



# Power Amplifier

## Model: PA-2G-6G-200

2-6GHz 200W CW

Ultrabroad frequency range, high performance and exceptional RF characteristics

### Features:

- Frequency range: 2-6GHz
- High output power at saturation, 200W Typ.
- High gain, 53 dB Typ.
- 50 Ohm Matched Input / Output.

### Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

### Product Overview:

The PA-2G-6G-200 is a power amplifier with a typical small signal gain of 53 dB and a nominal  $P_{sat}$  of 200W across the frequency range of 2 to 6 GHz. The DC power requirement for the amplifier is +28 VDC/3 A. The input port configuration offers coax adapter structure with SMA female and output port configuration offers coax adapter structure with N Female.



## Electrical Specifications at 25°C:

| Parameter          | Min | Typ | Max | Units |
|--------------------|-----|-----|-----|-------|
| Frequency range    | 2   |     | 6   | GHz   |
| Small Signal Gain  | 50  | 53  |     | dB    |
| Gain Flatness      |     | ±3  | ±4  | dB    |
| Output P1dB        | 48  | 49  |     | dBm   |
| Output Psat        | 52  | 53  |     | dBm   |
| Input VSWR         |     | 1.5 | 2.0 | :1    |
| DC Voltage         |     | +28 | +30 | V DC  |
| Static Current     |     | 3   |     | A     |
| Saturation current |     | 20  | 22  | A     |
| Impedance          |     | 50  |     | Ohms  |

## Mechanical Specifications:

| Parameter                       | Value   | Notes |
|---------------------------------|---|-------|
| Operating Temperature*          | -20°C to +50°C                                      |       |
| Non-operating Temperature*      | -30°C to +60°C                                      |       |
| Relative humidity               | 95  | %     |
| RF Input/Output Connector       | SMA Female/N Female                                 |       |
| DC Bias                         | D-SUB-15Pin   |       |
| 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  |       |
| Dimensions W x H x D            | 270*160*40  | mm    |
| Weight                          | 1500  | g     |

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

## Absolute Maximum Ratings:

| Parameter             | Value                |
|-----------------------|----------------------|
| Supply Bias Voltage   | +30 V                |
| RF Input Power        | +5 dBm               |
| ESD sensitivity (HBm) | Class 0, passed 150V |





## DC Supply Connector(DSUB-15 Female):

| Pin        | Name | Function   |
|------------|------|--|
| 1~3、 9~10  | VCC  | Power supply positive,+26.0-30.0VDC  |
| 4~5、 11~13 | GND  | Ground   |
| 6          | EN   | Amplifier Enable: TTL High (5V) (Internally Pulled-High)<br>Amplifier Disable: Short to ground   |
| 8          | TEM  | When the temperature of the case exceeds 75 °C, the power amplifier will turn off and this pin will be pulled high. If the temperature of case drops to 70 °C, the power amplifier will return to normal operation, and this pin will be pulled low. |
| 7、 14~15   | NC   | Not Connected  |

## Ordering Information:

| Base Number     | Description   | Optional         |
|-----------------|---|------------------|
| PA-2G-6G-200    | Power Amplifier, 2-6GHz,<br>Gain:53dB,Psat:200W,+28V DC | Without Heatsink |
| PA-2G-6G-200-HS | Power Amplifier, 2-6GHz,<br>Gain:53dB,Psat:200W,+28V DC | With Heatsink    |