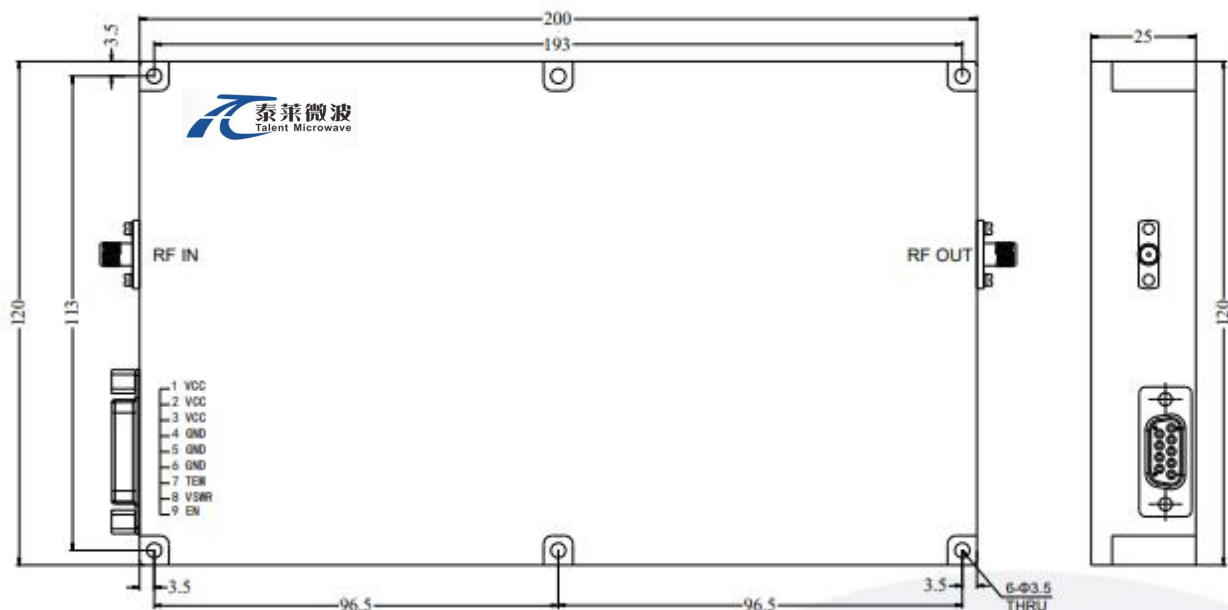
| Parameter             | Value                |
|-----------------------|----------------------|
| Supply Bias Voltage   | +30V                 |
| RF INPUT POWER        | 3 dBm                |
| ESD sensitivity (HBm) | Class 0, passed 150V |



Available 220V System  
Benchtop Amplifier

## Outline Drawing:

Unit: mm



**\*\*\*Heat Sink Required During Operation**



OBSERVE PRECAUTIONS  
ELECTROSTATIC SENSITIVE  
DEVICES

J30J-9ZKW-J(J30J-9TJL)

| Pin | Identification         | Type  | Function                                                                                                  |
|-----|------------------------|-------|-----------------------------------------------------------------------------------------------------------|
| 1   | power amplifier enable | Input | High level (or suspended) turn on the power amplifier, short contact ground turn off the power amplifier. |
| 2   | GND                    | Input | Power supply negative                                                                                     |
| 3   | GND                    | Input | Power supply negative                                                                                     |
| 4   | GND                    | Input | Power supply negative                                                                                     |
| 5   | GND                    | Input | Power supply negative                                                                                     |
| 6   | +28V                   | Input | Power supply positive +26.0-30.0VDC                                                                       |
| 7   | +28V                   | Input | Power supply positive +26.0-30.0VDC                                                                       |
| 8   | +28V                   | Input | Power supply positive +26.0-30.0VDC                                                                       |
| 9   | +28V                   | Input | Power supply positive +26.0-30.0VDC                                                                       |

Notes: TTL is 5V

## Environmental Conditions:

| Parameter                       | Min                                                 | Typ | Max  | Units |
|---------------------------------|-----------------------------------------------------|-----|------|-------|
| Operating Temperature           | -45                                                 |     | +70  | °C    |
| Non-operating Temperature       | -55                                                 |     | +125 | °C    |
| Relative humidity               |                                                     | 95  |      | %     |
| Altitude                        | 30,000                                              |     |      | 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  |     |      |       |

## Ordering Information:

| Part Number       | Description                                                              | Revision |
|-------------------|--------------------------------------------------------------------------|----------|
| TLPA4G8G-50-44    | Power amplifier 4-8GHz,Gain:50dB,Psat:44dBm,+28V DC,<br>Without Heatsink | Rev.1.0  |
| TLPA4G8G-50-44-HS | Power amplifier 4-8GHz,Gain:50dB,Psat:44dBm,+28V DC,<br>With Heatsink    | Rev.1.0  |