

Active Frequency Multiplier

X4/ 20-50GHz /+15dBm Output Power

Model: TLAM-2050-0415-K

TLAM-2050-0415-K is an active X4 frequency multiplier. The multiplier has an input frequency of 5 to 12.5 GHz with a typical input power of +15 dBm and an output frequency of 20 to 50 GHz with a typical output power of +15 dBm. The DC power requirement for the multiplier is +12 V DC/130 mA. The input/output port configuration is 2.4mm female connector.

Features:

- Output Frequency:20-50GHz
- Output Power :15dBm Typ
- Low power consumption
- 50 Ohm Matched Input / Output

Applications:

- Synthesizers
- Local oscillators

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Output Frequency	20		50	GHz
Output Power		+15		dBm
Input Frequency	5		12.5	GHz
Input Power	+12	+15	+18	dBm
Multiply Factor		4		
3rd Harmonic		-20		dBc
DC Voltage		+12	+15	V
DC Supply Current		130		mA

Mechanical Specifications:

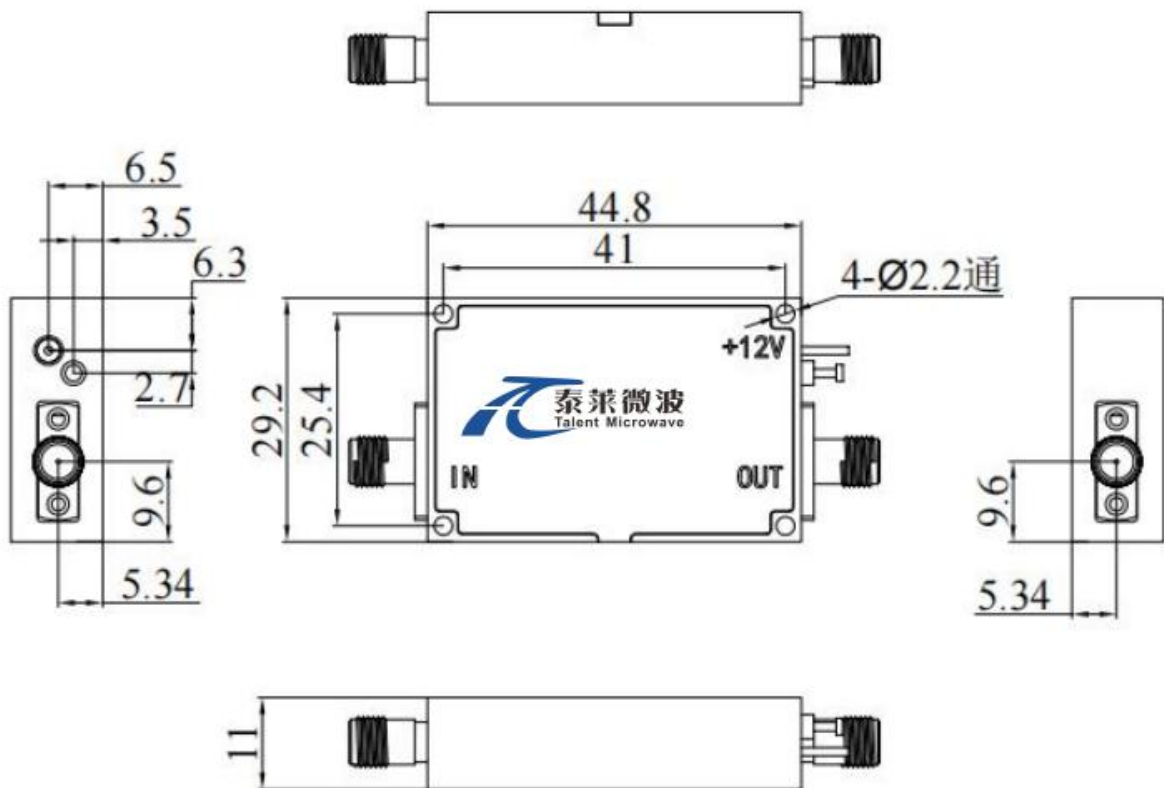
Parameter	Value	Units
Output Connector	2.4mm Female	
Input Connector	SMA Female	
DC Bias	Solder Pin	
Size	44.8*29.2*11	mm

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+15 V
RF Input Power	+18 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm



ESD Protection: Strictly adhere to ESD precautions to prevent electrostatic damage.

Environmental Conditions:

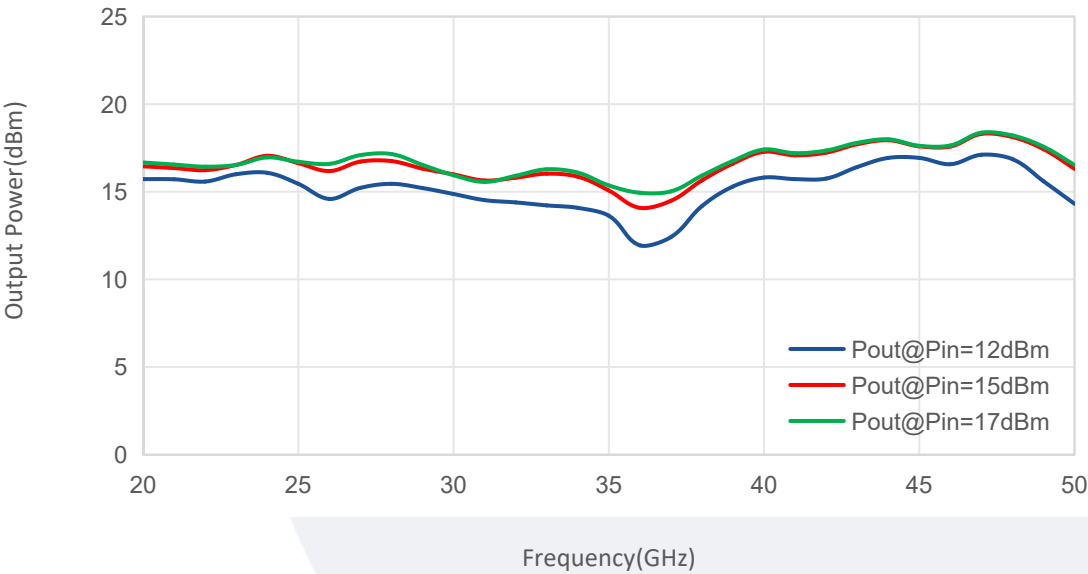
Parameter	Min	Typ	Max	Units
Operating Temperature	0		+55	°C
Non-operating Temperature	-25		+65	°C
Relative humidity		95		%
Altitude	50,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

Base Number	Description	Revision
TLAM-2050-0415-K	Active Multiplier X4, 20-50 GHz ,+15 dBm Output Power	Rev.1.1

Typical Performance Data:

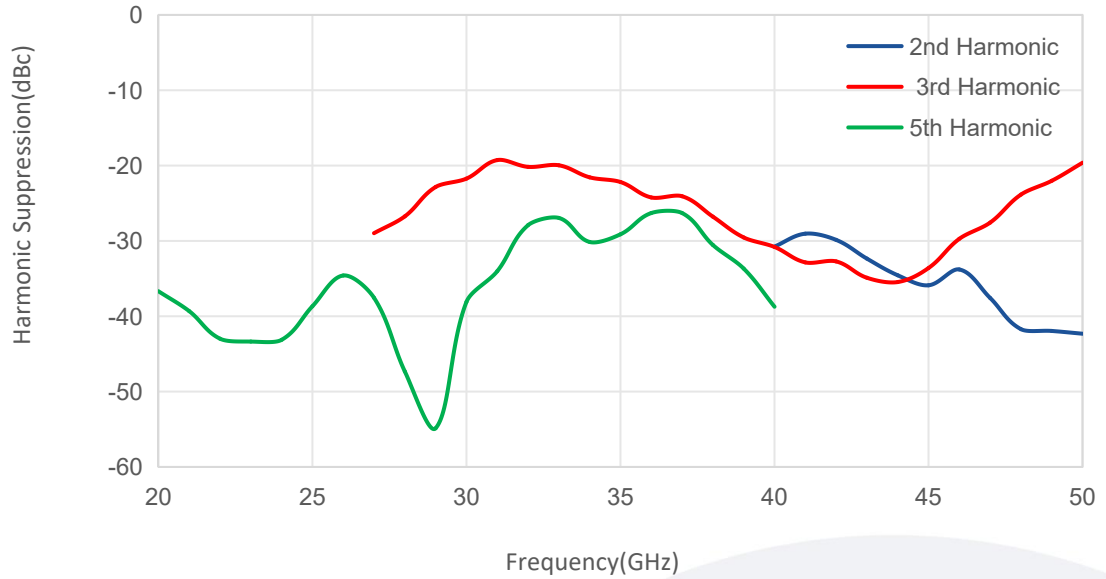
Output Power vs Frequency



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:

Harmonic Suppression vs Frequency



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