

Active Frequency Multiplier

WR-10/X6/70-115GHz/12dBm Output Power

Model: TMAM-070115-0612-10

TMAM-070115-0612-10 is an active X6 frequency multiplier. The multiplier has an input frequency of 11.6 to 19.16 GHz with a typical input power of +5 dBm and an output frequency of 70 to 115 GHz with a typical output power of +12 dBm. The DC power requirement for the multiplier is +12 V DC. The input port configuration is a female SMA connector and the output is a WR-10 waveguide with a UG-387/U-M anti-cocking flange.

Features:

- Output Frequency: 70-115GHz
- Output Power: 12dBm Typ
- Low power consumption

Applications:

- Frequency Extenders
- THz Systems

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Output Frequency	70		115	GHz
Output Power		12		dBm
Input Frequency	11.6		19.16	GHz
Input Power	3	5	7	dBm
Multiply Factor		6		
Harmonic Suppression		25		dBc
DC Voltage		12		V

Mechanical Specifications:

Parameter	Value	Units
Output Connector	WR-10/UG-387/U	
Input Connector	SMA Female	
DC Bias	Solder Pin	
Size	50*30*23	mm

Parameter	Value
Supply Bias Voltage	+15 V
RF Input Power	+10 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Technical drawings of the TM-1000 microwave oven, showing front, top, side, and rear views with dimensions.

- Front View:** Shows the microwave's front panel with a circular window and a control panel on the right. Dimensions: 50 (width) x 30 (height).
- Top View:** Shows the top of the microwave with a width of 40 and a depth of 20.
- Side View:** Shows the side profile with a depth of 23.
- Rear View:** Shows the rear panel with a width of 20 and a height of 5.



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-070115-0612-10	Active Multiplier, X6, 70-115GHz, Output Power:12dBm,WR-10/UG-387/U,SMA Female	Rev.1.0