

Active Frequency Multiplier

X3/22-40GHz/5dBm Output Power

Model: TLAM-2240-0305-K

TLAM-2240-0305-K is an active X3 frequency multiplier. The multiplier has an input frequency of 7.33 to 13.34 GHz with a typical input power of 0 dBm and an output frequency of 22 to 40 GHz with a minimum output power of +5 dBm. The DC power requirement for the multiplier is +12V DC/40 mA. The input port configuration is female SMA connector and output port configuration is female 2.92mm connector.

Features:

- Output Frequency: 22-40GHz
- Output Power: 5dBm 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	22		40	GHz
输出功率 Output Power	3			dBm
输入频率 Input Frequency	7.33		13.34	GHz
输入功率 Input Power	-4	0	10	dBm
倍频次数 Multiply Factor		3		
供电电压 DC Voltage	8	12	15	V
供电电流 DC Supply Current		40		mA

机械特性 Mechanical Specifications:

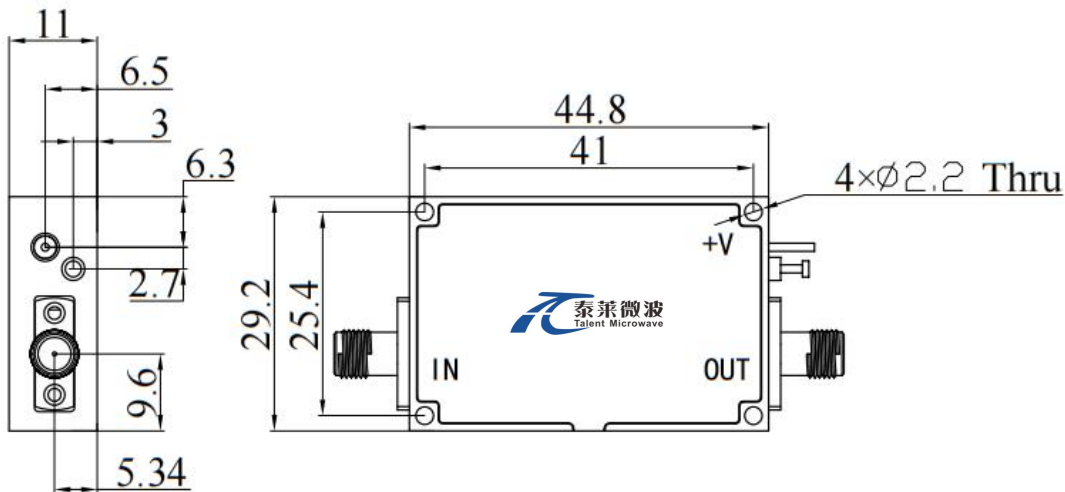
参数 Parameter	指标 Value	单位 Units
输出接口 Output Connector	2.92mm Female	
输入接口 Input Connector	SMA Female	
直流偏置 DC Bias	Solder Pin	
尺寸 Size	44.8*29.2*11	mm

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	+15 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:

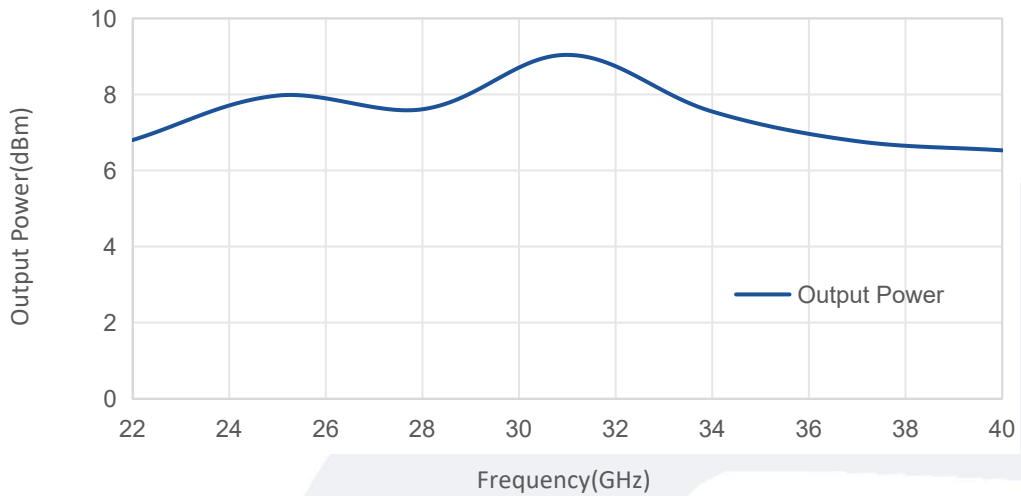
参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature	-45		+85	°C
存储温度 Non-operating Temperature	-55		+125	°C
相对湿度 Relative humidity		95		%
海拔 Altitude		10,000		feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

订货信息 Ordering Information:

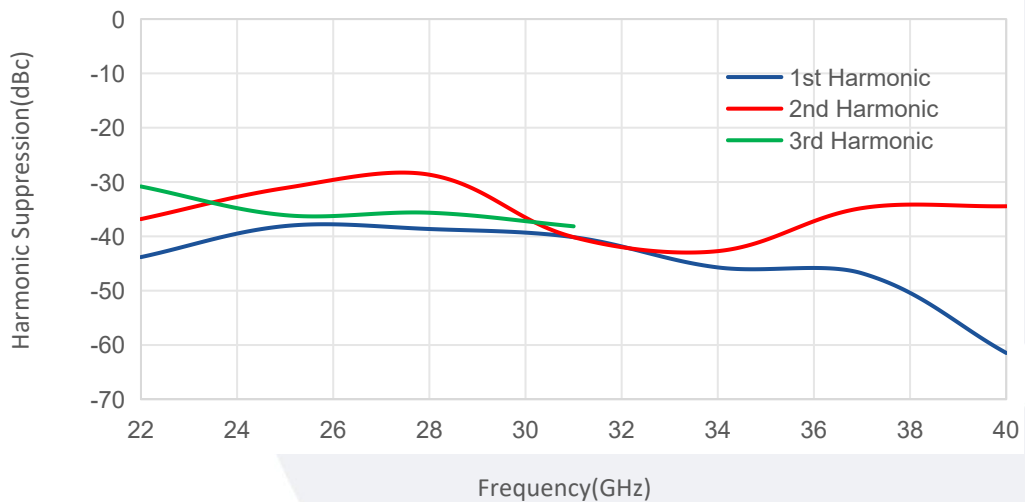
标准型号 Base Number	描述 Description	版本号 Revision
TLAM-2240-0305-K	Active Multiplier, X3, 22-40GHz , +5dBm Output Power, 2.92mm Female	Rev.1.0

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.