

## Active Frequency Multiplier

X2/ 20-60GHz /16dBm Output Power/1.85mm Female

Model: TLAM-2060-0216-V

TLAM-2060-0216-V is an active X2 frequency multiplier. The multiplier has an input frequency of 10 to 30 GHz with a typical input power of -2 dBm and an output frequency of 20 to 60 GHz with a minimum output power of +16 dBm. The DC power requirement for the multiplier is +12 V DC/240 mA. The input port configuration is female 2.92mm connector. The output port configuration is female 1.85mm connector.

### Features:

- Output Frequency:20-60GHz
- Output Power :16 dBm Min
- Low power consumption
- 50 Ohm Matched Input / Output

### Applications:

- Synthesizers
- Local oscillators

### Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Output Frequency	20		60	GHz
Output Power	+16			dBm
Input Frequency	10		30	GHz
Input Power	-6	-2	+2	dBm
Multiply Factor		2		
Harmonic		-15		dBc
DC Voltage	+8	+12	+15	V
DC Supply Current		240		mA

### Mechanical Specifications:

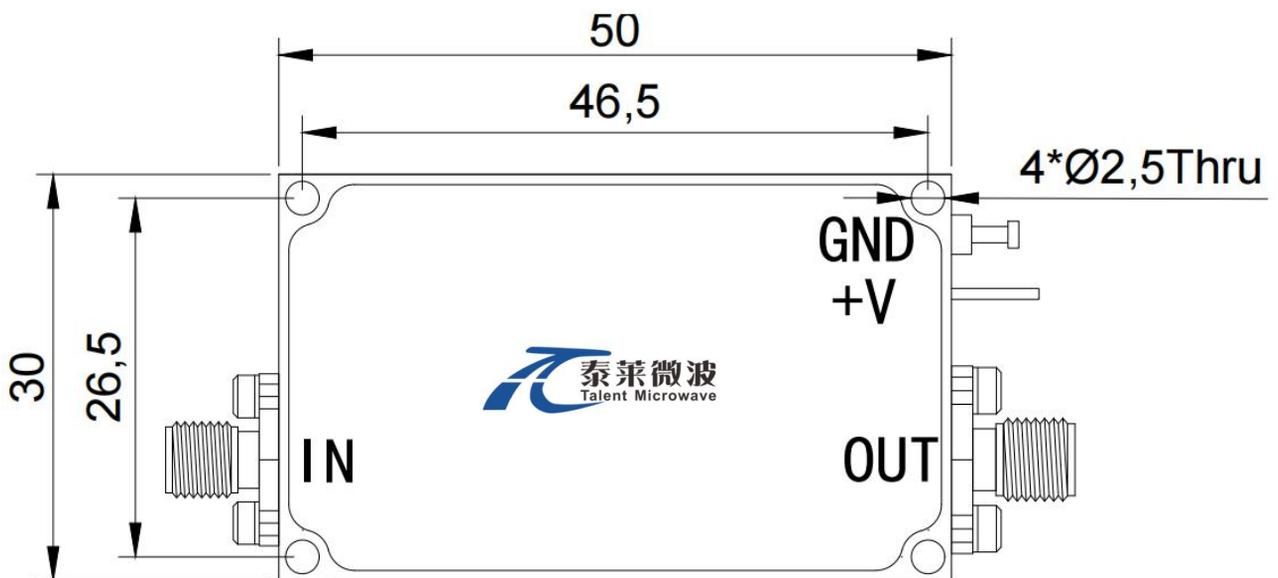
Parameter	Value	Units
Output Connector	1.85mm Female	
Input Connector	2.92mm Female	
DC Bias	Solder Pin	

### Absolute Maximum Ratings:

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

### Outline Drawing:

Unit:mm



**\*\*\*Heat Sink Required During Operation**



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

### Environmental Conditions:

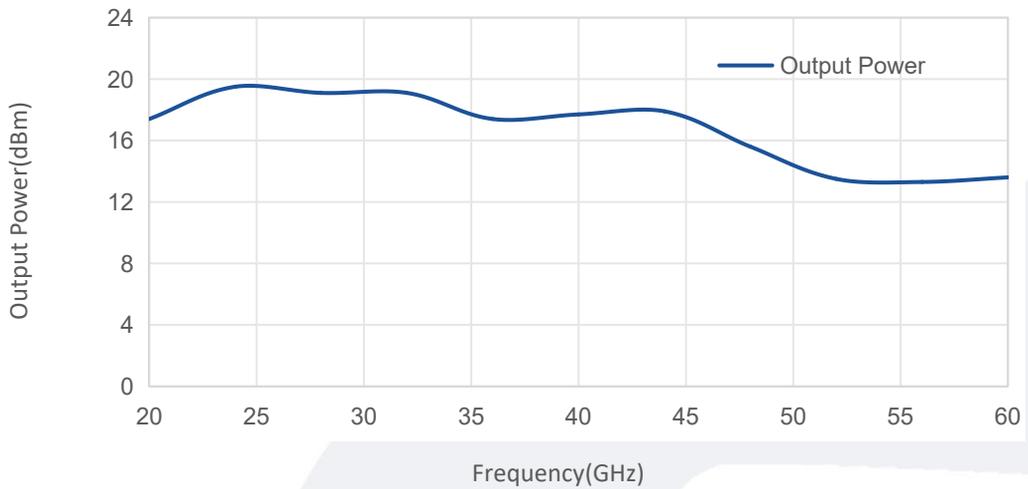
Parameter	Min	Typ	Max	Units
Operating Temperature	-10		+65	°C
Non-operating Temperature	-45		+85	°C
Relative humidity		95		%
Altitude	10,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

### Ordering Information:

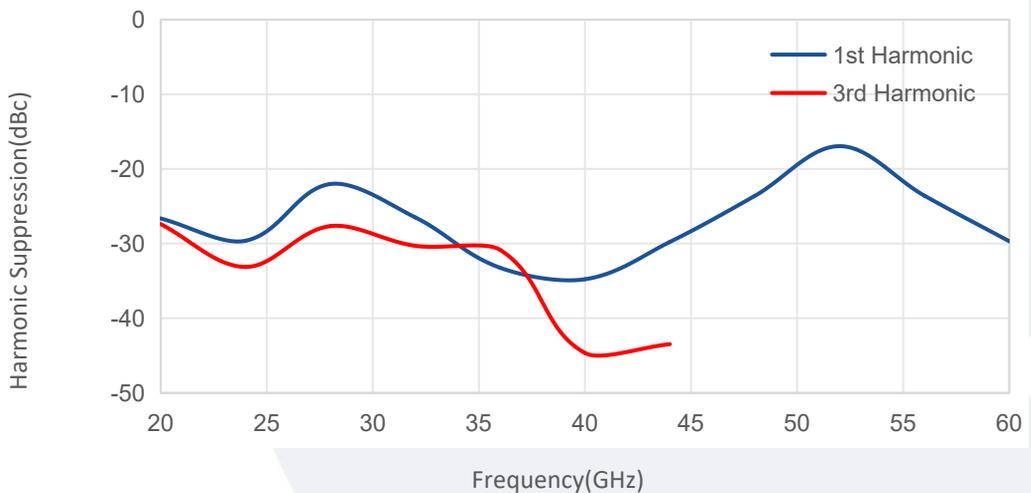
Base Number	Description	Revision
TLAM-2060-0216-V	Active Multiplier, X2, 20-60 GHz , +16 dBm Output Power, 1.85mm Female	Rev.1.0

### 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.