

D-Band, Active Frequency Multiplier

WR-6.5/X8/110-170GHz/17dBm Output Power

Model: TMAM-110170-0817-06

TMAM-110170-0817-06 is an active X8 frequency multiplier. The multiplier has an input frequency of 13.75 to 21.25 GHz with a typical input power of 5 dBm and an output frequency of 110 to 170 GHz with a typical output power of +17 dBm. The DC power requirement for the multiplier is +12 V DC. The input port configuration is a female 2.92mm 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: 17dBm Typ
- Low power consumption

Applications:

- Frequency Extenders
- THz Systems

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Output Frequency	110		170	GHz
Output Power		17		dBm
Input Frequency	13.75		21.25	GHz
Input Power		5		dBm
Multiply Factor		8		
Harmonic Suppression		-15		dBc
DC Voltage		12		V

Mechanical Specifications:

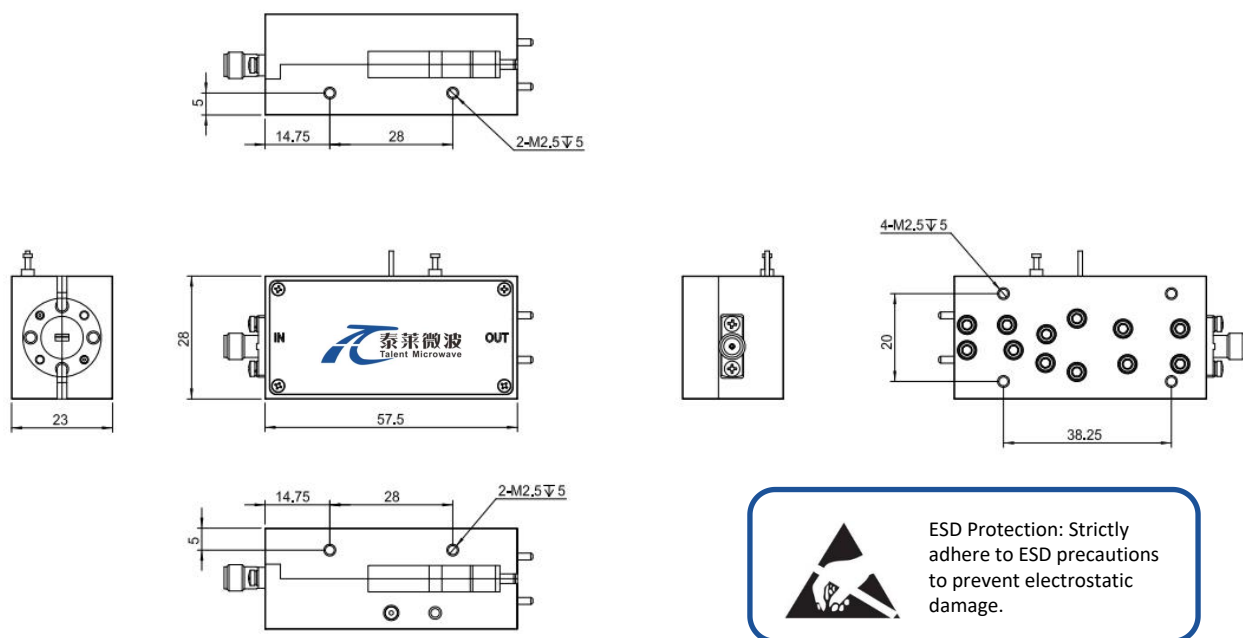
Parameter	Value	Units
Output Connector	WR-6.5/UG-387/U	
Input Connector	2.92mm Female	
DC Bias	Solder Pin	
Size	57.5*28*23	mm

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



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-110170-0817-06	Active Multiplier,X8,110-170GHz, Output Power:17dBm,WR-6.5/UG-387/U,2.92mm Female	Rev.1.0