

Passive Frequency Multiplier

WR-08/X2/90-140GHz/2dBm Output Power

Model: TMPM-090140-0202-08

TMPM-090140-0202-08 is a WR-08 X2 passive multiplier that generates second order harmonics with good harmonic and fundamental suppression. This multiplier requires an input frequency range of 45 to 70 GHz at +15 dBm RF power to yield typical +2 dBm output power at 90 to 140 GHz. The multiplier is equipped with a WR-15 waveguide and UG-385/U-M flange as its input port and a WR-08 waveguide and UG-387/U-M flange as its output port.

Features:

- Output Frequency: 90-140GHz
- Output Power: 2dBm Typ
- Compactness, High Power & Efficiency

Applications:

- Frequency Extenders
- THz Systems
- Source Modules

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Output Frequency	90		140	GHz
Input Frequency	45		70	GHz
Output Power		2		dBm
Input Power		15	18	dBm
Multiply Factor		2		

Mechanical Specifications:

Parameter	Value	Units
Output Connector	WR-08/UG-387/U	
Input Connector	WR-15/UG-385/U	
Size	20*20*20	mm

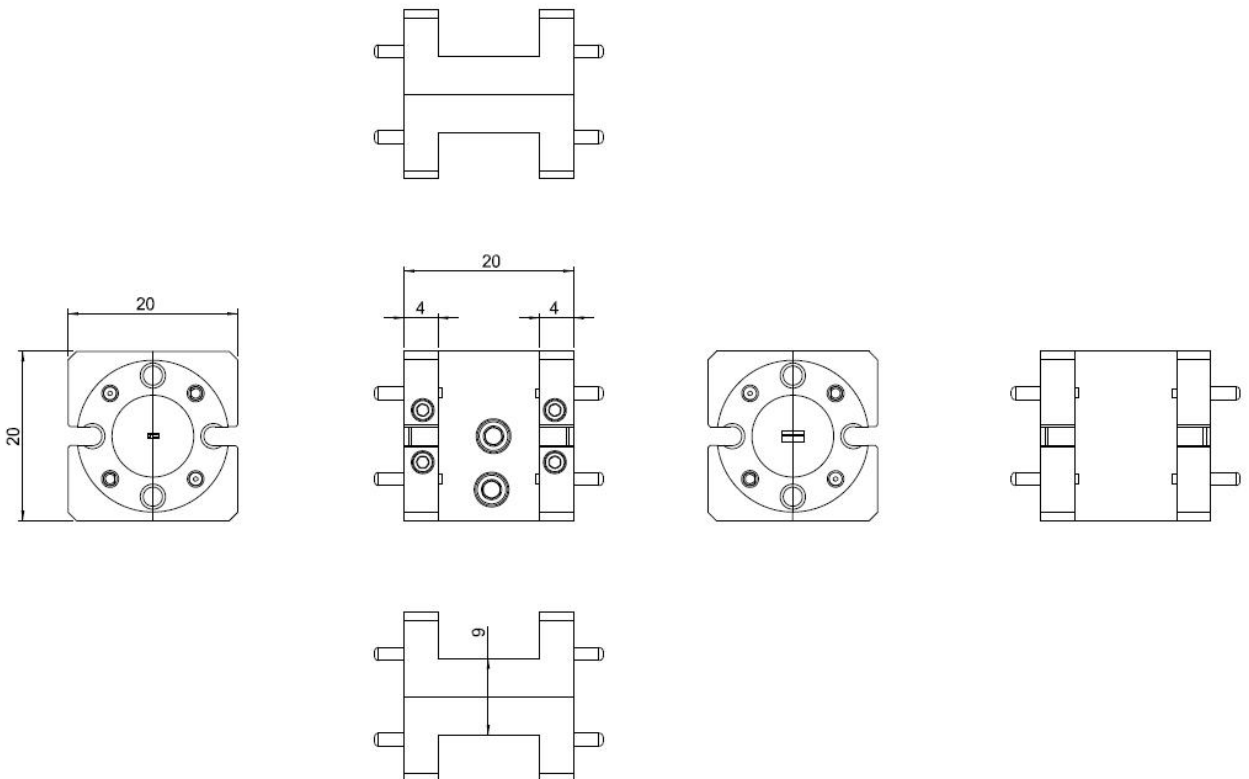
Absolute Maximum Ratings:

Parameter	Value
RF Input Power	+19 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm

Regulatory Compliance:



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-090140-0202-08	Passive Frequency Doubler X2,90-140GHz, 2dBm Output Power,WR-08	Rev.1.1