

Active Frequency Multiplier

X4/40-70GHz/17dBm Output Power

Model: TLAM-4070-0417-V

TLAM-4070-0417-V is an active X4 frequency multiplier. The multiplier has an input frequency of 10 to 17.5 GHz with a typical input power of +5 dBm and an output frequency of 40 to 70 GHz with a typical output power of +17 dBm. The DC power requirement for the multiplier is +8V DC/500 mA. The input port configuration is female SMA connector and output port configuration is female 1.85mm connector.

Features:

- Output Frequency: 40-70GHz
- Output Power: 17dBm Typ
- Low power consumption
- 50 Ohm Matched Input / Output

Applications:

- Synthesizers
- Local oscillators

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Output Frequency	40		70	GHz
Output Power	15	17		dBm
Input Frequency	10		17.5	GHz
Input Power	0	5		dBm
Multiply Factor		4		
1st Harmonic Suppression		30		dBc
Harmonic Suppression		20		dBc
VSWR		2.2		:1
DC Voltage		8	10	V
DC Supply Current		500		mA

Mechanical Specifications:

Parameter	Value	Units
Output Connector	1.85mm Female	
Input Connector	SMA Female	
DC Bias	Solder Pin	
Size	50*30*10	mm

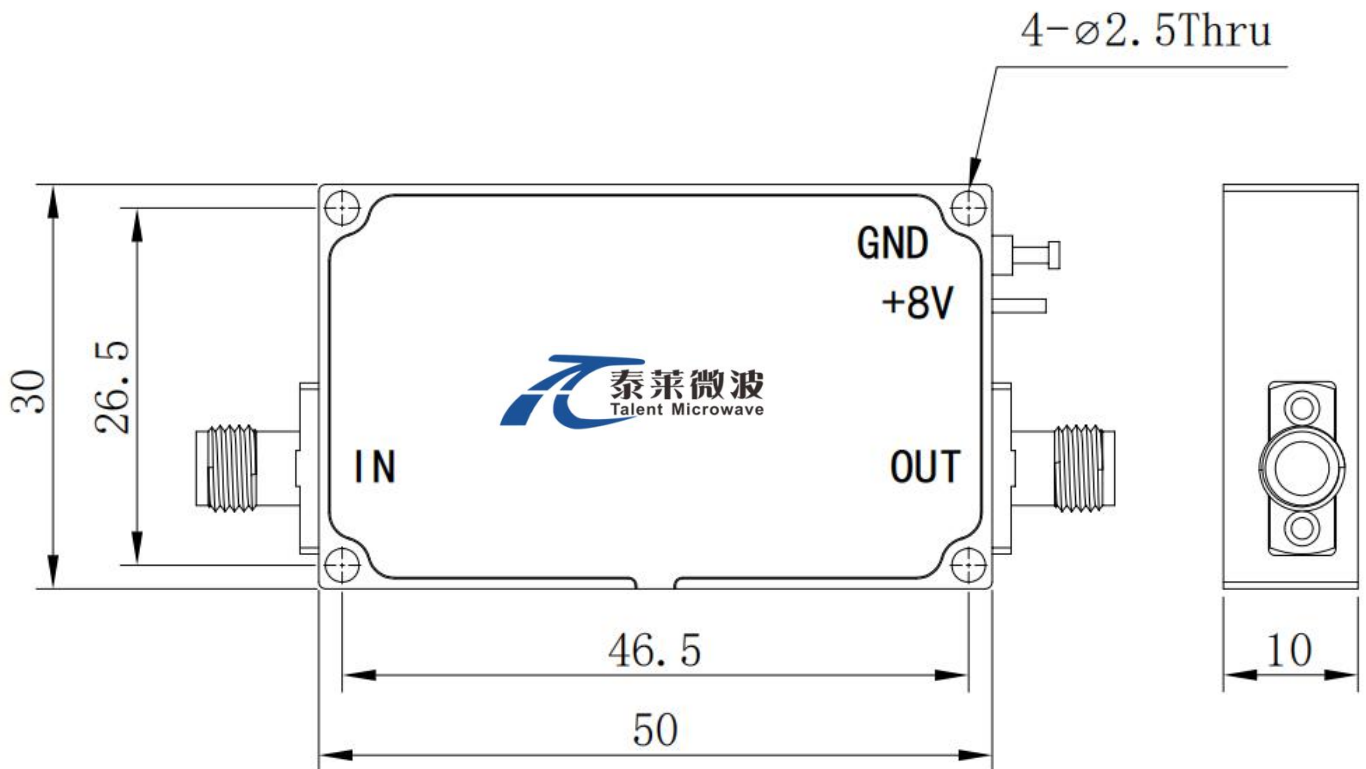
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+10 V
RF Input Power	+9 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.

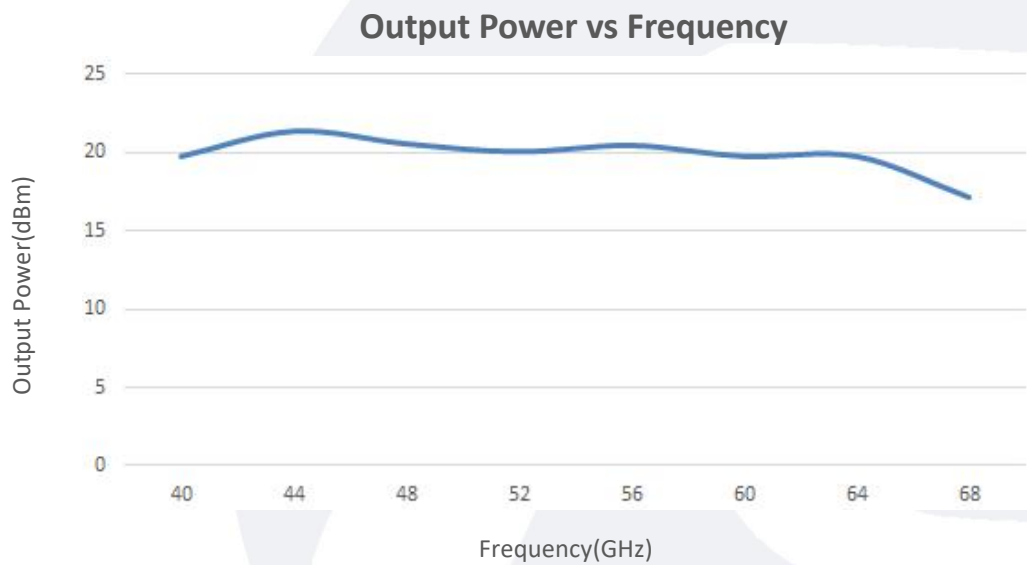
Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature	-10		+65	°C
Non-operating Temperature	-45		+85	°C
Relative humidity		95		%
Altitude	10,000			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
TLAM-4070-0417-V	Active Multiplier,X2, 4-16 GHz , +17 dBm Output Power,1.85mm Female	Rev.1.1

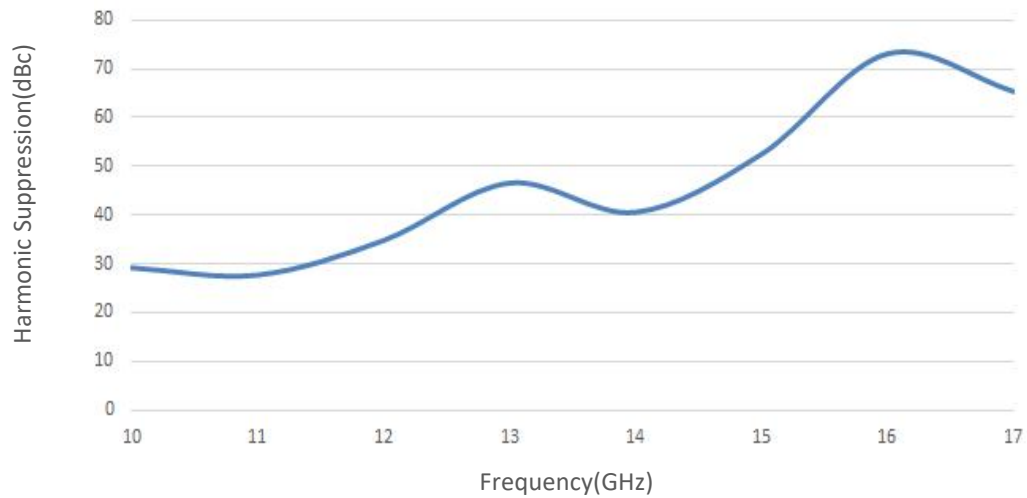
Typical Performance Data:



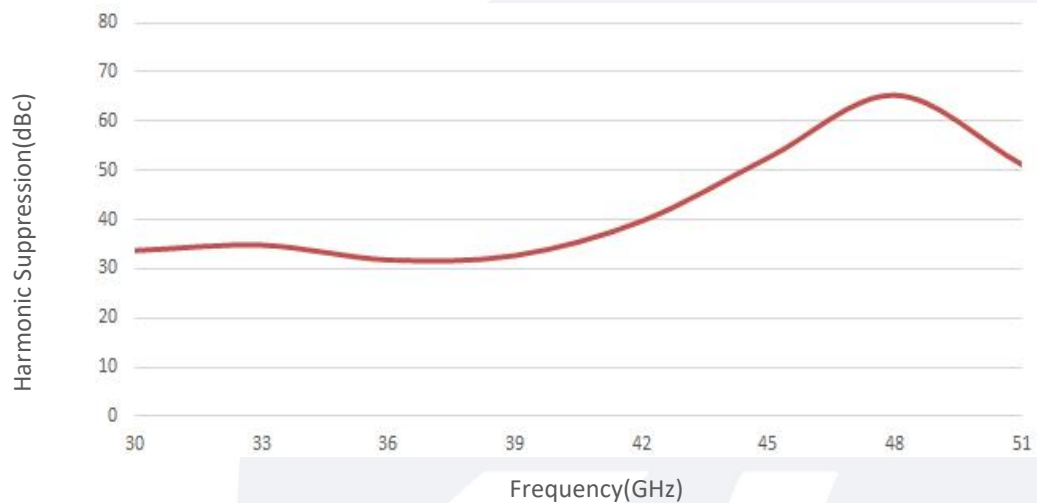
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

Typical Performance Data:

1st Harmonic Suppression vs Frequency

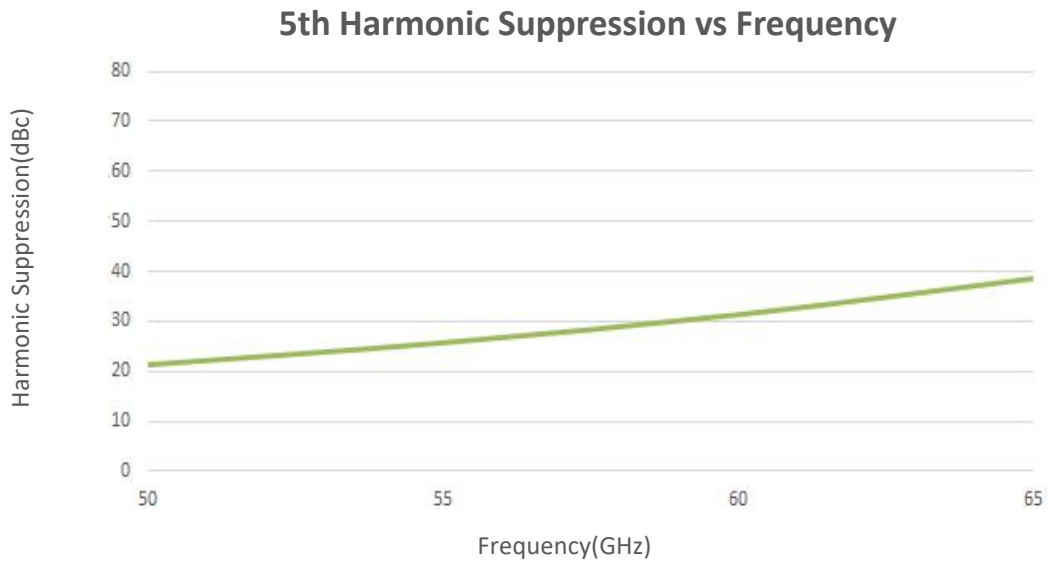


3rd Harmonic Suppression vs Frequency



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Typical Performance Data:



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