

Passive Frequency Multiplier

WR-6.5/X2/110-170GHz/8dBm Output Power

Model: TPM-110170-0208-06

TPM-110170-0208-06 is a WR-6.5, X2 passive multiplier that generates second order harmonics with good harmonic and fundamental suppression. This multiplier requires an input frequency range of 55 to 85 GHz at +20 dBm RF power to yield typical +8 dBm output power at 110 to 170 GHz. The multiplier is equipped with a WR-12 waveguide and UG-387/U-M flange as its input port and a WR-6.5 waveguide and UG-387/U-M flange as its output port.

Features:

- Output Frequency: 110-170GHz
- Output Power: 8dBm Typ
- Compactness,High Power&Efficiency

Applications:

- Frequency Extenders
- THz Systems
- Source Modules

电气特性 Electrical Characteristics:

参数 Parameter	Min	Typ	Max	单位 Units
输出频率 Output Frequency	110		170	GHz
输入频率 Input Frequency	55		85	GHz
输出功率 Output Power		8		dBm
输入功率 Input Power			20	dBm
倍频次数 Multiply Factor		2		
谐波 Harmonic		-40		dBc

机械特性 Mechanical Specifications:

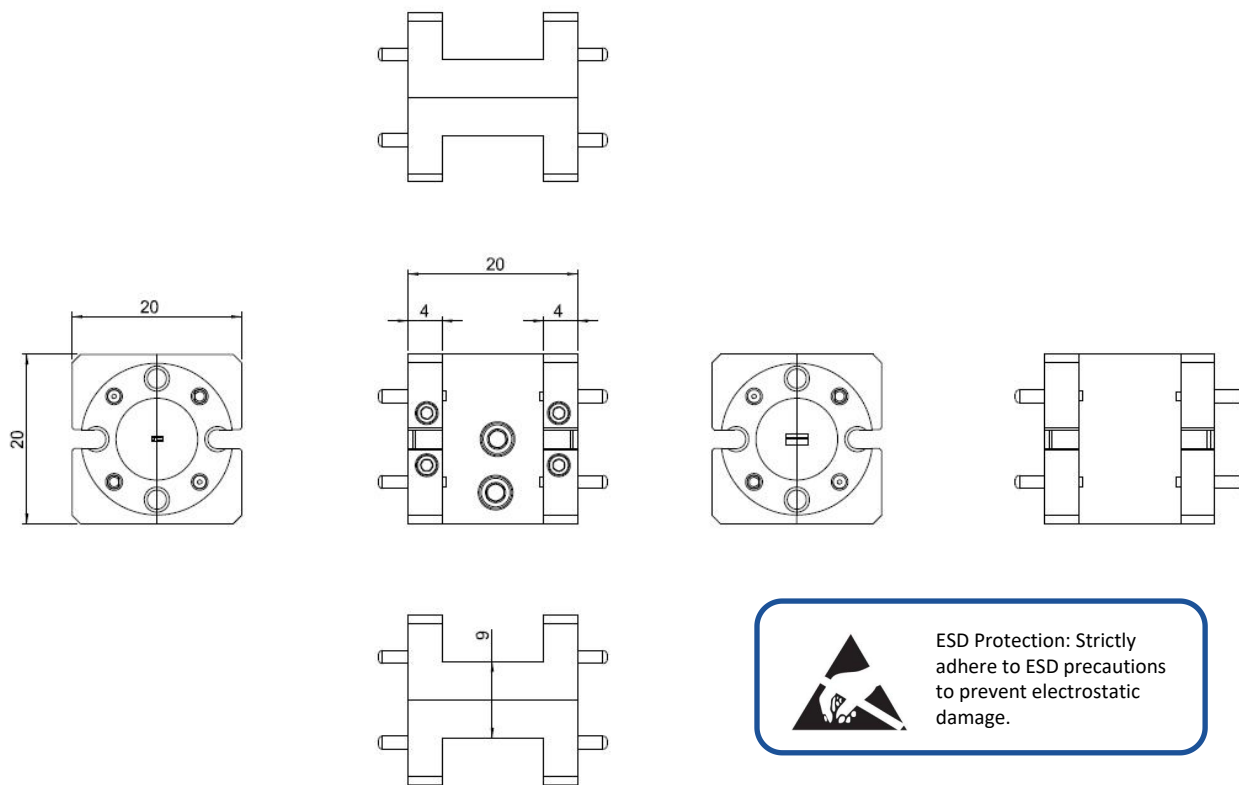
参数 Parameter	指标 Value	单位 Units
输出接口 Output Connector	WR-6.5/UG-387/U	
输入接口 Input Connector	WR-12/UG-387/U	
尺寸 Size	20*20*20	mm

绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
输入功率 RF Input Power	+20 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

外形图 Outline Drawing:

Unit:mm; Tolerance:±0.1mm



温度环境 Environmental Conditions:

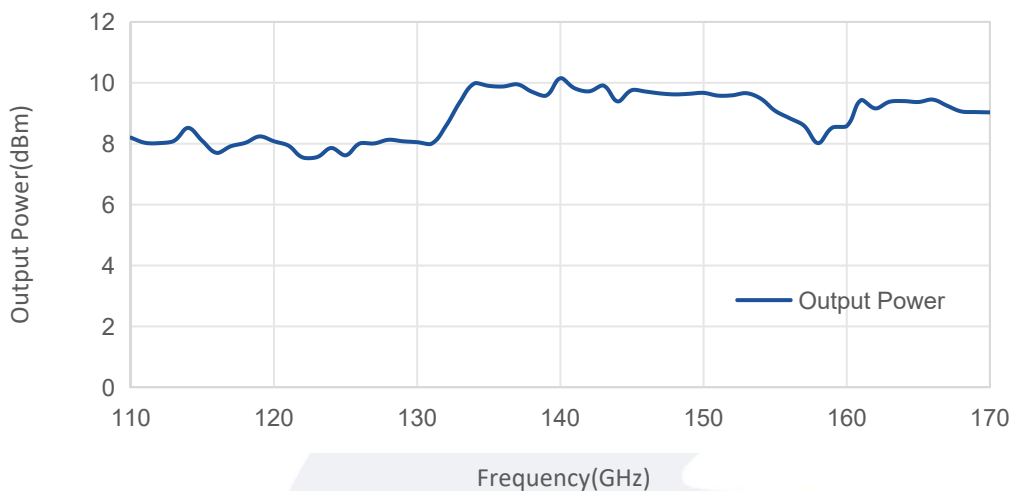
参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature	-10		+65	°C
存储温度 Non-operating Temperature	-45		+85	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	10,000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half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

订货信息 Ordering Information:

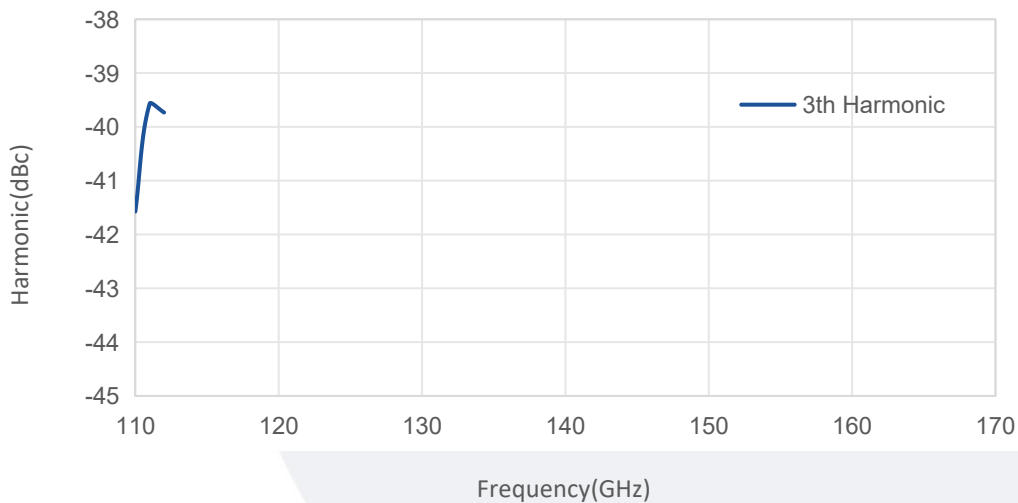
标准型号 Base Number	描述 Description	版本号 Revision
TMPM-110170-0208-06	Passive Frequency Multiplier X2,110-170GHz, 8dBm Output Power,WR-6.5	Rev.1.1

典型曲线 Typical Performance Data:

Output Power vs Frequency



Harmonic 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.