

Passive Frequency Multiplier

WR-3.4/X3/220-330GHz/3dBm Output Power**Model: TPM-220330-0307-3.4**

TPM-220330-0307-3.4 is a WR-3.4 X3 passive multiplier that generates third order harmonics with good harmonic and fundamental suppression. This multiplier requires an input frequency range of 73.5 to 110 GHz at +21 dBm RF power to yield typical +3 dBm output power at 220 to 330 GHz. The multiplier is equipped with a WR-10 waveguide and UG-387/U-M flange as its input port and a WR-3.4 waveguide and UG-387/U-M flange as its output port.

Features:

- Output Frequency: 220-330GHz
- Output Power: 3dBm Typ
- Compactness, High Power & Efficiency

Applications:

- Frequency Extenders
- THz Systems
- Source Modules

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Output Frequency	220		330	GHz
Input Frequency	73.5		110	GHz
Output Power		3		dBm
Input Power		21	23	dBm
Multiply Factor		3		

Mechanical Specifications:

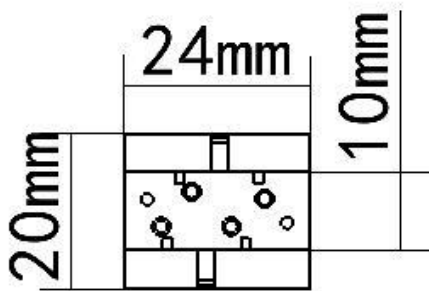
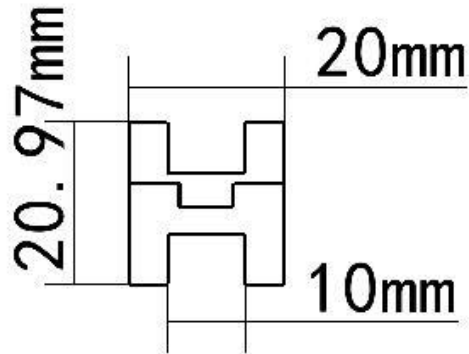
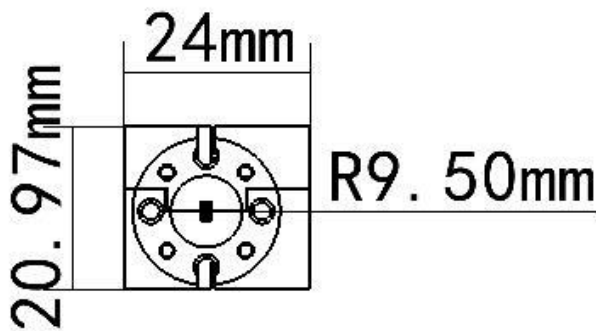
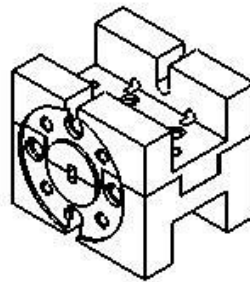
Parameter	Value	Units
Output Connector	WR-3.4/UG-387/U	
Input Connector	WR-10/UG-387/U	
Size	24*20*20.97	mm

Absolute Maximum Ratings:

Parameter	Value
RF Input Power	TBD
ESD sensitivity (HBM)	Class 0, passed 150V

Outline Drawing:

Unit:mm; Tolerance:±0.1mm



ESD Protection: Strictly adhere to ESD precautions to prevent electrostatic damage.

Environmental Conditions:

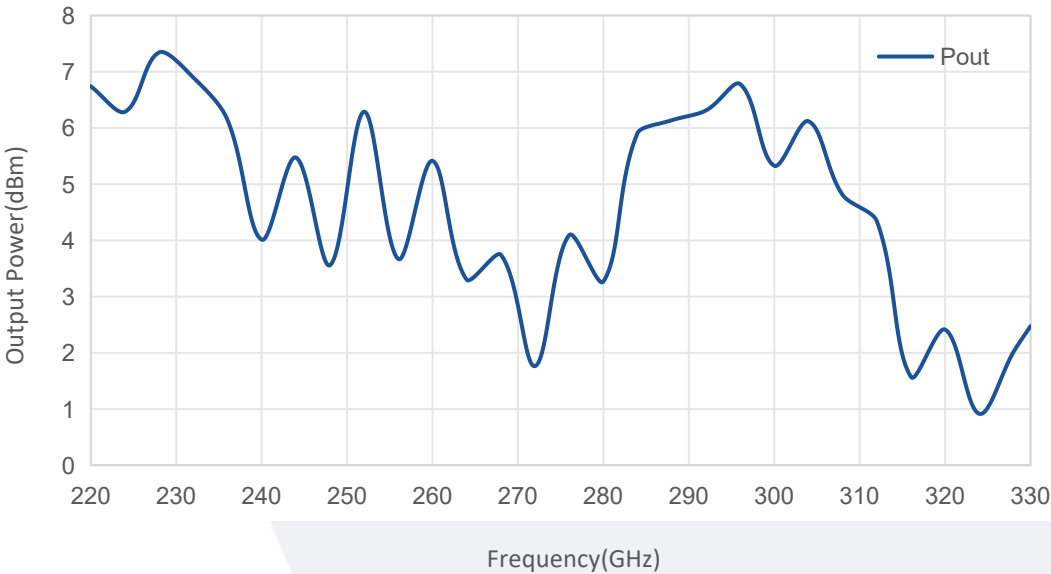
Parameter	Min	Typ	Max	Units
Operating Temperature	-10		+65	°C
Non-operating Temperature	-45		+85	°C
Relative humidity		95		%
Altitude	10,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

Base Number	Description	Revision
TMPM-220330-0307-3.4	Passive Frequency Multiplier X3, 220-330GHz, 3dBm Output Power,WR-3.4	Rev.1.1

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.