

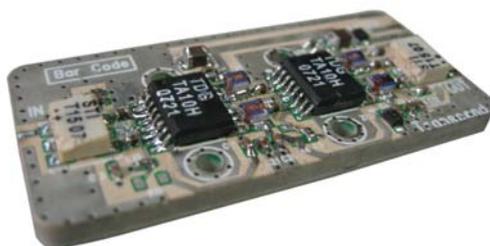
## 宽带高动态放大器

### 特点

- 高IP2、IP3，最高IP3可以达到50dBm以上
- 增益平坦度好
- 功耗低
- 输入输出回波损耗小

### 应用

- 用于接收机IF放大器
- 用于CATV
- 用于仪器仪表放大器
- 用于无线通讯放大器



| 型 号   | 频率<br>GHz   | 增 益<br>dB | NF<br>dB | P1dB<br>dBm | IP3<br>dBm | IP2<br>dBm | RL<br>dB | PS<br>V/A          |
|-------|-------------|-----------|----------|-------------|------------|------------|----------|--------------------|
| PA10  | 0.01 ~ 0.10 | 29.7      | 3        | 27          | 47.5       | 88         | - 17     | 5,12 / 0.15, 0.35  |
| PA50  | 0.02 ~ 0.08 | 26        | 4.9      | 27          | 50         | 70         | - 10     | 10 / 0.40          |
| PA70  | 0.05 ~ 0.09 | 27.3      | 3        | 27          | 47         |            | - 20     | 5, 12 / 0.1, 0.33  |
| PA140 | 0.10 ~ 0.18 | 27.3      | 3        | 27          | 47         |            | - 20     | 5, 12 / 0.1, 0.33  |
| PA370 | 0.29 ~ 0.45 | 27        | 3        | 27          | 47         |            | - 20     | 5, 12 / 0.1, 0.33  |
| PA720 | 0.50 ~ 0.80 | 27        | 3        | 27          | 47         |            | -20      | 5, 12 / 0.1, 0.33  |
| PA550 | 0.05 ~ 1.00 | 26        | 3.5      | 26          | 47         | 80         | -16      | 5, 12 / 0.15, 0.36 |

- 注：1. 我们可以为客户定制；  
 2. 该放大器带有铜基板，使用时安装螺钉至散热底板。建议底板上使用导热材料；  
 3. 输入输出线、电源线用PCB引出线连接。

## PA10 高动态放大器

- excellent Gain flatness, 0.2dB typ.
- high IP3, 47.5dBm typ.
- high IP2, 88dBm typ.
- low noise figure, 3.0dB typ.
- low DC power consumption, 4.66W typ.
- small size with 61x29.2x3.6 mm.
- flexible configure with DC power and IP3 requirement

### ELECTRICAL SPECIFICATIONS @ 25°C, 50 Ω System .

| Parameter                              | Symbol     | Min. | Typ. | Max. | Unit |
|--|------------|------|------|------|------|
| Operating Frequency                    | BW         | 10   |      | 100  | MHz  |
| Power Gain                             | G          | 28   | 29.7 |      | dB   |
| Gain Flatness                          | $\Delta G$ |      | 0.2  | 0.6  | dB   |
| Output-third-order interception point  | IP3        | 46   | 47.5 |      | dBm  |
| Output-second-order interception point | IP2        | 80   | 88   |      | dBm  |
| Input/Output Return Loss               | S11/S22    |      | -20  | -12  | dB   |
| Voise Figure                           | NF         |      | 3.0  | 4.0  | dB   |
| Supply Current @5V                     | Iq1        |      | 0.14 | 0.20 | Amp  |
| Supply Current @12V                    | Iq2        |      | 0.33 | 0.38 | Amp  |

Note: IP2 and IP3 testing condition is two-tone, Pout=11.2dBm each, 1MHz separation

### ENVIRONMENTAL CHARACTERISTICS

| Parameter                          | Symbol | Min.   | Typ.     | Max. | Unit |
|------------------------------------|--------|--------|----------|------|------|
| Operating Case Temperature         | Tc     | -40    |          | +70  | °C   |
| Storage Temperature                | Tstg   | -40    |          | +85  | °C   |
| Relative humidity w/o condensation | RH     | 95     |          |      | %    |
| Altitude                           | ALT    | 10,000 | 30,000   |      | Feet |
| shock & Vibration                  | SH/VI  |        | airborne |      |      |

### MECHANICAL SPECIFICATIONS

| Parameter                      | Value              | Units | Limits |
|--------------------------------|--------------------|-------|--------|
| Dimensions(with copper pallet) | 61.0*29.2*3.6      | mm    |        |
| RF Connectors In/Out           | Trace              |       |        |
| DC interface                   | Trace              |       |        |
| Pallet                         | 3mm Cu + 0.6mm PCB | mm    |        |
| Cooling                        | External Heat sink |       |        |