

## Power Amplifier

WR-19/40-60GHz/37dB Gain/37dBm Psat

Model: TMPA-040060-3737-19

TMPA-040060-3737-19 is a power amplifier with a minimum small signal gain of 37 dB and a minimum Psat of 37 dBm across the frequency range of 40 to 60 GHz. The DC power requirement for the amplifier is +18VDC/10 A. The input and output port configuration offers an inline structure with WR-19 waveguides and UG-383/U-M antiracking flanges.

### Features:

- Frequency: 40-60GHz
- Gain: 37dB Min
- Output Power Psat: 37dBm Min
- Good Power and Gain Flatness

### Applications:

- Passive Imaging
- Communication Systems
- Radar Systems

## 电气特性 Electrical Characteristics:

| 参数 Parameter            | Min   | Typ | Max | 单位 Units |
|-------------------------|-------|-----|-----|----------|
| 频率范围 Frequency range    | 40-60 |     |     | GHz      |
| 小信号增益 Small Signal Gain | 37    |     |     | dB       |
| 饱和输出功率 Output Psat      | 37    |     |     | dBm      |
| 杂散 Spurious@Pout=37dBm  |       |     | -50 | dBc      |
| 直流电压 DC Voltage         |       | 18  |     | V DC     |
| 直流电流 DC Supply Current  |       | 10  |     | A        |

## 机械特性 Mechanical Specifications:

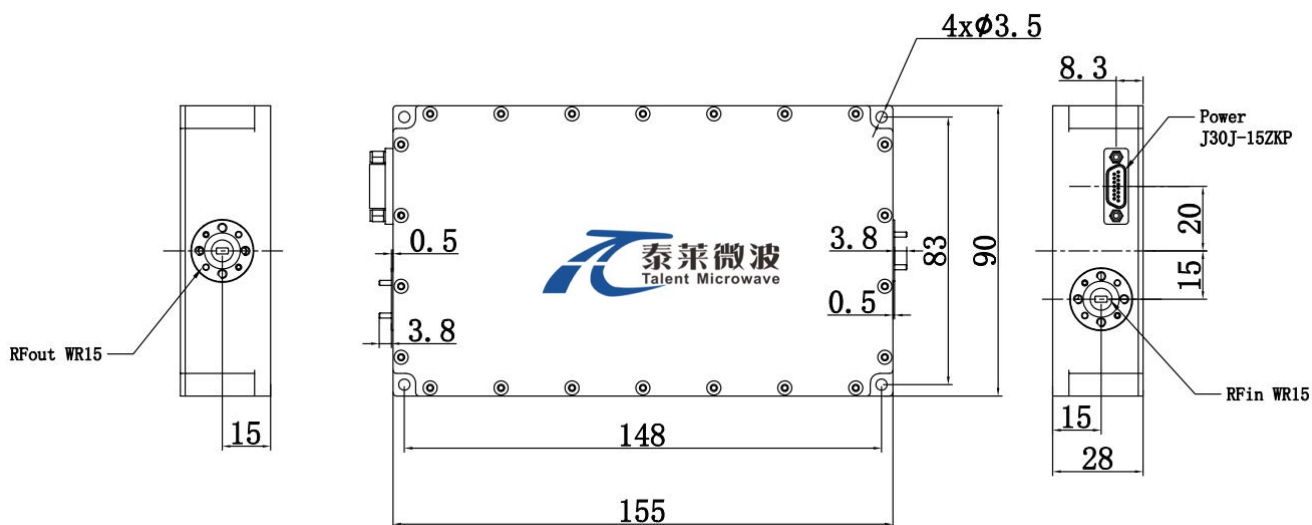
| 参数 Parameter                    | 指标 Value       | 单位 Units                  |
|---------------------------------|----------------|---------------------------|
| 输入/输出接口 Input /Output Connector | WR-19/UG-383/U |                           |
| 直流供电接口 DC Supply Connector      | J30J-9ZKP      | Pin1~5:+18V<br>Pin6~9:GND |
| 尺寸 Size                         | 155*90*28      | mm                        |
| 重量 Weight                       | ≤500           | 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          | +5 dBm               |
| ESD灵敏度 ESD sensitivity (HBm) | Class 0, passed 150V |

## 外形图 Outline Drawing:

Unit:mm



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

## 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  |     |     |          |

订货信息 Ordering Information:

| 标准型号 Base Number       | 描述 Description                                                                             | 版本号 Revision |
|------------------------|--------------------------------------------------------------------------------------------|--------------|
| TPMA-040060-3737-19    | Power Amplifier, 40-60 GHz, Gain:37dB Min, Psat:37 dBm Min, +18V DC,WR-19,Without Heatsink | Rev.1.1      |
| TPMA-040060-3737-19-HS | Power Amplifier, 40-60 GHz, Gain:37dB Min, Psat:37 dBm Min, +18V DC,WR-19,With Heatsink    | Rev.1.1      |