Suzhou Talent Microwave,Inc
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Active Frequency Multiplier

WR-12/X2/55-90GHz/18dBm Output Power Model: TMAM-055090-0218-12

TMAM-055090-0218-12 is an active X2 frequency multiplier. The multiplier has an input frequency of 27.5 to 45 GHz with a typical input power of +5 dBm and an output frequency of 55 to 90 GHz with a typical output power of +18 dBm. The DC power requirement for the multiplier is +12 V DC. The input port configuration is a female 2.4mm connector and the output is a WR-12 waveguide with a UG-387/U-M anti-cocking flange.

Features:

- Output Frequency: 55-90GHz
- Output Power: 18dBm Typ
- Low power consumption

Applications:

- Frequency Extenders
- THz Systems

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Output Frequency	55		90	GHz
Output Power		18		dBm
Input Frequency	27.5		45	GHz
Input Power	3	5	7	dBm
Multiply Factor		2		
Harmonic Suppression		25		dBc
DC Voltage		12		V
DC Supply Current		260		mA

Mechanical Specifications:

Parameter	Value	Units
Output Connector	WR-12/UG-387/U	
Input Connector	2.4mm Female	
DC Bias	Solder Pin	
Size	46*28*23	mm

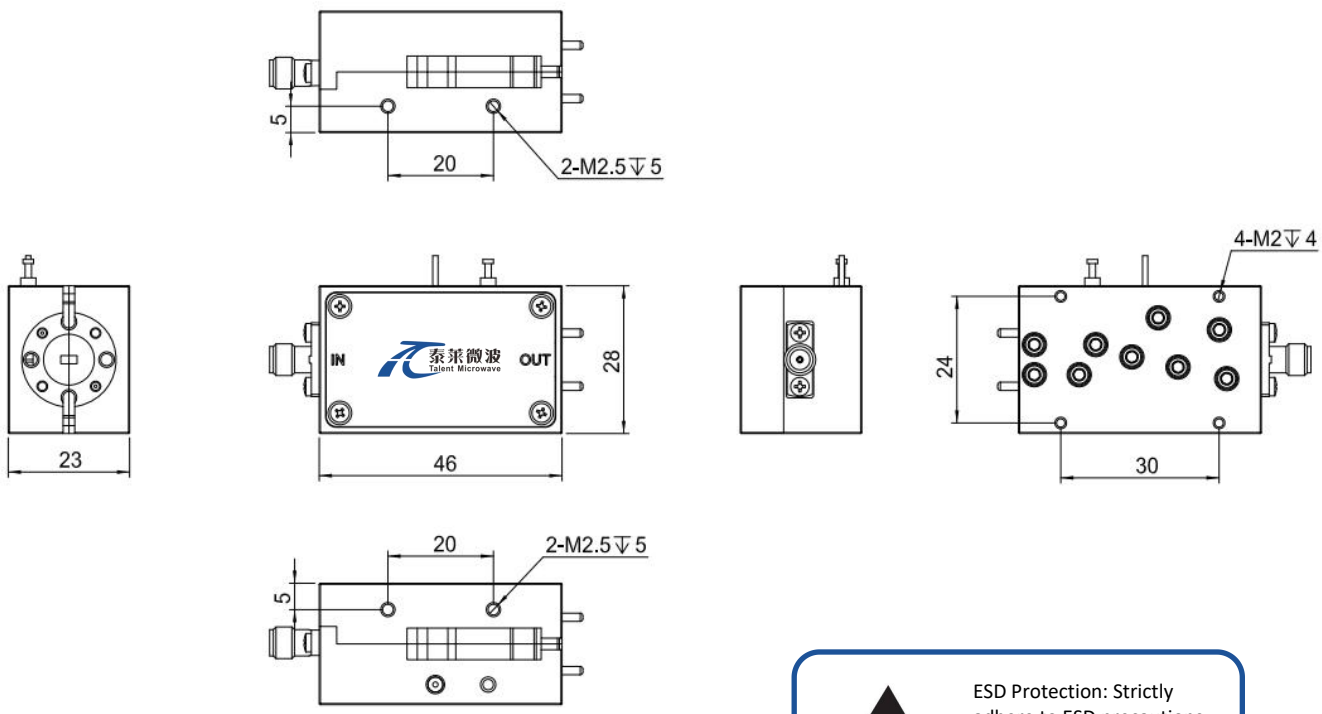
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Absolute Maximum Ratings:

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.

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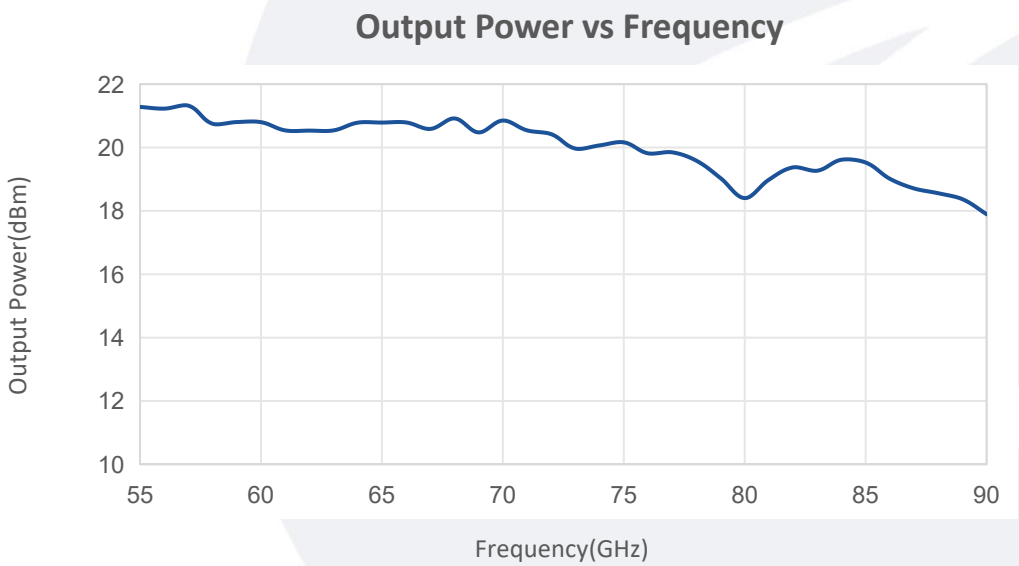
Environmental Conditions:

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-055090-0218-12	Active Multiplier,X2,55-90GHz, Output Power:18dBm,WR-12/UG-387/U,2.4mm Female	Rev.1.0

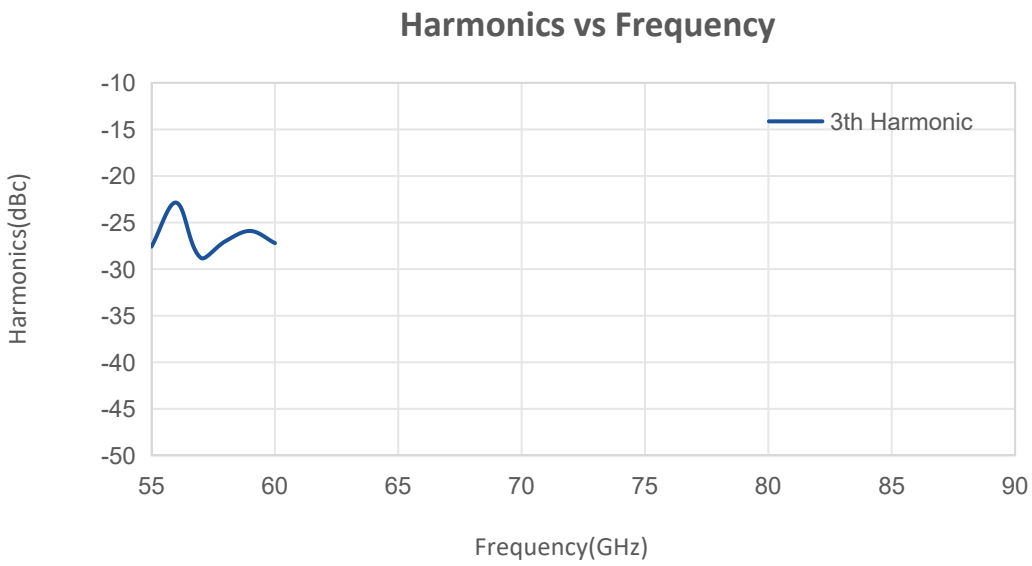
Typical Performance Data:



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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