

## Passive Multiplier

### X2/6-18GHz /2dBm Output Power

Model: TLPM-0618-0202-K

TLPM-0618-0202-K is a X2 passive multiplier. The multiplier has an input frequency of 3 to 9 GHz with a typical input power of 15 dBm and an output frequency of 6 to 18 GHz with a typical output power of 2 dBm. The input and output port configuration is 2.92mm connector.

#### Features:

- Output Frequency: 6-18GHz
- Output Power : 2dBm Typ
- Low power consumption
- 50 Ohm Matched Input / Output

#### Applications:

- Synthesizers
- Local oscillators

### 电气特性 Electrical Characteristics:

| 参数 Parameter                     | Min | Typ | Max | 单位 Units |
|----------------------------------|-----|-----|-----|----------|
| 输出频率 Output Frequency            | 6   |     | 18  | GHz      |
| 输出功率 Output Power                |     | 2   |     | dBm      |
| 输入频率 Input Frequency             | 3   |     | 9   | GHz      |
| 输入功率 Input Power                 |     | 15  |     | dBm      |
| 倍频次数 Multiply Factor             |     | 2   |     |          |
| 基波抑制 1st Harmonic Suppression    |     | -30 |     | dBc      |
| 3rd谐波抑制 3rd Harmonic Suppression |     | -34 |     | dBc      |
| 4th谐波抑制 4th Harmonic Suppression |     | -22 |     | dBc      |
| 基波隔离 1st Harmonic Isolation      |     | -43 |     | dBc      |
| 3rd谐波隔离 3rd Harmonic Isolation   |     | -47 |     | dBc      |
| 4th谐波隔离 4th Harmonic Isolation   |     | -34 |     | dBc      |

The value of harmonic isolation is compared to input power and harmonic isolation is compared to output power.

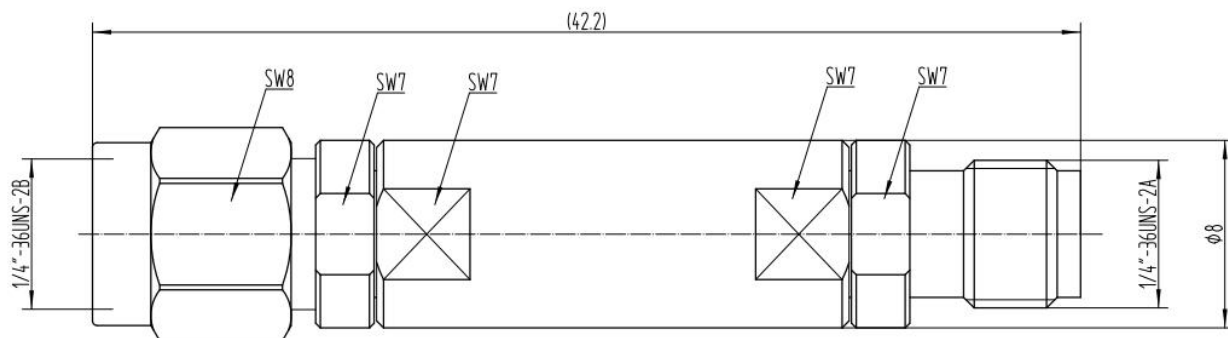
### 机械特性 Mechanical Specifications:

| 参数 Parameter          | 指标 Value      | 单位 Units |
|-----------------------|---------------|----------|
| 输出接口 Output Connector | 2.92mm Female |          |
| 输入接口 Input Connector  | 2.92mm Male   |          |
| 长度 Length             | 42.2          | mm       |

## 绝对最大值 Absolute Maximum Ratings:

| 参数 Parameter                 | 指标 Value             |
|------------------------------|----------------------|
| 输入功率 RF Input Power          | +22 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:

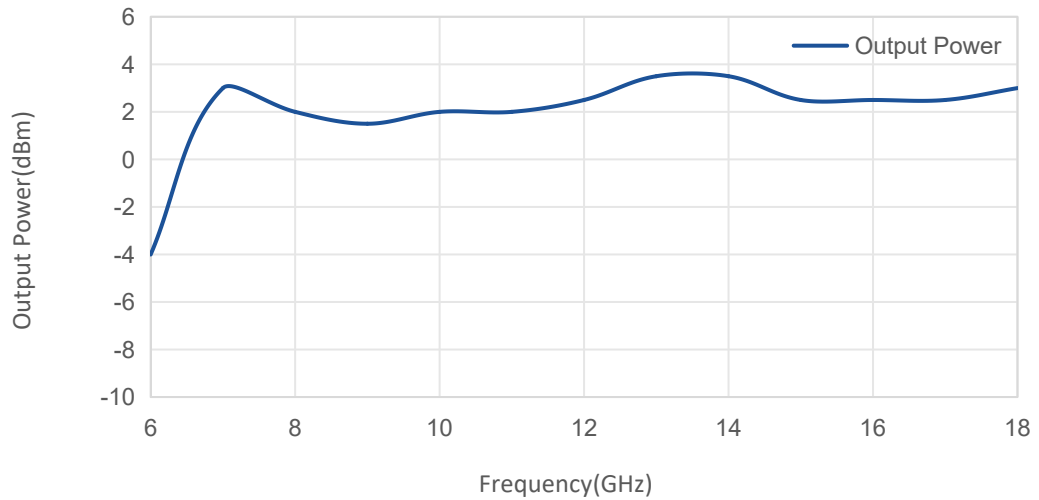
| 参数 Parameter                       | Min                                                 | Typ | Max | 单位 Units |
|------------------------------------|-----------------------------------------------------|-----|-----|----------|
| 操作温度 Operating Temperature         | -10                                                 |     | +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:

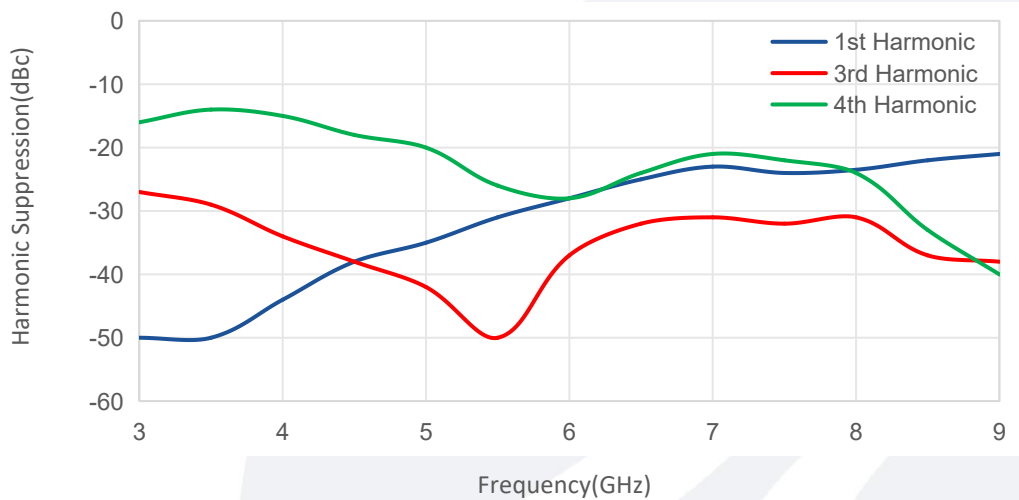
| 标准型号 Base Number | 描述 Description                                                  | 版本号 Revision |
|------------------|-----------------------------------------------------------------|--------------|
| TLPM-0618-0202-S | Passive Multiplier , X2, 6-18GHz ,<br>2 dBm Output Power,2.92mm | Rev.1.1      |

## 典型曲线 Typical Performance Data:

### Output Power vs Frequency



### Harmonic Suppression vs Frequency



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.