

F-Band, Active Frequency Multiplier

WR-08/X4/96-116GHz/20dBm Output Power

Model: TMAM-096116-0420-08

TMAM-096116-0420-08 is an active X4 frequency multiplier. The multiplier has an input frequency of 24 to 29 GHz with a typical input power of 5 dBm and an output frequency of 96 to 116 GHz with a typical output power of +20 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-08 waveguide with a UG-387/U-M anti-cocking flange.

Features:

- Output Frequency: 96-116GHz
- Output Power: 20dBm Typ
- Low power consumption

Applications:

- Frequency Extenders
- THz Systems

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Output Frequency	96		116	GHz
Output Power		20		dBm
Input Frequency	24		29	GHz
Input Power		5		dBm
Multiply Factor		4		
Harmonic Suppression		-20		dBc
DC Voltage		12		V

Mechanical Specifications:

Parameter	Value	Units
Output Connector	WR-08/UG-387/U	
Input Connector	2.92mm Female	
DC Bias	Solder Pin	
Size	57.5*28*23	mm

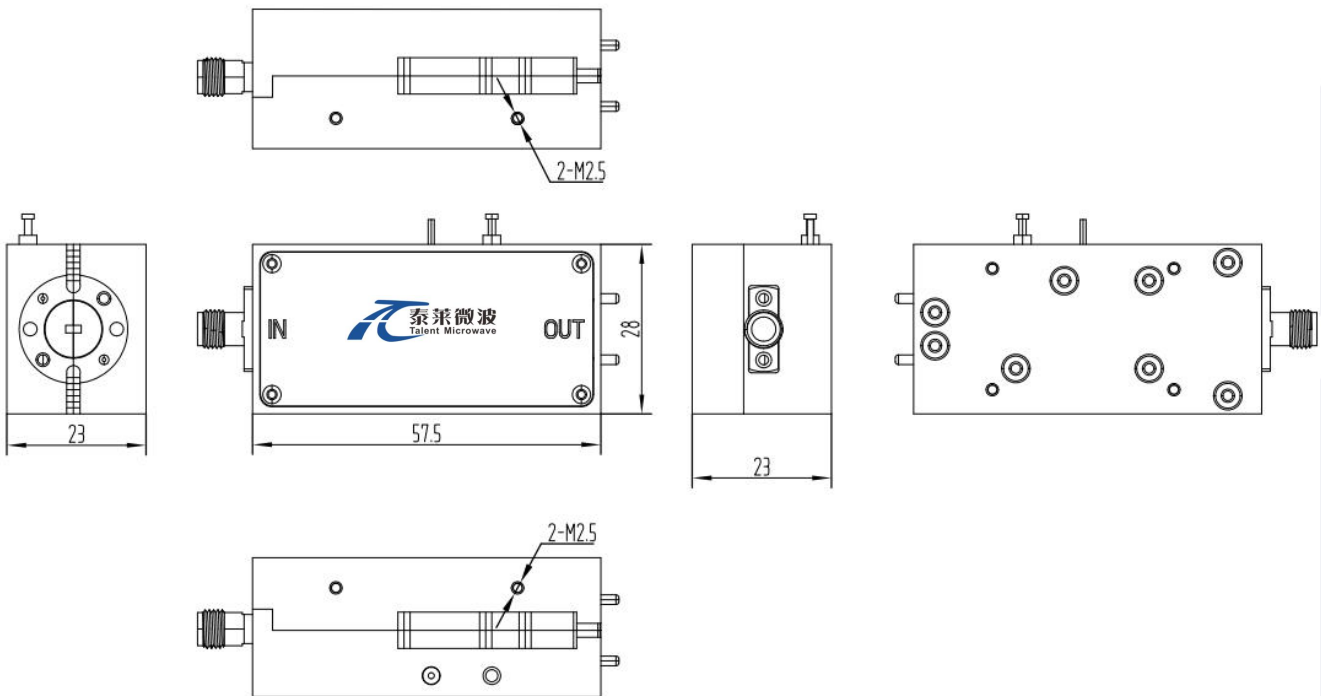
Absolute Maximum Ratings:

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

Outline Drawing:

Unit:mm

Regulatory Compliance:



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-096116-0420-08	Active Multiplier,X4,96-116GHz, Output Power:20dBm,WR-08/UG-387/U,2.92mm Female	Rev.1.1