

## U-Band Fixed Attenuator

WR-19/40-60GHz/3 $\pm$ 0.5dB Attenuation

Model: TLFA-03-WR19

TLFA-03-WR19 is a 3 dB fixed attenuator that is used in millimeterwave systems and operates from 40 to 60 GHz. The input and output port configuration offers an inline structure with WR-19 waveguides and UG-383/U-M anticocking flanges. Other attenuation values are available under different model numbers as TLFA-XX-WR19, where XX is the desired attenuation value.

### Features:

- Full Band Coverage
- 1-35dB Available
- Good attenuation flatness
- Good Return Loss

### Applications:

- Test Equipment
- RF Over Fiber
- 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      |
| 衰减量 Attenuation Value          |     | 3         |     | dB       |
| 衰减平坦度 Attenuation Flatness     |     | $\pm 0.5$ |     | dB       |
| 回波损耗 Return Loss               |     | -20       |     | dB       |
| 功率容量 Power Handling            |     |           | 100 | mW       |
| 标称温度 Specification Temperature |     | +25       |     | °C       |

### 机械特性 Mechanical Specifications:

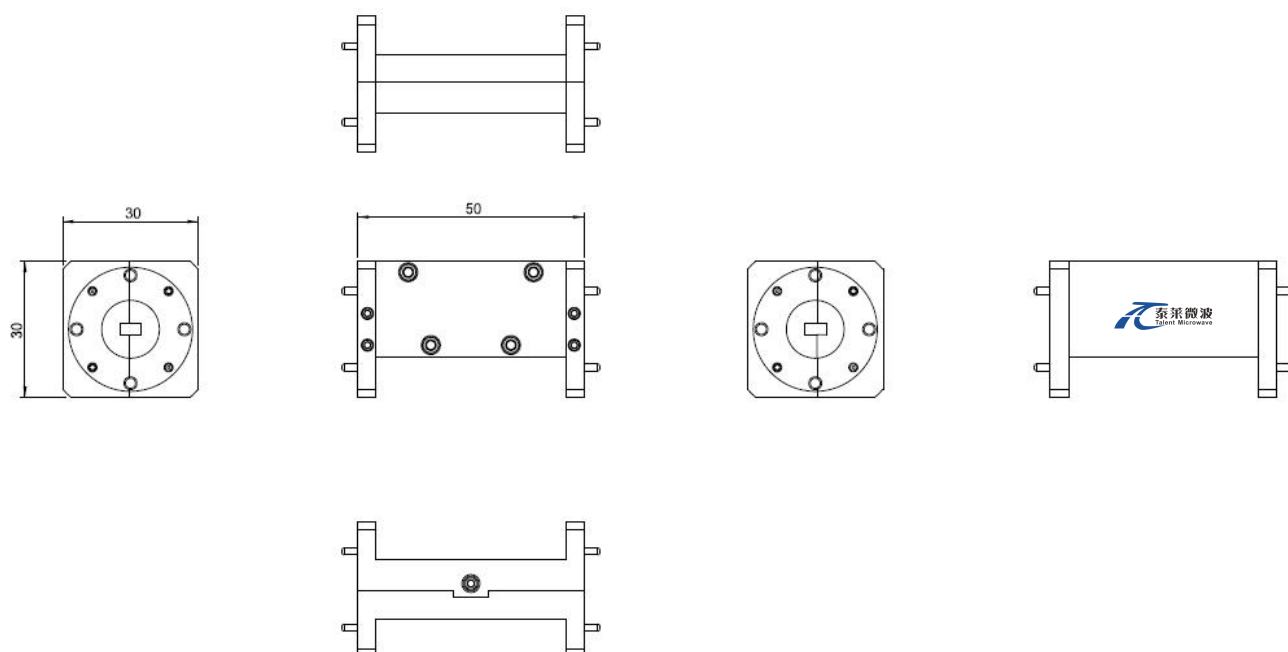
| 参数 Parameter                    | 指标 Value         | 单位 Units |
|---------------------------------|------------------|----------|
| 输入/输出接口 Input /Output Connector | WR-19/UG-383/U-M |          |
| 材质 Material                     | Brass            |          |
| 表面处理 Finish                     | Gold Plated      |          |
| 尺寸 Size                         | 50x30x30         | mm       |

## 绝对最大值 Absolute Maximum Ratings:

| 参数 Parameter        | 指标 Value |
|---------------------|----------|
| 输入功率 RF Input Power | +20dBm   |

## 外形图 Outline Drawing:

Unit:mm; Tolerance:±0.1mm



## 温度环境 Environmental Conditions:

| 参数 Parameter                       | Min                                                 | Typ | Max | 单位 Units |
|------------------------------------|-----------------------------------------------------|-----|-----|----------|
| 操作温度 Operating Temperature         | -10                                                 |     | +65 | °C       |
| 存储温度 Non-operating Temperature     | -45                                                 |     | +85 | °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 |
|------------------|--------------------------------------------------------------------------|--------------|
| TLFA-03-WR19     | WR-19 Waveguide Fixed Attenuators;<br>40-60GHz, $3\pm0.5$ dB Attenuation | Rev.1.0      |