

## Active Frequency Multiplier

X2/ 20-60GHz /16dBm Output Power/1.85mm Female

Model: TLAM-2060-0216-V

TLAM-2060-0216-V is an active X2 frequency multiplier. The multiplier has an input frequency of 10 to 30 GHz with a typical input power of -2 dBm and an output frequency of 20 to 60 GHz with a typical output power of +16 dBm. The DC power requirement for the multiplier is +12 V DC/120 mA. The input port configuration is female 2.92mm connector. The output port configuration is female 1.85mm connector.

### Features:

- Output Frequency:20-60GHz
- Output Power :16 dBm Min
- 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	20		60	GHz
输出功率 Output Power		16		dBm
输入频率 Input Frequency	10		30	GHz
输入功率 Input Power	-6	-2	+2	dBm
倍频次数 Multiply Factor		2		
谐波 Harmonic		-15		dBc
供电电压 DC Voltage	+8	+12	+15	V
供电电流 DC Supply Current		120		mA

### 机械特性 Mechanical Specifications:

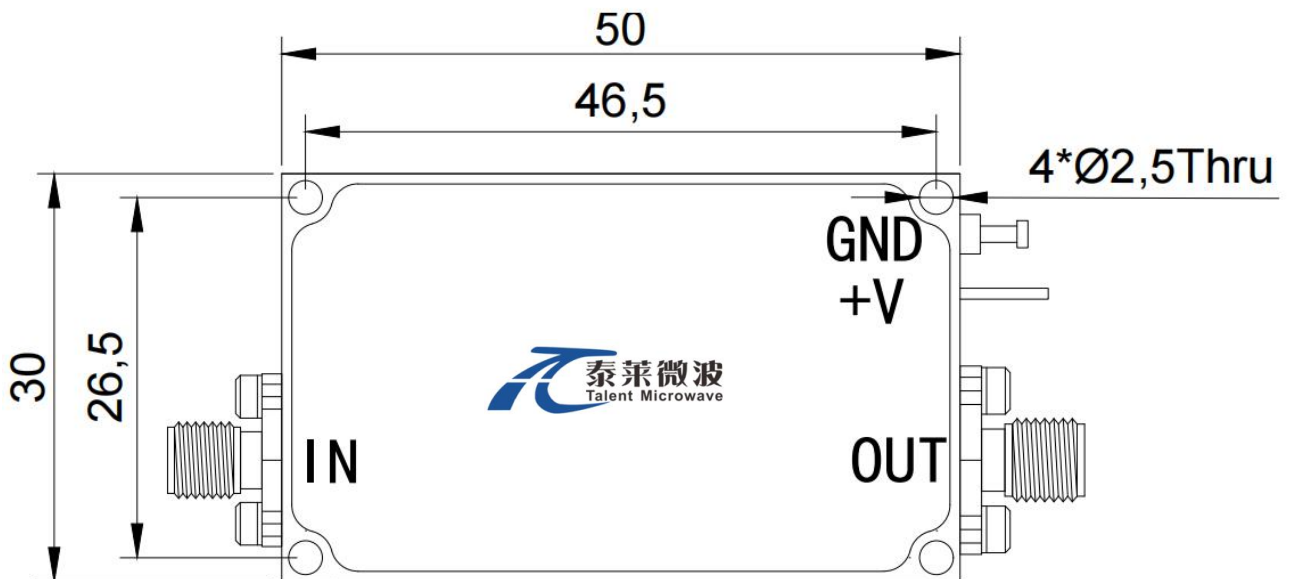
参数 Parameter	指标 Value	单位 Units
输出接口 Output Connector	1.85mm Female	
输入接口 Input Connector	2.92mm Female	
直流偏置 DC Bias	Solder Pin	

**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	+15 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

**外形图 Outline Drawing:**

Unit:mm


**\*\*\*Heat Sink Required During Operation**


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

**温度环境 Environmental Conditions:**

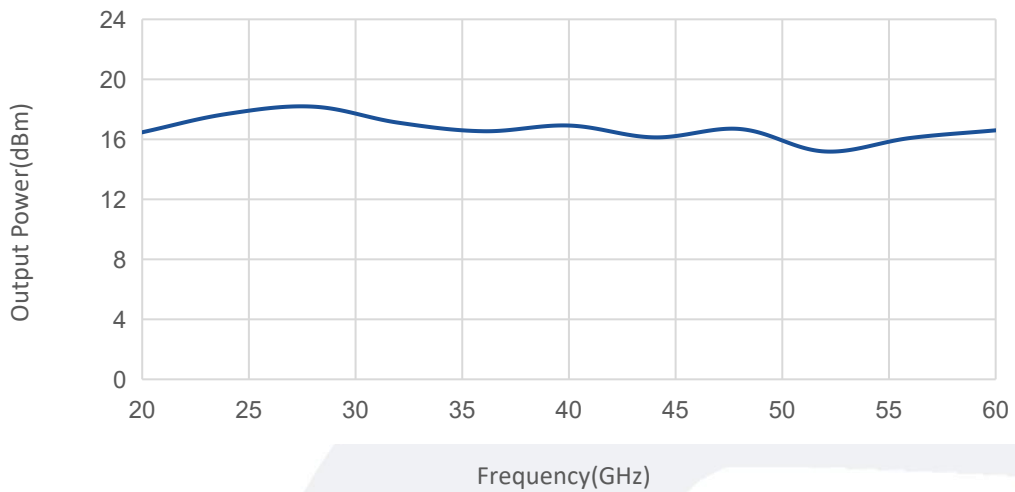
参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature	-10		+65	°C
存储温度 Non-operating Temperature	-45		+85	°C
相对湿度 Relative humidity		95		%
海拔 Altitude		10,000		feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

## 订货信息 Ordering Information:

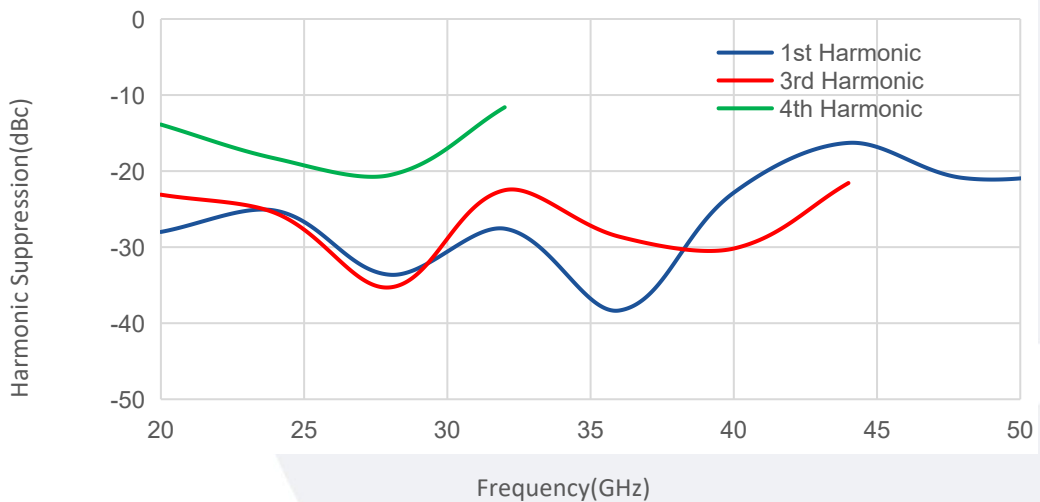
标准型号 Base Number	描述 Description	版本号 Revision
TLAM-2060-0216-V	Active Multiplier, X2, 20-60 GHz , +16 dBm Output Power, 1.85mm Female	Rev.1.0

## 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.