Suzhou Talent Microwave,Inc
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Passive Frequency Multiplier

WR-5.1/X2/140-220GHz /10dBm Output Power

Model: TMPM-140220-0213-05

TMPM-140220-0213-05 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 140 to 220 GHz at 250 mW RF power to yield typical +10 dBm output power at 140 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:140-220 GHz
- Output Power : 10 dBm Typ
- Compactness,High Power&Efficiency

Applications:

- Frequency Extenders
- THz Systems
- Source Modules

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Output Frequency	140		220	GHz
Input Frequency	70		110	GHz
Output Power		10	15	dBm
nput Power		250	350	mW
Multiply Factor		2		
Harmonic Suppression		-20		dBc

Mechanical Specifications:

Parameter	Value	Units
Output Connector	WR-5.1/UG-387/U	
Input Connector	WR-10/UG-387/U	
ize	25*25*20	mm

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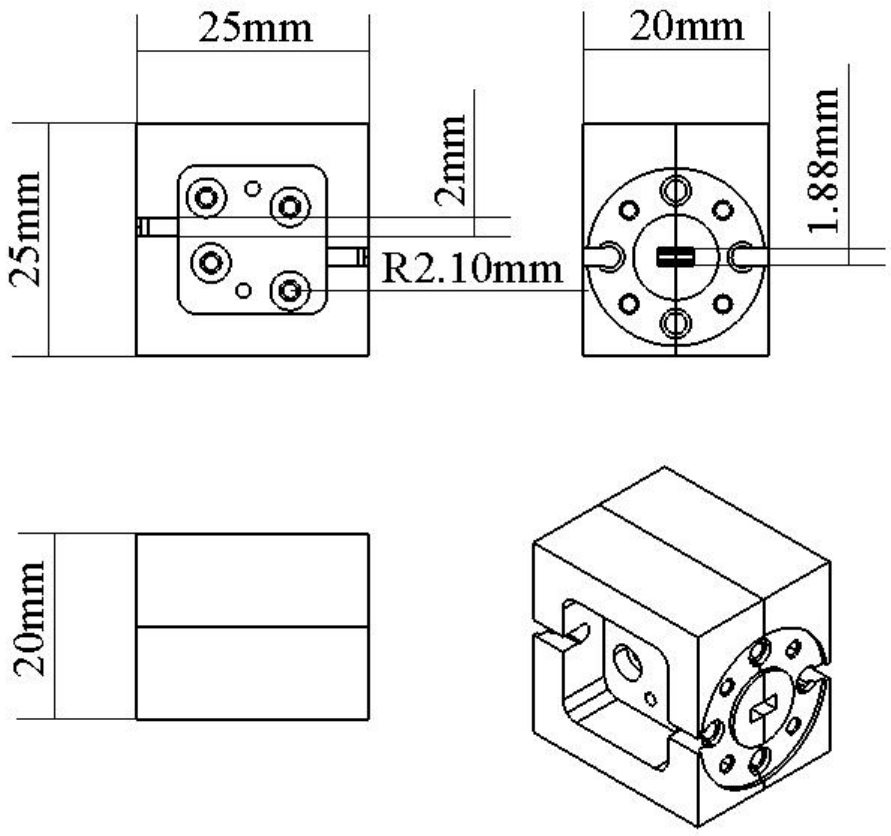
Absolute Maximum Ratings:

Parameter	Value
RF Input Power	350 mW
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm



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

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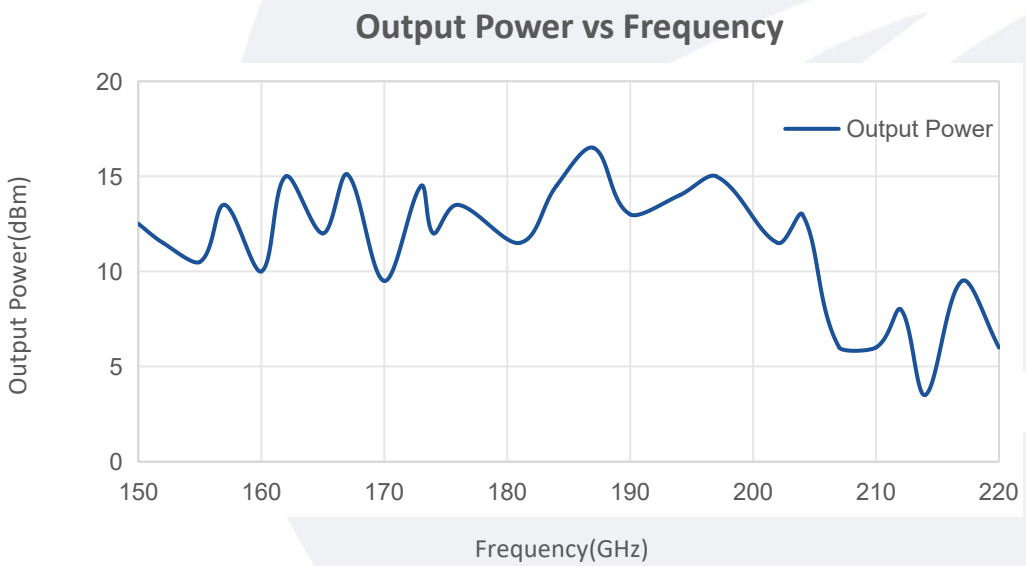
Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature	-10		+65	℃
Non-operating Temperature	-45		+85	℃
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-140220-0213-05	Passive Frequency Doubler X2,140-220GHz,10dBm Output Power,WR-5.1	Rev.1.1

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.