

Active Frequency Multiplier

X4/32-50GHz/0dBm Output Power

Model: TLAM-3250-0400-2.4

TLAM-3250-0400-2.4 is an active X4 frequency multiplier. The multiplier has an input frequency of 8 to 12.5 GHz with a typical input power of -10 dBm and an output frequency of 32 to 50 GHz with a typical output power of 0 dBm. The DC power requirement for the multiplier is +12 V DC/90 mA. The input port configuration is female SMA connector. The output port configuration is female 2.4 connector.

Features:

- Output Frequency: 32-50GHz
- Output Power: 0dBm Typ
- Low power consumption
- 50 Ohm Matched Input / Output

Applications:

- Synthesizers
- Local oscillators

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Output Frequency	32		50	GHz
Output Power		0		dBm
Input Frequency	8		12.5	GHz
Input Power	-10		0	dBm
Multiply Factor		4		
1st Harmonic		-20		dBc
2nd armonic		-10		dBc
3rd Harmonic		-10		dBc
DC Voltage	+8	+12	+15	V
DC Supply Current		90		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

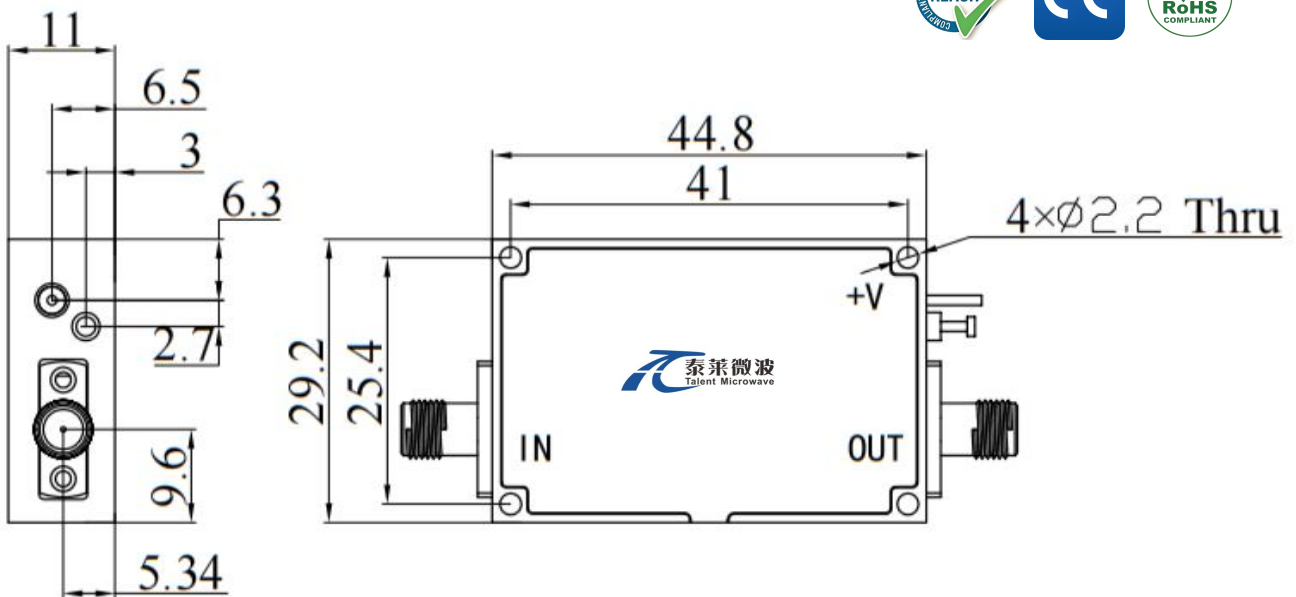
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+15 V
RF Input Power	+5dBm
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:

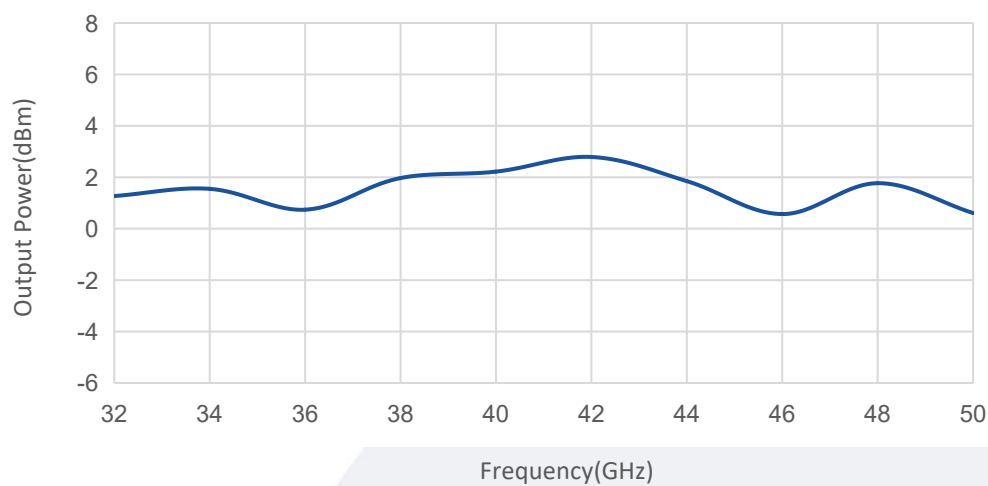
Parameter	Min	Typ	Max	Units
Operating Temperature	-10		+65	°C
Non-operating Temperature	-45		+85	°C
Relative humidity		95		%
Altitude	10,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

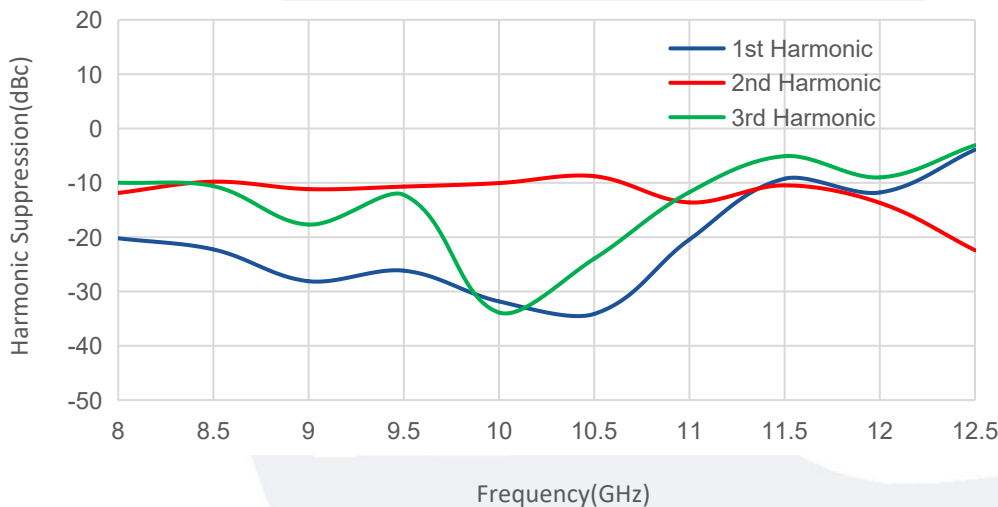
Base Number	Description	Revision
TLAM-3250-0400-2.4	Active Multiplier,X4, 32-50GHz ,0dBm Output Power,SMA Female,2.4mm Female	Rev.1.1

Typical Performance Data:

Output Power vs Frequency



Harmonic Suppression 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.