

Active Frequency Multiplier

X2/ 7-21GHz /14dBm Output Power/SMA

Model: TLAM-0721-0214-S

TLAM-0721-0214-S is an active X2 frequency multiplier. The multiplier has an input frequency of 3.5 to 10.5 GHz with a typical input power of +7 dBm and an output frequency of 7 to 21 GHz with a typical output power of +14 dBm. The DC power requirement for the multiplier is +12 V DC/50 mA. The input port configuration is female SMA connector and output port configuration is female 2.92mm connector.

Features:

- Output Frequency:7-21GHz
- Output Power :14dBm 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	7		21	GHz
输出功率 Output Power		+14		dBm
输入频率 Input Frequency	3.5		10.5	GHz
输入功率 Input Power		+7	+10	dBm
倍频次数 Multiply Factor		2		
基波 1st Harmonic		-25		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		50		mA

机械特性 Mechanical Specifications:

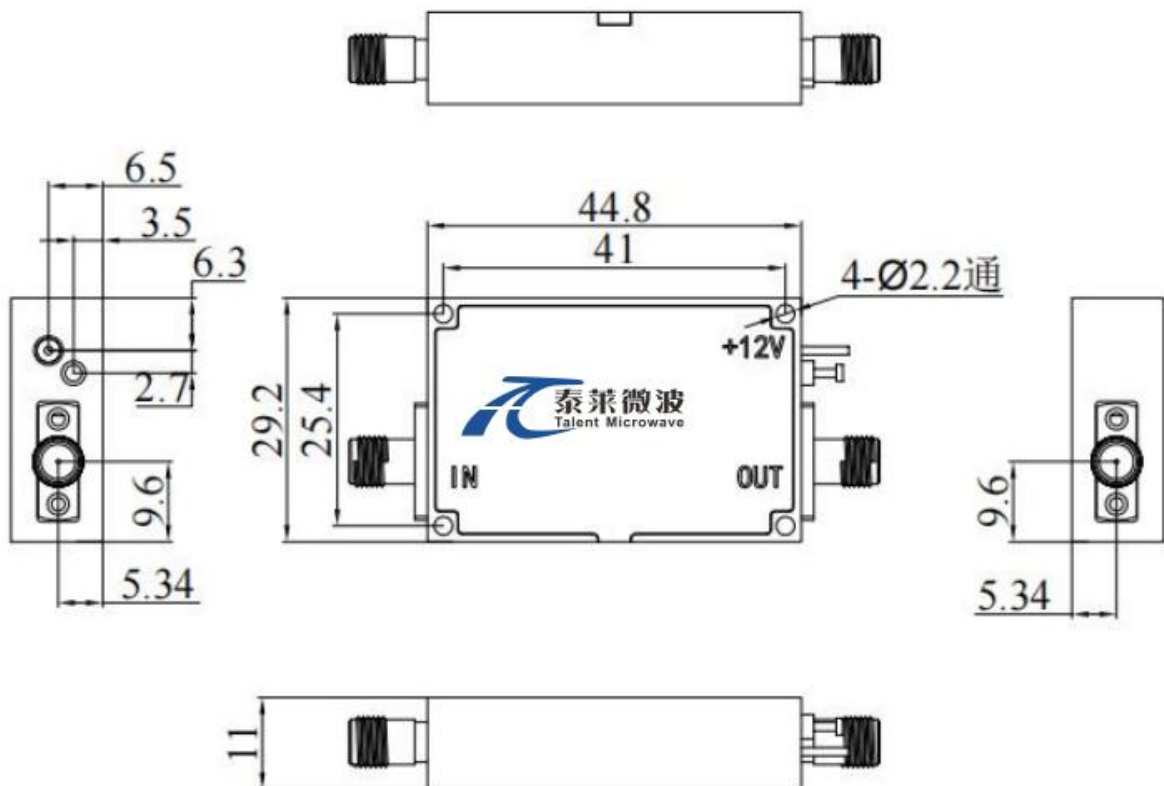
参数 Parameter	指标 Value	单位 Units
输出接口 Output Connector	2.92mm Female	
输入接口 Input Connector	SMA Female	
直流偏置 DC Bias	Solder Pin	
尺寸 Size	44.8*29.2*11	mm

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	+10 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.

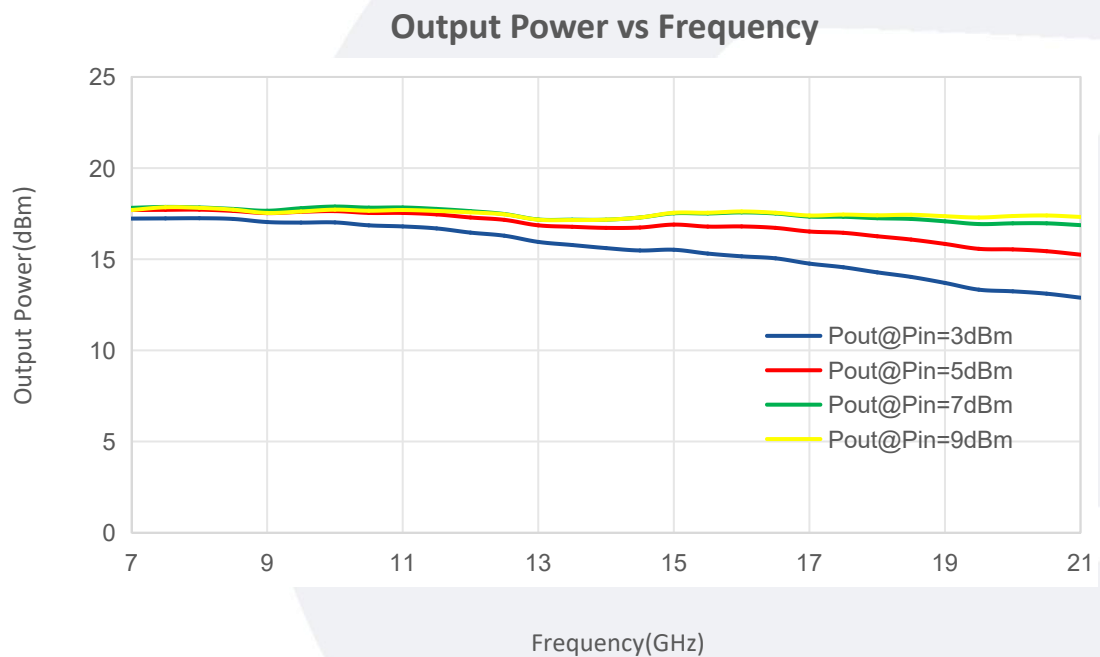
温度环境 Environmental Conditions:

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-0721-0214-S	Active Multiplier X2, 7-21 GHz, +14 dBm Output Power,2.92mm Female	Rev.1.1

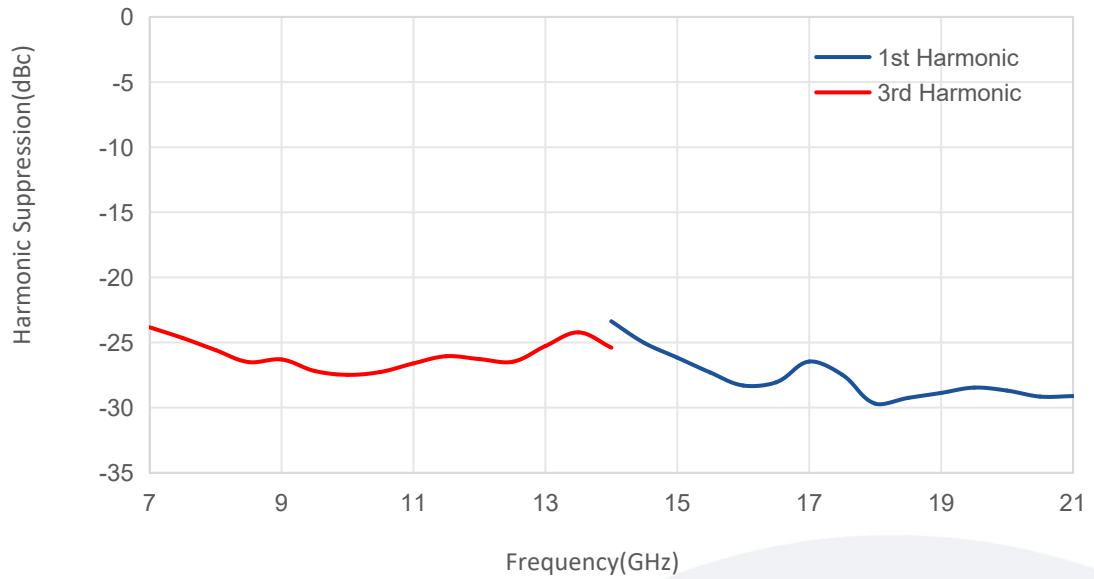
典型曲线 Typical Performance Data:



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:

Harmonic Suppression vs Frequency



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