Suzhou Talent Microwave,Inc
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D-Band, Active Frequency Multiplier

WR-6.5/X12/110-170GHz/16dBm Output Power Model: TMAM-110170-1216-06-TTL-UCA

TMAM-110170-1216-06-TTL-UCA is a D-Band active X12 frequency multiplier. The multiplier has an input frequency of 9.16 to 14.17 GHz with a typical input power of +5 dBm and an output frequency of 110 to 170 GHz with a typical output power of +16 dBm. The DC power requirement for the multiplier is +12 V DC/480 mA. The input port configuration is a female SMA connector and the output is a WR-6.5 waveguide with a UG-387/U-M anti-cocking flange.

Features:

- Output Frequency: 110-170GHz
- Output Power: 16dBm Typ
- Low power consumption

Applications:

- Frequency Extenders
- THz Systems

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Output Frequency	110		170	GHz
Output Power		16		dBm
Input Frequency	9.16		14.17	GHz
Input Power	3	5	7	dBm
Multiply Factor		12		
Harmonics		-20		dBc
DC Voltage		12		V
Control Voltage	0V: Off to +5V: Full power output			V
TTL Voltage	On: +5V; Off: 0V			V
DC Supply Current		480		mA

Mechanical Specifications:

Parameter	Value	Units
Output Connector	WR-6.5/UG-387/U	
Input Connector	SMA Female	
DC Bias	Solder Pin	
Size	57.5*28*23(Without heatsink) 57.5*40*50.5(With heatsink)	mm

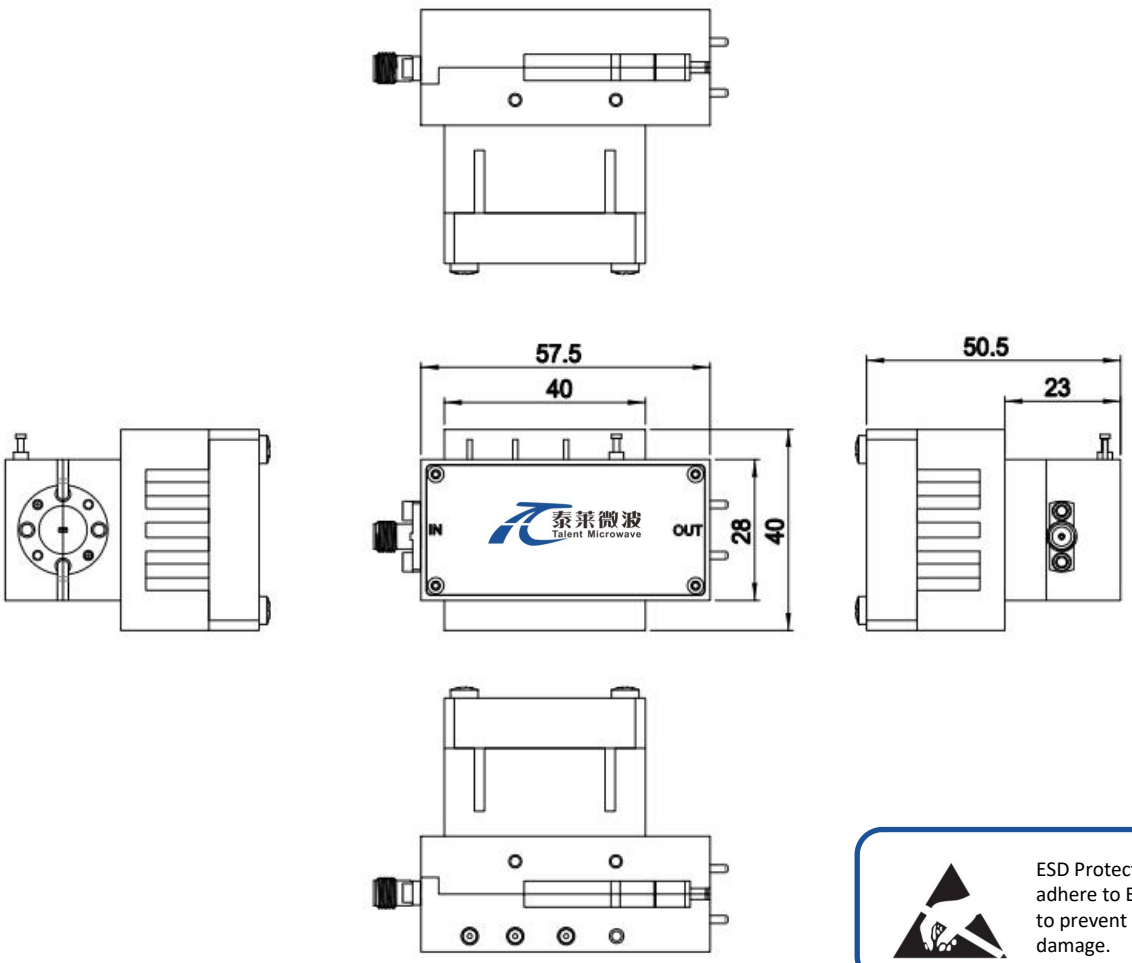
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Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+15 VDC
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.

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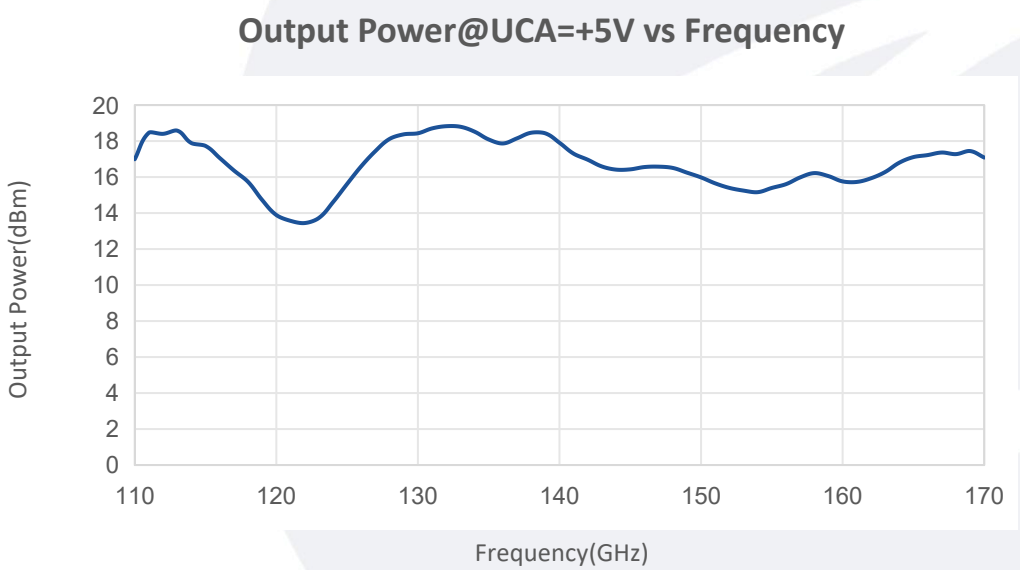
Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature	-10		+65	℃
Non-operating Temperature	-45		+85	℃
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-110170-1216-06-TTL-UCA	D-Band Active Multiplier, X12, 110-170GHz, Output Power:16dBm,WR-6.5/UG-387/U,SMA Female	Rev.1.0

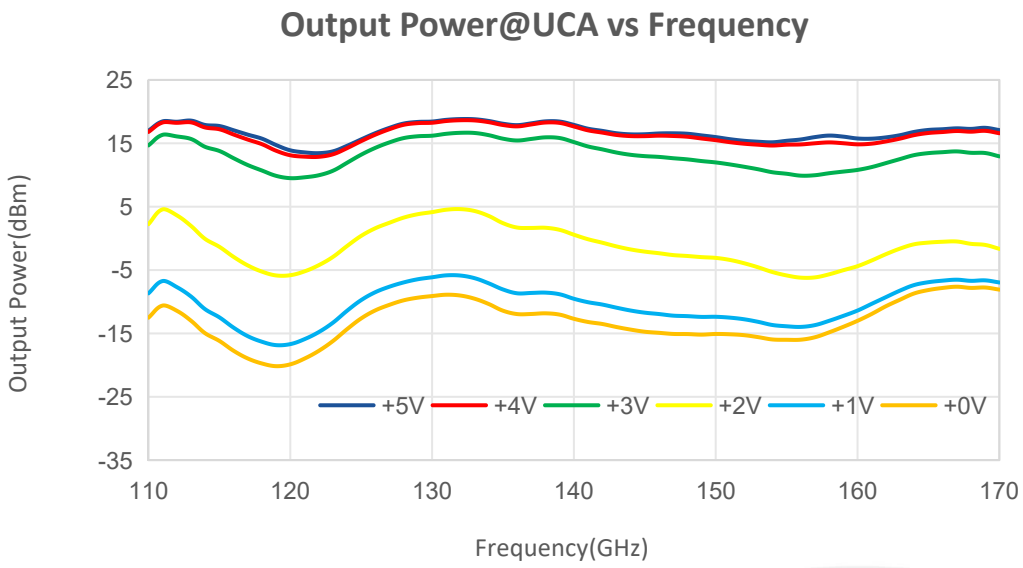
Typical Performance Data:

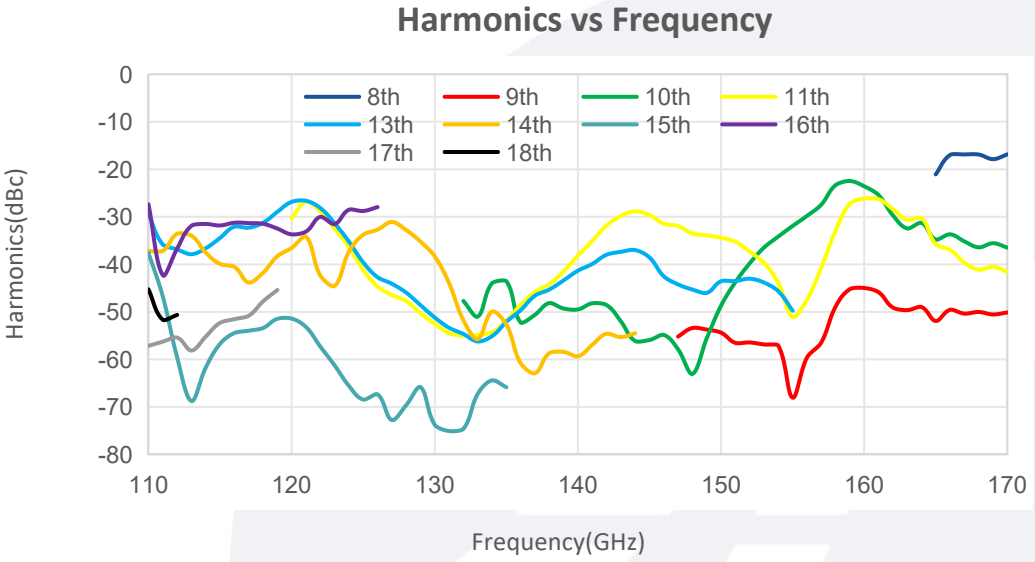


Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

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