

V-Band, Active Frequency Multiplier

WR-15/X4/ 46-75GHz /23dBm Output Power

Model: TMAM-046075-0423-15

TMAM-046075-0423-15 is an active X4 frequency multiplier. The multiplier has an input frequency of 11.5 to 18.75 GHz with a typical input power of +5 dBm and an output frequency of 46 to 75 GHz with a typical output power of +23 dBm. The DC power requirement for the multiplier is +12 V DC/450 mA. The input port configuration is a female SMA connector and the output is a WR-15 waveguide with a UG-385/U-M anti-cocking flange.

Features:

- Output Frequency:46-75GHz
- Output Power :23dBm Typ
- Low power consumption

Applications:

- Frequency Extenders
- THz Systems

电气特性 Electrical Characteristics:

| 参数 Parameter | Min | Typ | Max | 单位 Units |
|---------------------------|------|-----|-------|----------|
| 输出频率 Output Frequency | 46 | | 75 | GHz |
| 输出功率 Output Power | | 23 | | dBm |
| 输入频率 Input Frequency | 11.5 | | 18.75 | GHz |
| 输入功率 Input Power | 3 | 5 | 7 | dBm |
| 倍频次数 Multiply Factor | | 4 | | |
| 谐波抑制 Harmonic Suppression | | | -30 | dBc |
| 供电电压 DC Voltage | | 12 | | V |
| 供电电流 DC Supply Current | | 450 | | mA |

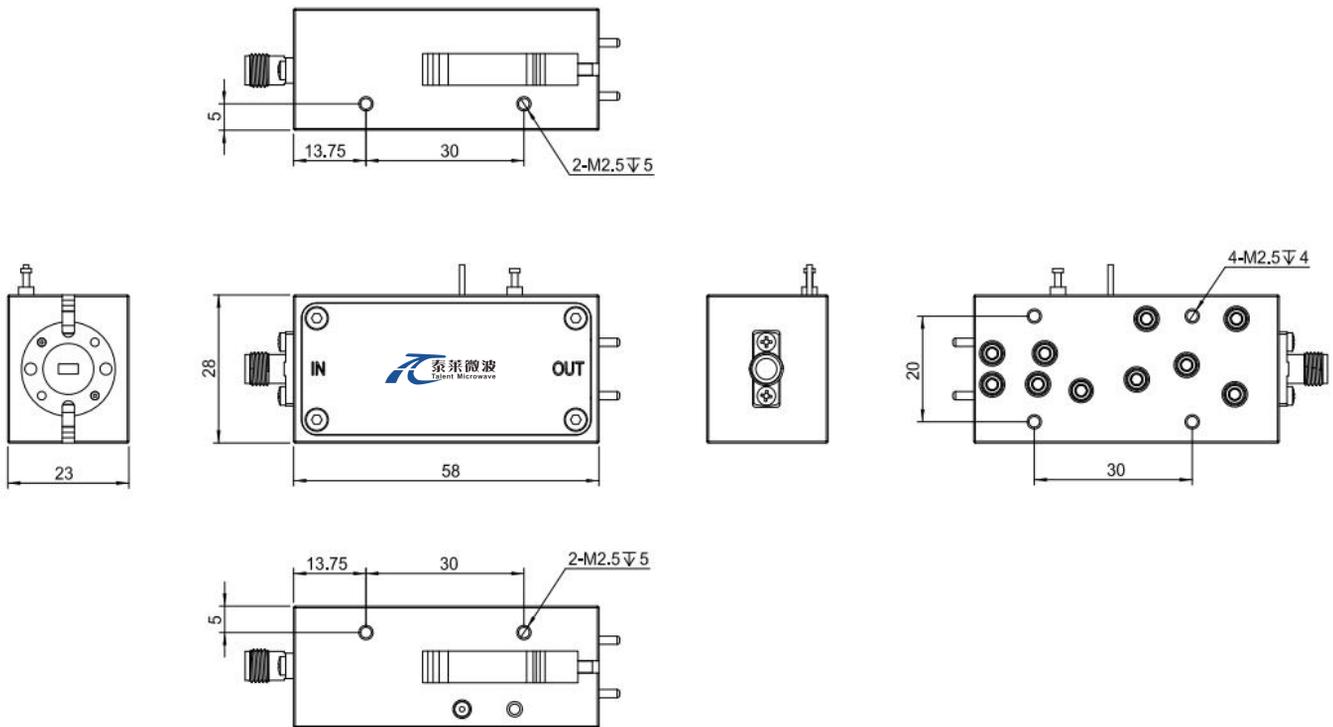
机械特性 Mechanical Specifications:

| 参数 Parameter | 指标 Value | 单位 Units |
|-----------------------|----------------|----------|
| 输出接口 Output Connector | WR-15/UG-385/U | |

绝对最大值 Absolute Maximum Ratings:

| 参数 Parameter | 指标 Value |
|------------------------------|----------------------|
| 供电偏置电压 Supply Bias Voltage | +15 V |
| 输入功率 RF Input Power | +10 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:

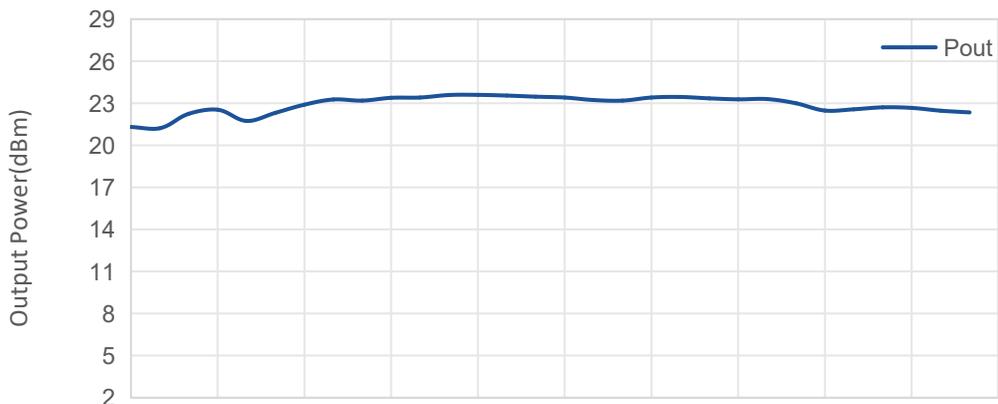
| 参数 Parameter | Min | Typ | Max | 单位 Units |
|------------------------------------|---|-----|-----|----------|
| 操作温度 Operating Temperature | -10 | | +65 | °C |
| 存储温度 Non-operating Temperature | -45 | | +85 | °C |
| 相对湿度 Relative humidity | | 95 | | % |
| 海拔 Altitude | 50,000 | | | feet |
| 震动 Shock / 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:

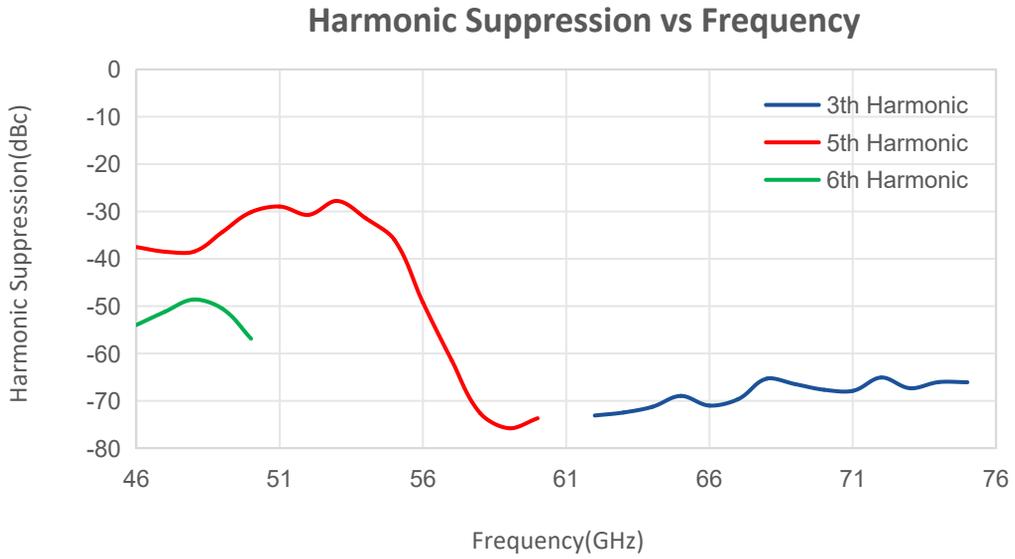
| 标准型号 Base Number | 描述 Description | 版本号 Revision |
|---------------------|---|--------------|
| TMAM-046075-0423-15 | Active Multiplier,X4,46-75GHz, Output Power:23dBm,WR-15/UG-385/U,SMA Female | Rev.1.1 |

典型曲线 Typical Performance Data:

Output Power vs Frequency



典型曲线 Typical Performance Data:



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.