

Active Frequency Multiplier

WR-22/X4/33-50GHz/15dBm Output Power

Model: TMAM-033050-0415-22

TMAM-033050-0415-22 is an active X4 frequency multiplier. The multiplier has an input frequency of 8.25 to 12.5 GHz with a typical input power of +5 dBm and an output frequency of 33 to 50 GHz with a typical output power of +15 dBm. The DC power requirement for the multiplier is +6 V DC/700 mA. The input port configuration is a female SMA connector and the output is a WR-22 waveguide with a UG-383/U-M anti-cocking flange.

Features:

- Output Frequency: 33-50GHz
- Output Power: 15dBm Typ
- Low power consumption

Applications:

- Frequency Extenders
- THz Systems

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Output Frequency	33		50	GHz
Output Power		15		dBm
Input Frequency	8.25		12.5	GHz
Input Power	3	5	7	dBm
Multiply Factor		4		
Input VSWR		2		:1
Output VSWR		2		:1
DC Voltage		6		V
DC Supply Current		700		mA

Mechanical Specifications:

Parameter	Value	Units
Output Connector	WR-22/UG-383/U	
Input Connector	SMA Female	
DC Bias	Solder Pin	
Size	70*24*50(With Heatsink) 70*48*50(Without Heatsink)	mm

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+8 V
RF Input Power	+10 dBm
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-033050-0415-22	Active Multiplier,X4,33-50GHz, Output Power:15dBm,WR-22/UG-383/U,SMA Female	Rev.1.1