Suzhou Talent Microwave,Inc
sales@talentmw.com
www.talentmw.com

# Power Amplifier

## 6-18GHz/45dB Gain/43dBm Psat

## Model: TLPA6G18G-45-43-HS

TLPA6G18G-45-43-HS is a power amplifier with a minimum small signal gain of 45 dB and a typical Psat of 43 dBm across the frequency range of 6 to 18GHz. The DC power requirement for the amplifier is +28 VDC/120 W. The input and output port configuration offers coax adapter structure with SMA female.

## Features:

- Frequency range: 6-18GHz
- Gain: 45dB Min
- Output Power Psat: 43dBm Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

## Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

## Electrical Characteristics:

| Parameter | Min | Typ | Max | Units |
|---|---|---|---|---|
| Frequency range | 6 | | 18 | GHz |
| Small Signal Gain | 45 | | | dB |
| Gain Flatness@Full band | | ±4 | | dB |
| Output Psat | | 43 | | dBm |
| Spurious@Pout=43dBm | | | -60 | dBc |
| Harmonics@Pout=43dBm | | | -10 | dBc |
| Input VSWR | | | 2.2 | :1 |
| DC Voltage | | +28 | | V DC |
| Power Consumption | | | 120 | W |
| Impedance | 50 | | | Ohms |

Suzhou Talent Microwave,Inc
sales@talentmw.com
www.talentmw.com

## Mechanical Specifications:

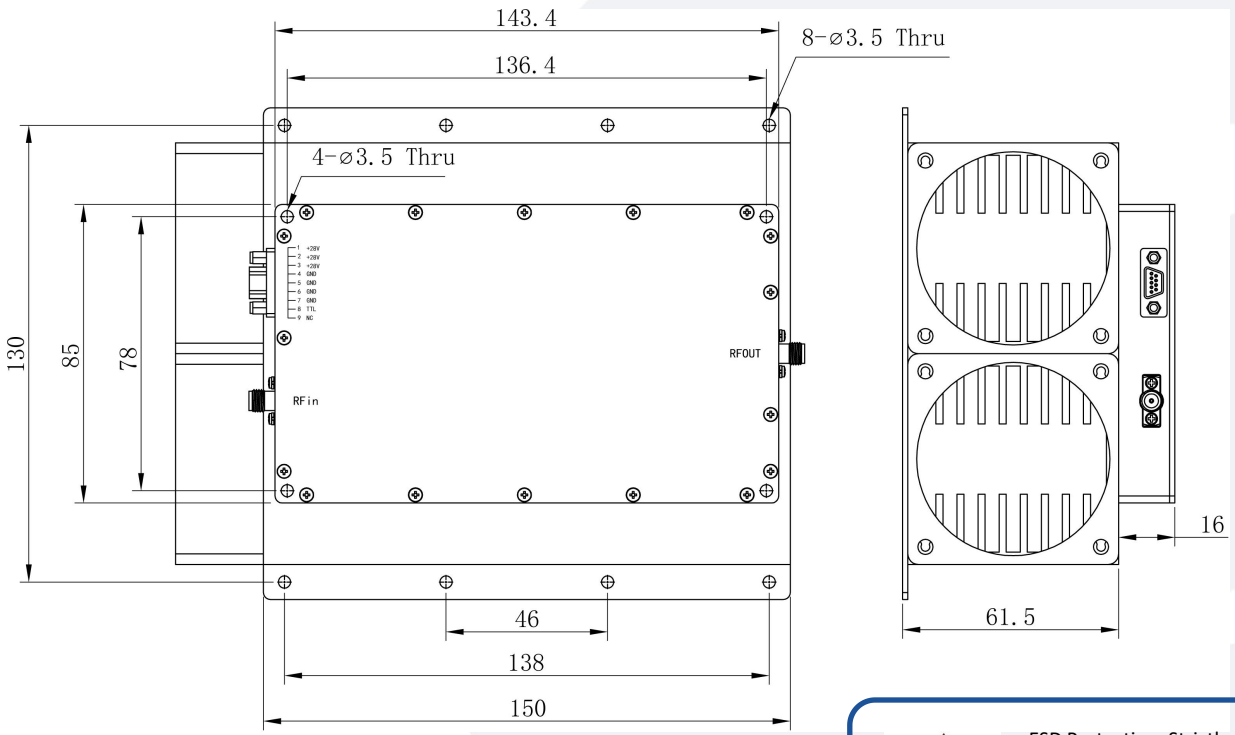
| Parameter | Value | Units |
|---|---|---|
| Input /Output Connector | SMA Female/SMA Female | |
| DC Power Supply Connector | J30J-9ZKP | Pin1~3: +28V<br>Pin4~7: GND<br>Pin8: TLL<br>Pin9: NC |
| Size | 143.4*85*16(Without heatsink) | mm |

## Absolute Maximum Ratings:

| Parameter | Value |
|---|---|
| Supply Bias Voltage | +30 V |
| RF Input Power | +15 dBm |
| ESD sensitivity (HBm) | Class 0, passed 150V |

## Outline Drawing:

Unit:mm; Tolerance:±0.1mm




ESD Protection: Strictly adhere to ESD precautions to prevent electrostatic damage.

Suzhou Talent Microwave,Inc
sales@talentmw.com
www.talentmw.com

## Environmental Conditions:

| Parameter | Min | Typ | Max | Units |
|---|---|---|---|---|
| Operating Temperature* | -40 | | +70 | ℃ |
| Non-operating Temperature* | -50 | | +80 | ℃ |
| Relative humidity | | 95 | | % |
| Altitude | 10,000 | | | feet |
| Shock / Vibration(MIL-STD-810F) | 20g,11ms,saw-tooth | | | |
| Shock(non operating) | 20G for 11msc half sin wave,3 axis both directions | | | |

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

## Ordering Information:

| Base Number | Description | Revision |
|---|---|---|
| TLPA6G18G-45-43-HS | Power amplifier 6-18GHz,Gain:45dB,Psat:43dBm,+28V DC,With Heatsink, Operating Temperature -40~+70℃ | Rev.1.0 |