

## Active Frequency Multiplier

### X6/70-110GHz/18dBm Output Power

**Model: TLAM-070110-0618-1.0**

TLAM-070110-0618-1.0 is an active X6 frequency multiplier. The multiplier has an input frequency of 11.16 to 18.34 GHz with a typical input power of 3 dBm and an output frequency of 70 to 110 GHz with a typical output power of +18 dBm. The DC power requirement for the multiplier is +16 V DC. The input port configuration is a female 1.85mm connector and the output is a female 1.0mm connector.

#### Features:

- Output Frequency: 70-110GHz
- Output Power: 18dBm Typ
- Low power consumption
- 50 Ohm Matched Input / Output

#### 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	70		110	GHz
输出功率 Output Power		18		dBm
输入频率 Input Frequency	11.66		18.34	GHz
输入功率 Input Power	0	3		dBm
倍频次数 Multiply Factor		6		
谐波抑制 Harmonic Suppression		-20		dBc
供电电压 DC Voltage		16		V

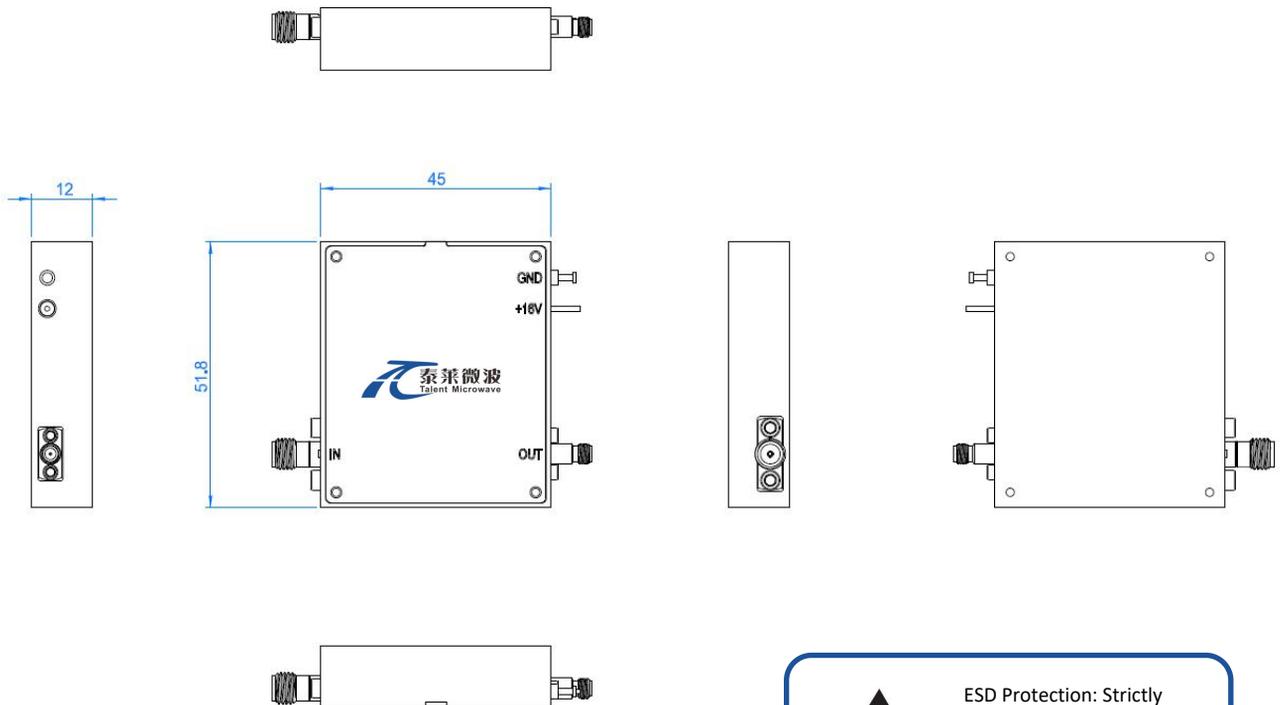
### 机械特性 Mechanical Specifications:

参数 Parameter	指标 Value	单位 Units
输出接口 Output Connector	1.0mm Female	
输入接口 Input Connector	1.85mm Female	
直流偏置 DC Bias	Solder Pin	
尺寸 Size	51.8*45*12(Without heatsink)	mm

### 绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+17 V
输入功率 RF Input Power	+8 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	-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
TLAM-070110-0618-1.0	Active Multiplier,X6,70-110GHz, Output Power:18dBm,1.0mm Female,Without Heatsink	Rev.1.0
TLAM-070110-0618-1.0-HS	Active Multiplier,X6,70-110GHz, Output Power:18dBm,1.0mm Female,With Heatsink	Rev.1.0