

Active Frequency Multiplier

X4/40-70GHz/17dBm Output Power

Model: TLAM-4070-0417-V

TLAM-4070-0417-V is an active X4 frequency multiplier. The multiplier has an input frequency of 10 to 17.5 GHz with a typical input power of +5 dBm and an output frequency of 40 to 70 GHz with a typical output power of +17 dBm. The DC power requirement for the multiplier is +8V DC/500 mA. The input port configuration is female SMA connector and output port configuration is female 1.85mm connector.

Features:

- Output Frequency: 40-70GHz
- Output Power: 17dBm 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	40		70	GHz
输出功率 Output Power	15	17		dBm
输入频率 Input Frequency	10		17.5	GHz
输入功率 Input Power	0	5		dBm
倍频次数 Multiply Factor		4		
基波抑制 1st Harmonic Suppression		30		dBc
谐波抑制 Harmonic Suppression		20		dBc
驻波 VSWR		2.2		:1
供电电压 DC Voltage		8	10	V
供电电流 DC Supply Current		500		mA

机械特性 Mechanical Specifications:

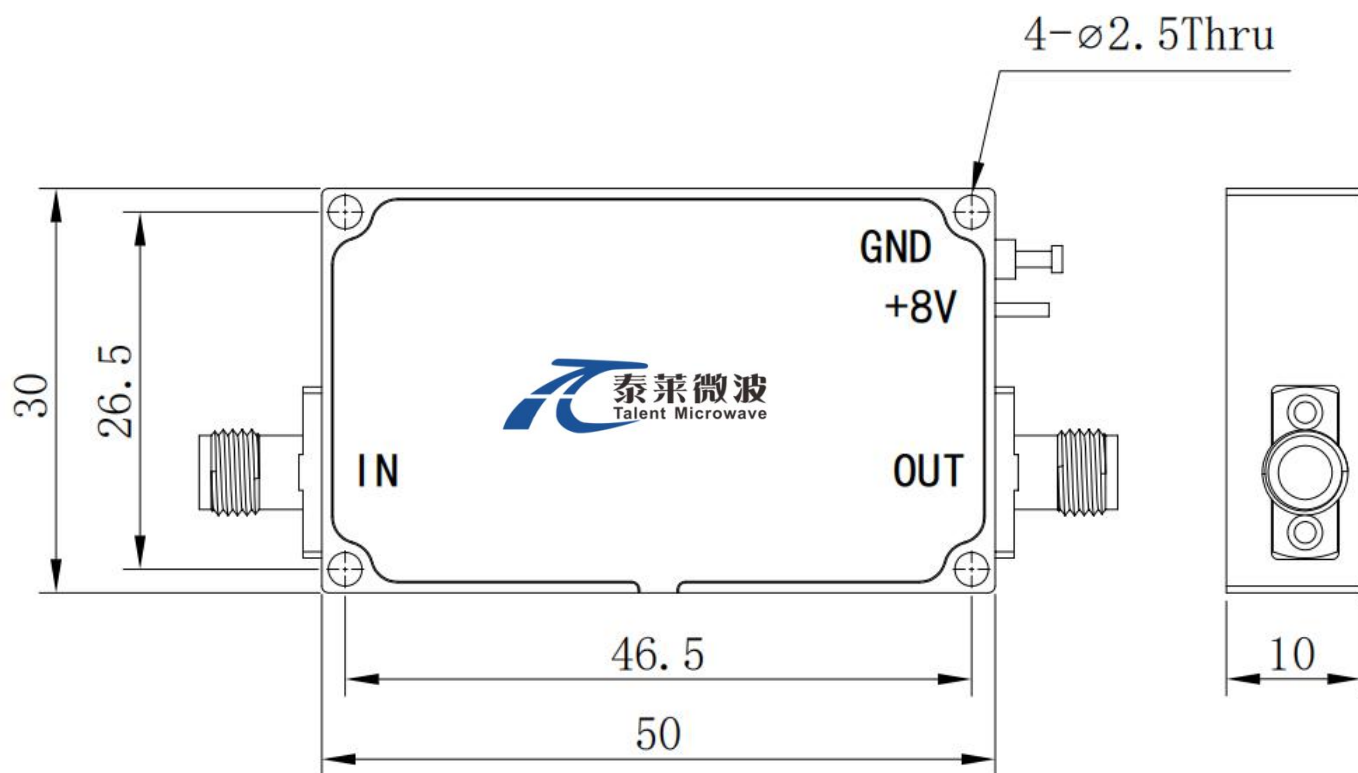
参数 Parameter	指标 Value	单位 Units
输出接口 Output Connector	1.85mm Female	
输入接口 Input Connector	SMA Female	
直流偏置 DC Bias	Solder Pin	
尺寸 Size	50*30*10	mm

绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+10 V
输入功率 RF Input Power	+9 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.

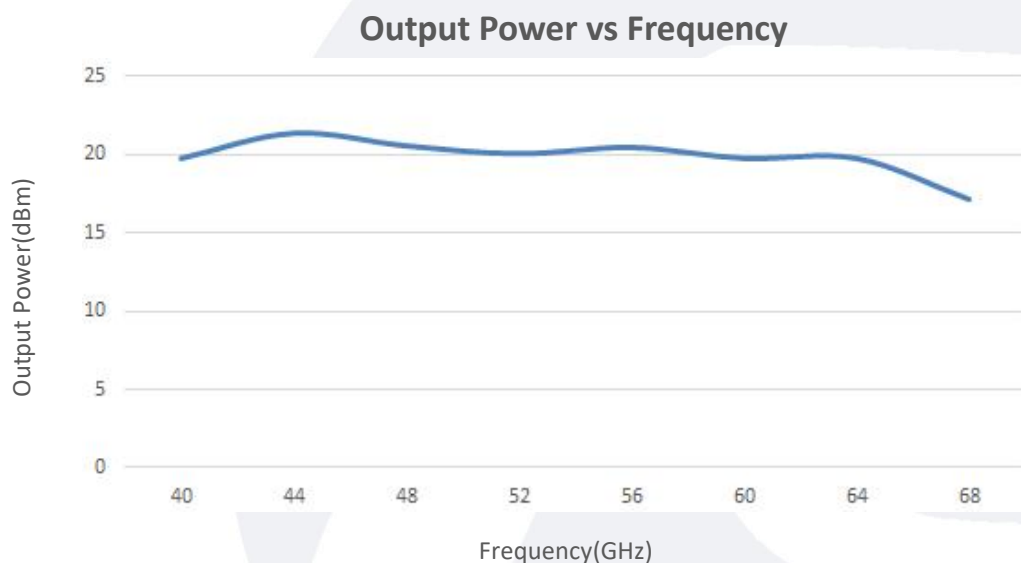
温度环境 Environmental Conditions:

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	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-4070-0417-V	Active Multiplier,X2, 4-16 GHz , +17 dBm Output Power,1.85mm Female	Rev.1.1

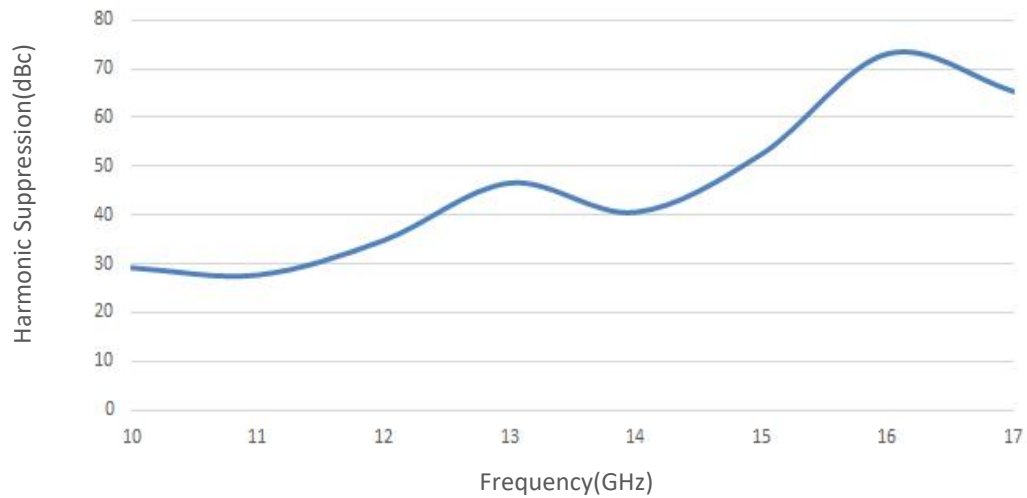
典型曲线 Typical Performance Data:



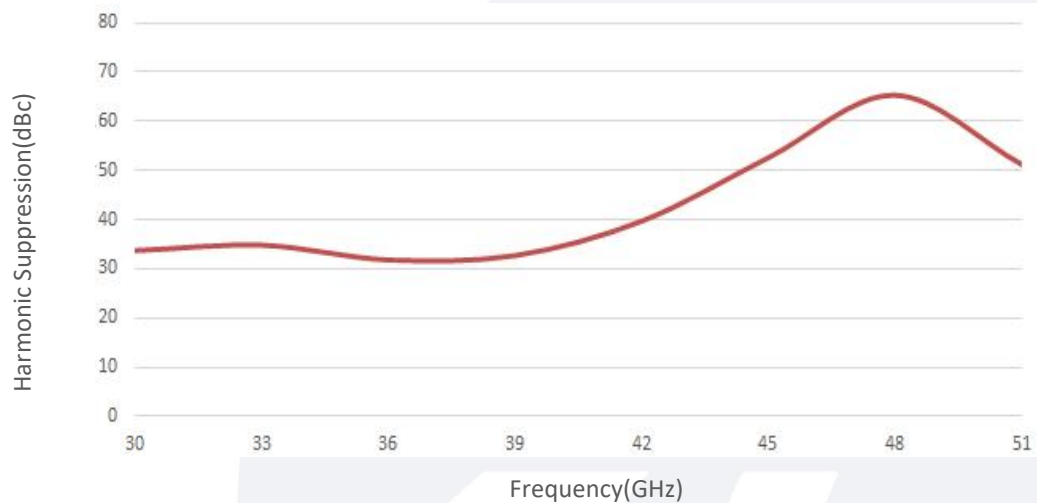
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

典型曲线 Typical Performance Data:

1st Harmonic Suppression vs Frequency

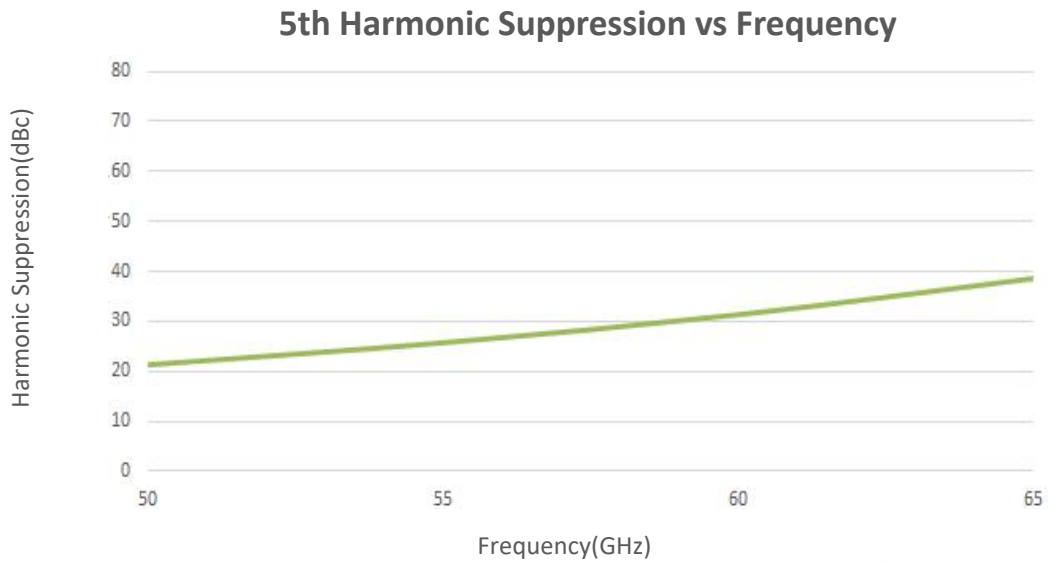


3rd Harmonic Suppression vs Frequency



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典型曲线 Typical Performance Data:



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