

Active Frequency Multiplier

X4/ 18-40GHz /12dBm Output Power/SMA/2.92

Model: TLAM-1840-0412-K

TLAM-1840-0412-K is an active X4 frequency multiplier. The multiplier has an input frequency of 4.5 to 10 GHz with a typical input power of +5 dBm and an output frequency of 18 to 40 GHz with a typical output power of +15 dBm. The DC power requirement for the multiplier is +12 V DC/100 mA. The input port configuration is female SMA connector. The output port configuration is female 2.92 connector.

Features:

- Output Frequency:18-40GHz
- Output Power :15dBm 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	18		40	GHz
输出功率 Output Power	+12	+15		dBm
输入频率 Input Frequency	4.5		10	GHz
输入功率 Input Power	+3	+5	+8	dBm
倍频次数 Multiply Factor		4		
基波 1st Harmonic		-30		dBc
3次谐波 3rd Harmonic		-25		dBc
供电电压 DC Voltage	+8	+12	+15	V
供电电流 DC Supply Current		100		mA

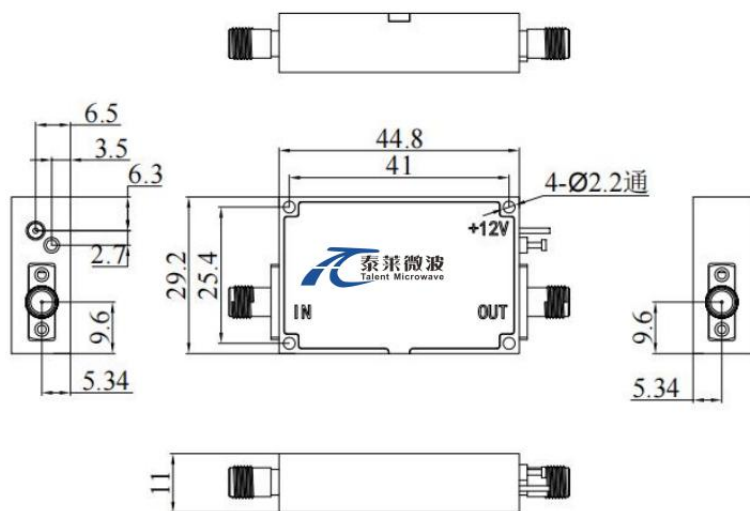
机械特性 Mechanical Specifications:

参数 Parameter	指标 Value	单位 Units
输出接口 Output Connector	SMA Female	
输入接口 Input Connector	2.92 Female	
直流偏置 DC Bias	Solder Pin	
尺寸 Size	44.8*29.2*11	mm

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	+8 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:

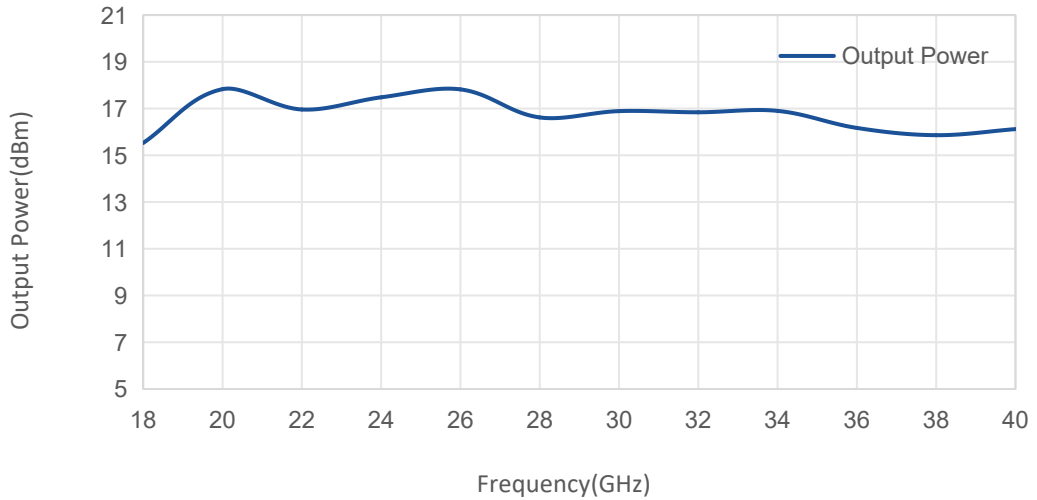
参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature	-10		+65	°C
存储温度 Non-operating Temperature	-45		+85	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	10,000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half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

订货信息 Ordering Information:

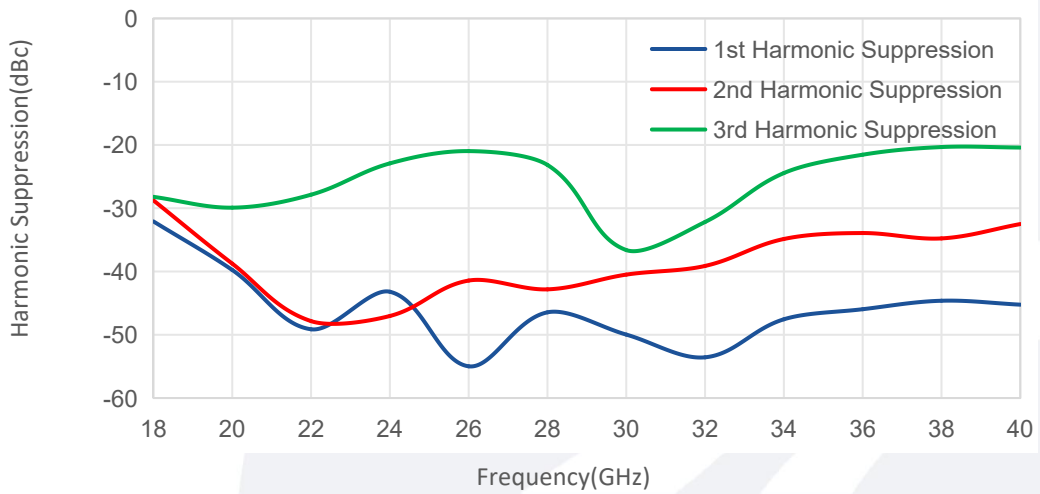
标准型号 Base Number	描述 Description	版本号 Revision
TLAM-1840-0412-K	Active Multiplier,X4, 18-40 GHz ,+15 dBm Output Power,SMA Female,2.92 Female	Rev.1.1

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.