

## Power Amplifier 6-18GHz/24dB Gain/30dBm Psat

## TLPA6G18G-24-30

TURPA6G18G-2430 is a power amplifier with a typical small signal gain of 24 dB and a nominal Psat of 33 dBm across the frequency range of 6 to 18 GHz. The DC power requirement for the amplifier is +8 VDC/0.6 A. The input and output port configuration offers coax adapter structure with SMA female.

### Features:

- Frequency range: 6-18GHz
- Gain: 24dB Typ
- Output Power Psat: 30dBm Min
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

### Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

### 电气特性 Electrical Characteristics:

| 参数 Parameter            | Min  | Typ  | Max | 单位 Units |
|-------------------------|------|------|-----|----------|
| 频率范围 Frequency range    | 6-18 |      |     | GHz      |
| 小信号增益 Small Signal Gain |      | 24   |     | dB       |
| 增益平坦度 Gain Flatness     |      | ±2.5 |     | dB       |
| 饱和输出功率 Output Psat      | 30   | 33   |     | dBm      |
| 输入驻波 Input VSWR         |      | 1.8  | 2.2 | :1       |
| 输出驻波 Output VSWR        |      | 1.8  | 2.2 | :1       |
| 直流电压 DC Voltage         |      | 8    |     | V DC     |
| 直流电流 DC Supply Current  |      | 0.6  |     | A        |
| 阻抗 Impedance            | 50   |      |     | Ohms     |

## 机械特性 Mechanical Specifications:

| 参数 Parameter                    | 指标 Value              | 单位 Units |
|---------------------------------|-----------------------|----------|
| 输入/输出接口 Input /Output Connector | SMA Female/SMA Female |          |
| 直流偏置 DC Bias                    | Solder Pin            |          |
| 尺寸 Size                         | 44*52*13              | mm       |
| 重量 Weight                       | 1000                  | g        |

## 绝对最大值 Absolute Maximum Ratings:

| 参数 Parameter                 | 指标 Value             |
|------------------------------|----------------------|
| 供电偏置电压 Supply Bias Voltage   | TBD                  |
| 输入功率 RF Input Power          | +10 dBm              |
| ESD灵敏度 ESD sensitivity (HBm) | Class 0, passed 150V |

外形图 Outline Drawing: Unit:mm



## 温度环境 Environmental Conditions:

| 参数 Parameter                       | Min   | Typ | Max | 单位 Units |
|------------------------------------|---|-----|-----|----------|
| 操作温度 Operating Temperature*        | -40   |     | +60 | °C       |
| 存储温度 Non-operating Temperature*    | -50   |     | +70 | °C       |
| 相对湿度 Relative humidity             |   | 95  |     | %        |
| 海拔 Altitude                        | 10,000  |     |     | feet     |
| 震动 Shock / Vibration(MIL-STD-810F) | 25g rms (15 degree 2KHz) endurance, 1 hour per axis |     |     |          |
| 冲击 Shock(non operating)            | 20G for 11msc half sin wave,3 axis both directions  |     |     |          |

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

## 订货信息 Ordering Information:

| 标准型号 Base Number   | 描述 Description   | 版本号 Revision |
|--------------------|--|--------------|
| TURPA6G18G-2430    | Power amplifier 6-18GHz,Gain:24dB,Psat:30dBm,<br>+8V DC,Without Heatsink | Rev.1.1      |
| TURPA6G18G-2430 HS | Power amplifier 6-18GHz,Gain:24dB,Psat:30dBm,<br>+8V DC,With Heatsink    | Rev.1.1      |

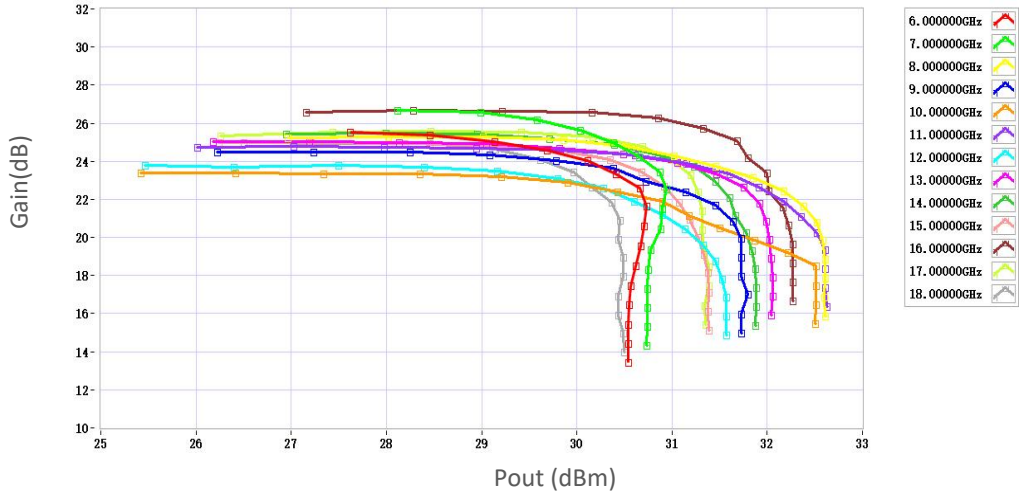
## 典型曲线 Typical Performance Data:

### VSWR&Gain vs Frequency

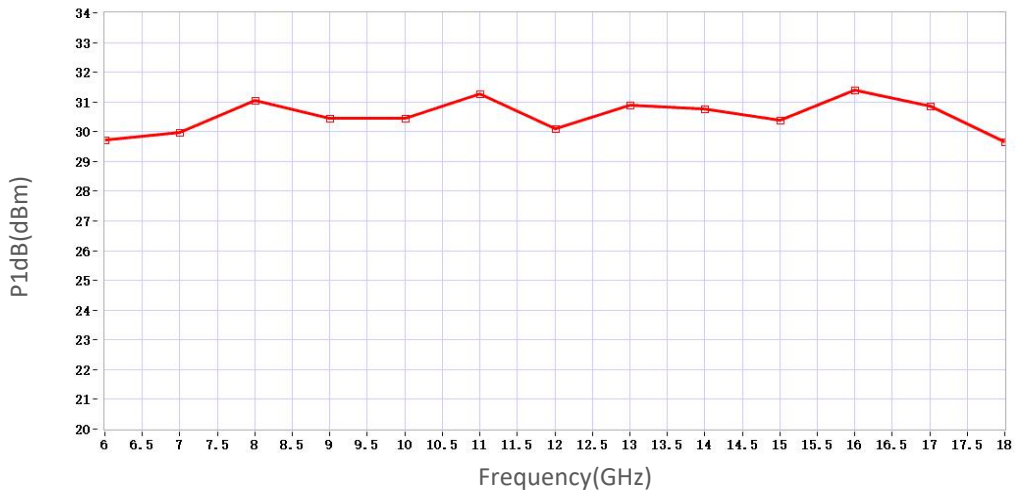
VSWR&Gain

## 典型曲线 Typical Performance Data:

### Gain vs Output Power



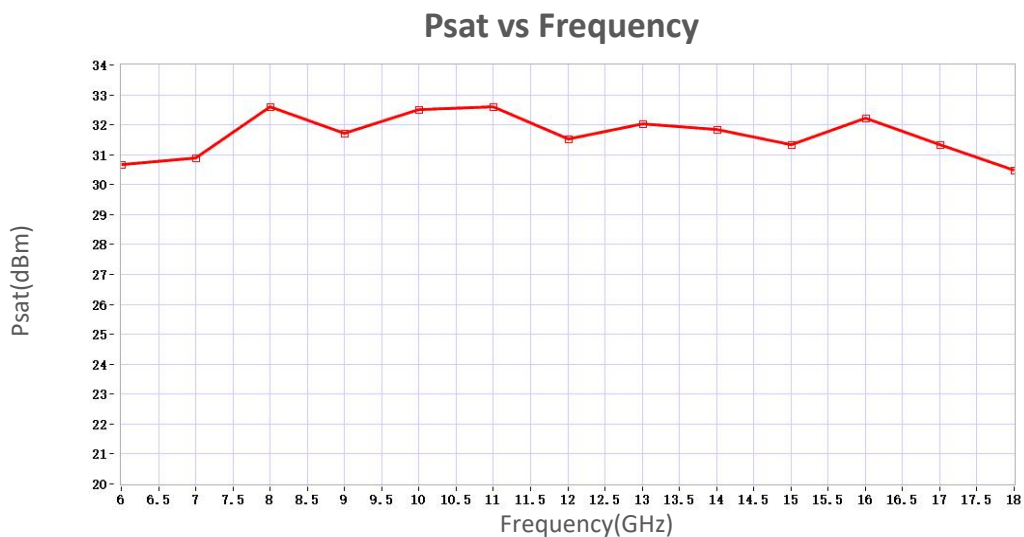
### P1dB vs Frequency



### P3dB vs Frequency

P3dB (dBm)

## 典型曲线 Typical Performance Data:



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.