

Passive Frequency Multiplier

WR-5.1/X2/130-220GHz/8dBm Output Power

Model: TMPM-130220-0208-05

TMPM-130220-0208-05 is a WR-5.1 X2 passive multiplier that generates second order harmonics with good harmonic and fundamental suppression. This multiplier requires an input frequency range of 65 to 110 GHz at +18 dBm RF power to yield typical +8 dBm output power at 130 to 220 GHz. The multiplier is equipped with a WR-10 waveguide and UG-387/U-M flange as its input port and a WR-5.1 waveguide and UG-387/U-M flange as its output port.

Features:

- Output Frequency: 130-220GHz
- 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	130		220	GHz
输入频率 Input Frequency	65		110	GHz
输出功率 Output Power		8		dBm
输入功率 Input Power		18	20	dBm
倍频次数 Multiply Factor		2		

机械特性 Mechanical Specifications:

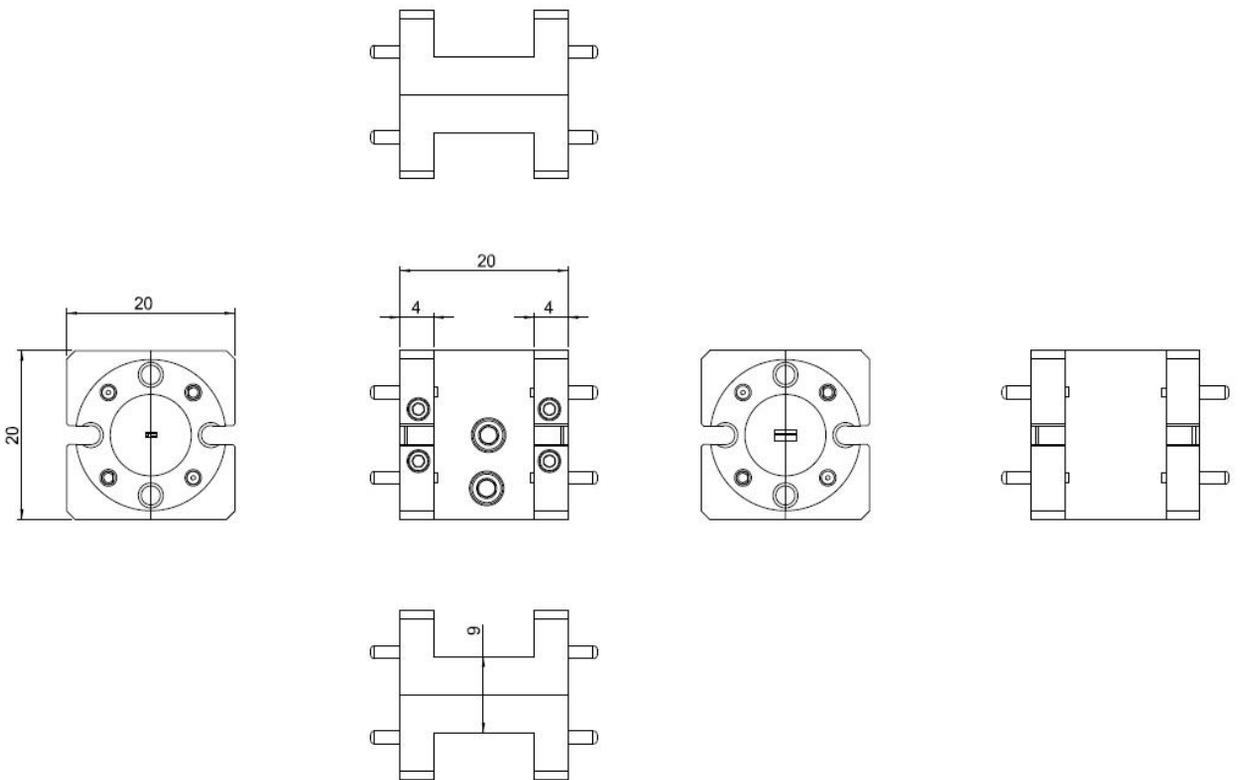
参数 Parameter	指标 Value	单位 Units
输出接口 Output Connector	WR-5.1/UG-387/U	
输入接口 Input Connector	WR-10/UG-387/U	
尺寸 Size	20*20*20	mm

绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
输入功率 RF Input Power	+21 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:

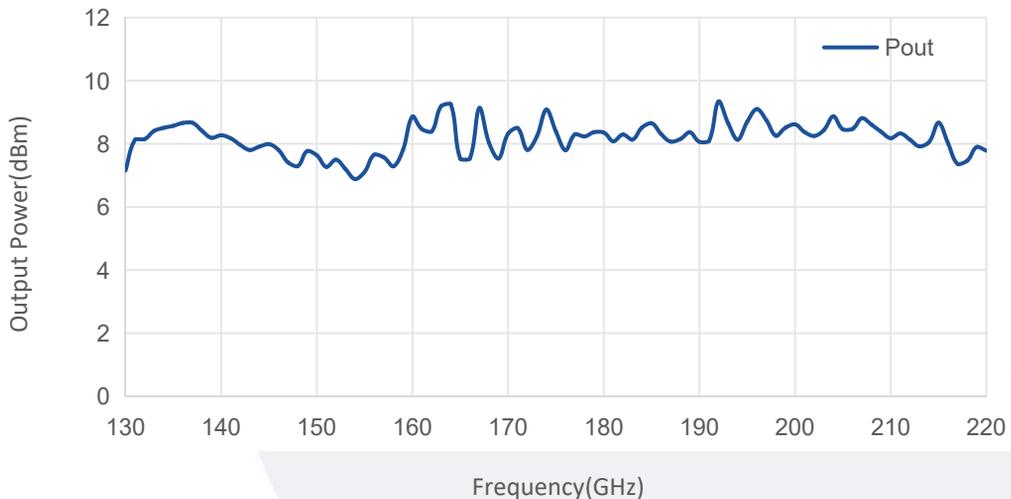
参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature	-10		+65	°C
存储温度 Non-operating Temperature	-45		+85	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	10,000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half 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
TMPM-130220-0208-05	Passive Frequency Doubler X2,130-220GHz, 8dBm Output Power,WR-5.1	Rev.1.1

典型曲线 Typical Performance Data:

Output Power 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.