

Active Frequency Multiplier

WR-10/X3/67-110GHz/15dBm Output Power**Model: TMAM-067110-0315-10**

TMAM-067110-0315-10 is an active X3 frequency multiplier. The multiplier has an input frequency of 22.33 to 36.37 GHz with a typical input power of +5 dBm and an output frequency of 67 to 110 GHz with a typical output power of +15 dBm. The DC power requirement for the multiplier is +12 V DC/120 mA. The input port configuration is a female 2.92mm connector and the output is a WR-10 waveguide with a UG-387/U-M anti-cocking flange.

Features:

- Output Frequency: 67-110GHz
- Output Power: 15dBm Typ
- Low power consumption

Applications:

- Frequency Extenders
- THz Systems

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Output Frequency	67		110	GHz
Output Power		15		dBm
Input Frequency	22.33		36.37	GHz
Input Power		5		dBm
Multiply Factor		3		
Harmonics		-20		dBc
DC Voltage		12		V
DC Supply Current		120		mA

Mechanical Specifications:

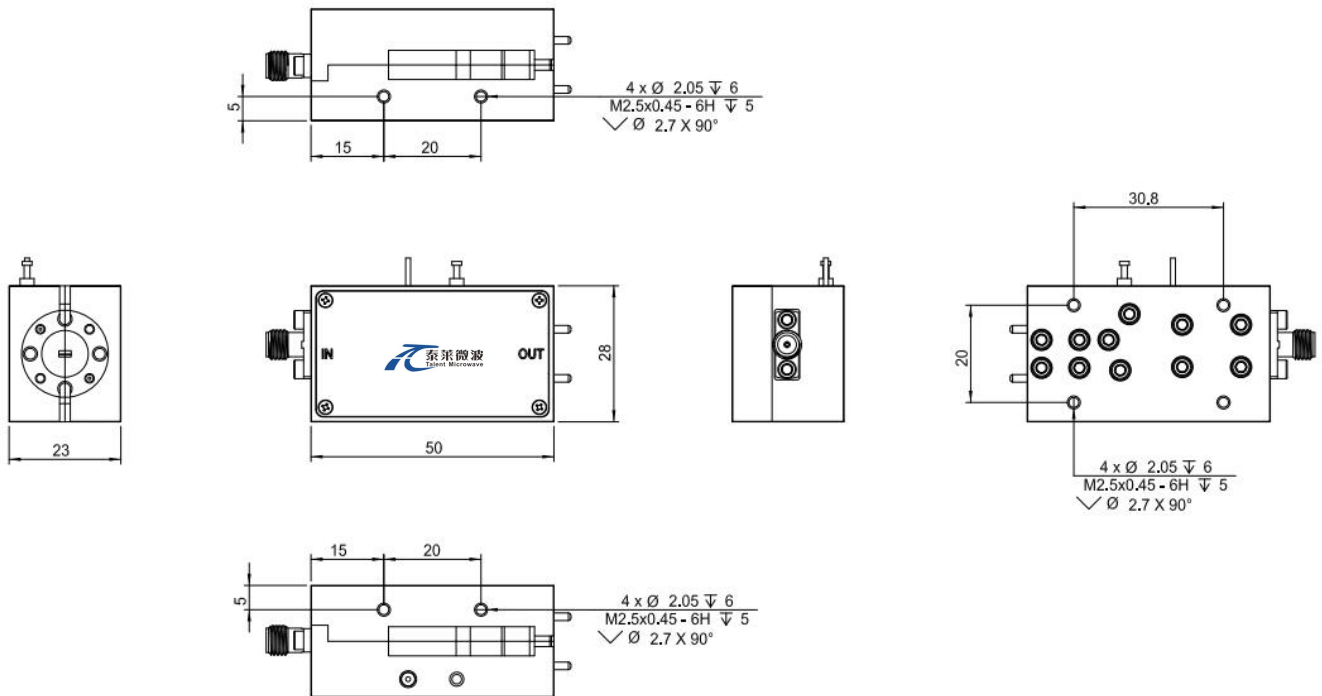
Parameter	Value	Units
Output Connector	WR-10/UG-385/U	
Input Connector	2.92mm Female	
DC Bias	Solder Pin	
Size	50*28*23	mm

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+15 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:

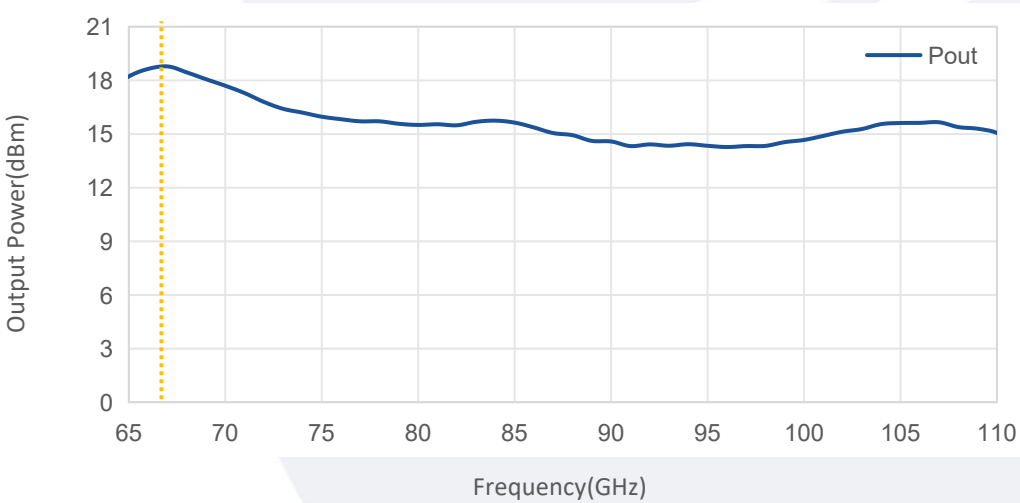
Parameter	Min	Typ	Max	Units
Operating Temperature	-10		+65	°C
Non-operating Temperature	-45		+85	°C
Relative humidity		95		%
Altitude	50,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

Base Number	Description	Revision
TMAM-067110-0315-10	Active Multiplier, X3, 67-110GHz, Output Power:15dBm,WR-10/UG-387/U,2.92mm Female	Rev.1.0

Typical Performance Data:

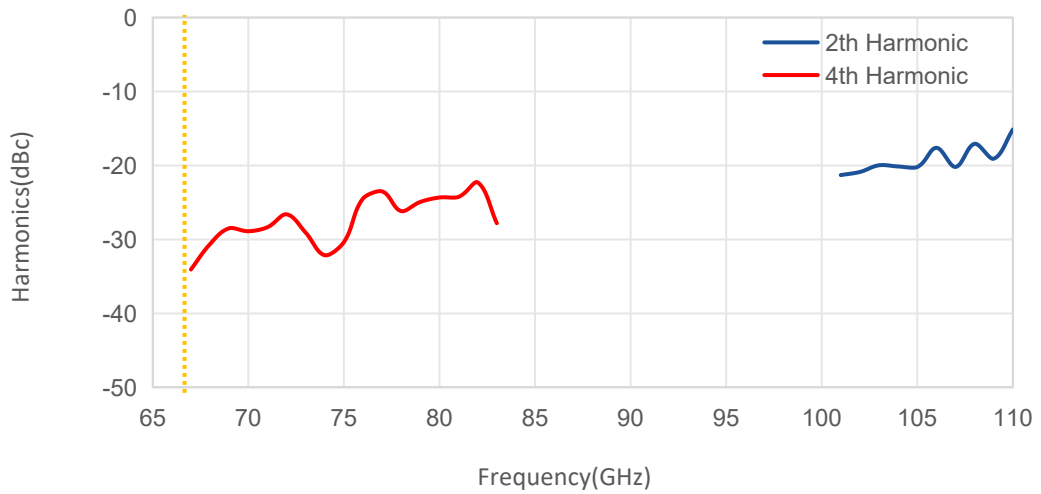
Output Power vs Frequency



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.

Typical Performance Data:

Harmonics vs Frequency



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