

Active Frequency Multiplier

WR-12/X2/60-80GHz/20dBm Output Power

Model: TMAM-060080-0220-12

TMAM-060080-0220-12 is an active X2 frequency multiplier. The multiplier has an input frequency of 30 to 40 GHz with a typical input power of 5 dBm and an output frequency of 60 to 80 GHz with a typical output power of +20 dBm. The DC power requirement for the multiplier is +12 V DC/450 mA. The input port configuration is a female SMA connector and the output is a WR-12 waveguide with a UG-387/U-M anti-cocking flange.

Features:

- Output Frequency: 60-80GHz
- Output Power: 20dBm Typ
- Low power consumption

Applications:

- Frequency Extenders
- THz Systems

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Output Frequency	60		80	GHz
Output Power		20		dBm
Input Frequency	30		40	GHz
Input Power	3	5	7	dBm
Multiply Factor		2		
DC Voltage		12		V
DC Supply Current		450		mA

Mechanical Specifications:

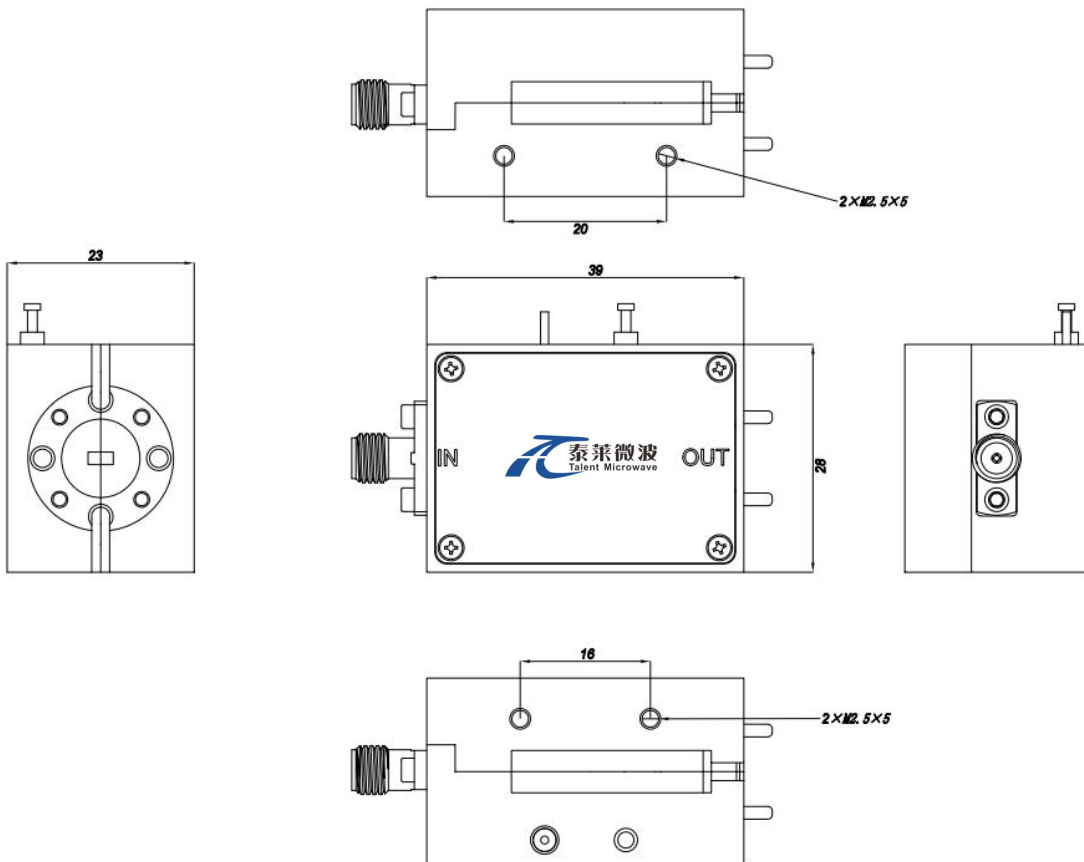
Parameter	Value	Units
Output Connector	WR-12/UG-387/U	
Input Connector	SMA Female	
DC Bias	Solder Pin	
Size	39*28*23	mm

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+13 V
RF Input Power	+10 dBm
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	50,000			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
TMAM-060080-0220-12	Active Multiplier, X2, 60-80GHz, Output Power:20dBm,WR-12/UG-387/U,SMA Female	Rev.1.0