泰莱微波
Talent Microwave

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# Model:TLPA1G18G-40-34

## Power Amplifier
## 1-18GHz,Gain:40dB,Psat:34dBm

**Feature:**

- Ultra Wide Band: 1-18GHz
- Gain:40dB Min
- Psat Output Power:34dBm Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

## Electrical Specifications:

| Parameter | Min | Typ | Max | Units |
|---|---|---|---|---|
| Frequency range | | 1-18 | | GHz |
| Gain | 40 | 41 | | dB |
| Gain Flatness | | ±2.5 | ±3 | dB |
| Output P1dB | | 31 | | dBm |
| Output Psat | | 34 | | dBm |
| Spurious@Psat | | -60 | | dBc |
| Input VSWR | | 2 | 2.5 | :1 |
| Output VSWR | | 2 | 2.5 | :1 |
| DC Voltage | | +20 | | V DC |
| DC Supply Current | | 0.8 | | A |
| Impedance | | 50 | | Ohms |

## Mechanical Specifications:

| Parameter | Value | Units |
|---|---|---|
| Input /Output Connector | SMA Female/SMA Female | |
| DC Bias | Solder Pin | |
| Size | 58.5*38*12 | mm |
| Weight | / | g |

## Absolute Maximum Ratings:

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

Available 220V System
Benchtop Amplifier

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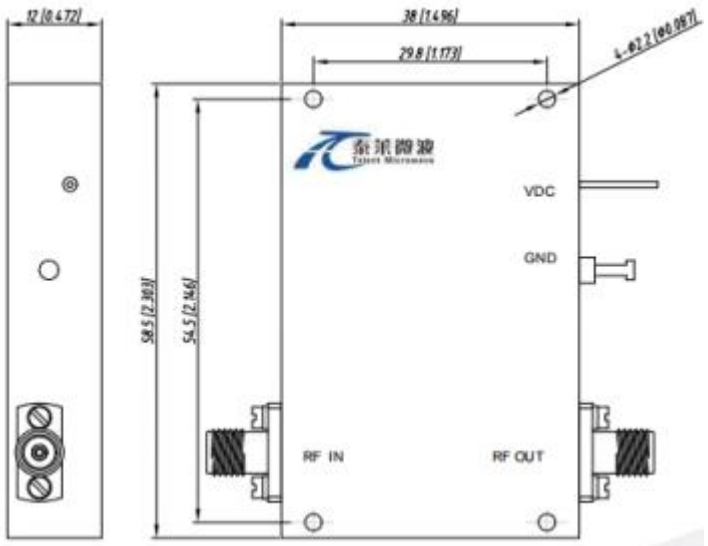
## Outline Drawing:

Unit: mm




***Heat Sink Required During Operation

OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

## Environmental Conditions:

| Parameter | Min | Typ | Max | Units |
|---|---|---|---|---|
| Operating Temperature | -45 | | +85 | ℃ |
| Non-operating Temperature | -55 | | +125 | ℃ |
| Relative humidity | | 95 | | % |
| Altitude | 10000 | | 30000 | 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 |
|---|---|---|
| TLPA1G18G-40-34 | Power amplifier 1-18GHz,Gain:40dB,Psat:34dBm,+20V DC,Without Heatsink. | Rev.1.1 |
| TLPA1G18G-40-34-HS | Power amplifier 1-18GHz,Gain:40dB,Psat:34dBm,+20V DC,With Heatsink. | Rev.1.1 |

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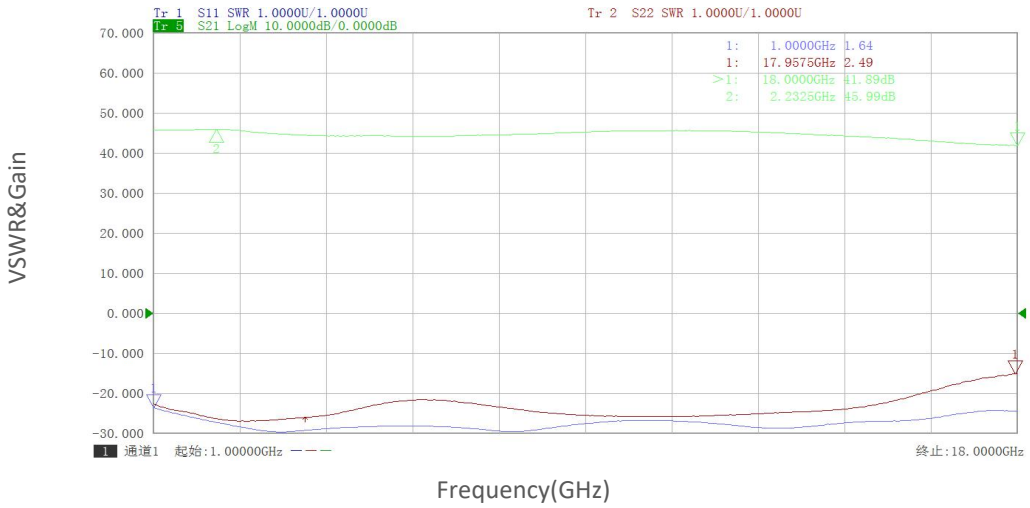
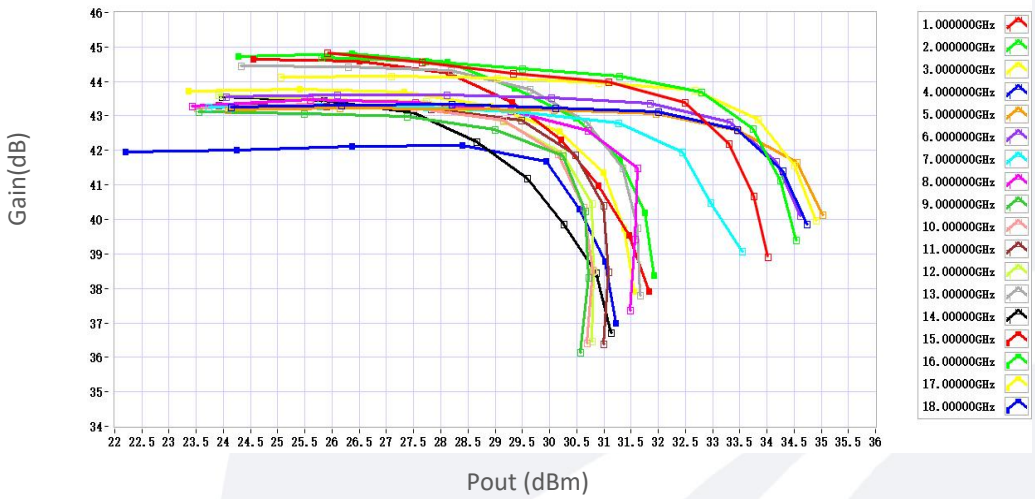
## Typical Performance Data:

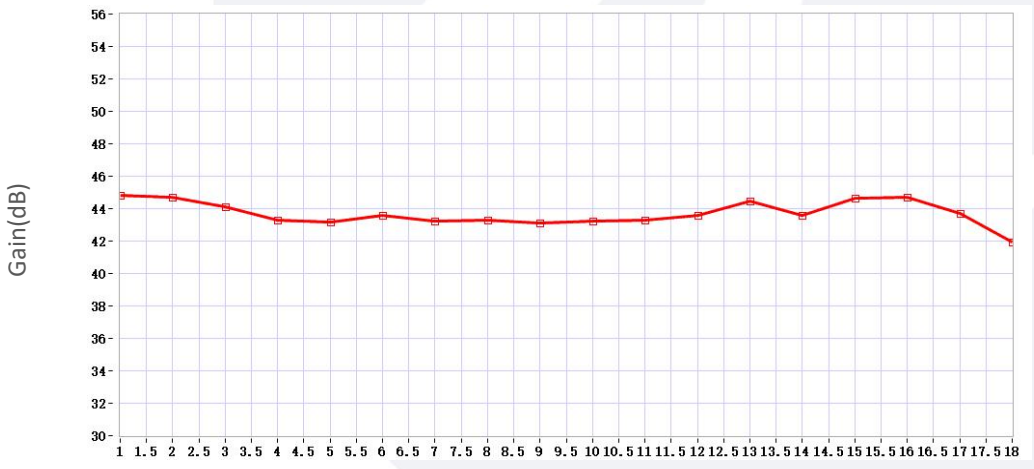
### VSWR&Gain vs Frequency




### Gain vs Output Power




### Gain vs Frequency



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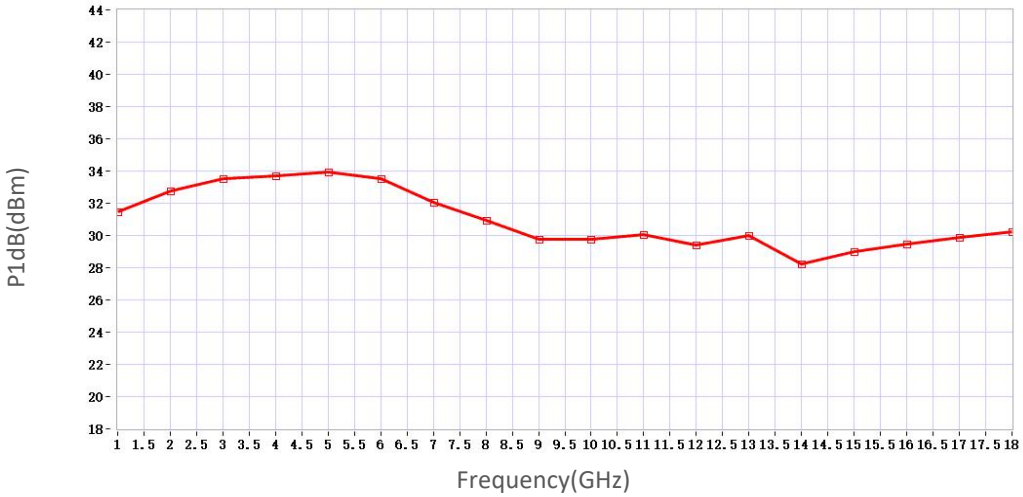
## Typical Performance Data:

### P1dB vs Frequency




### P3dB vs Frequency