

## Active Frequency Multiplier

### X2/18-52GHz/16dBm Output Power

**Model: TLAM-1852-0216-V**

TLAM-1852-0216-V is an active X2 frequency multiplier. The multiplier has an input frequency of 9 to 26 GHz with a typical input power of -6 to dBm and an output frequency of 18 to 52 GHz with a typical output power of +16 dBm. The DC power requirement for the multiplier is +12 V DC/150 mA. The input port configuration is female SMA connector and output port configuration is female 1.85mm connector.

#### Features:

- Output Frequency:18-52GHz
- Output Power :16dBm Typ
- Low power consumption
- 50 Ohm Matched Input / Output

#### Applications:

- Synthesizers
- Local oscillators

#### Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Output Frequency	18		52	GHz
Output Power		+16		dBm
Input Frequency	9		26	GHz
Input Power		-6	-4	dBm
Multiply Factor		2		
Harmonic Suppression		-20		dBc
DC Voltage		+12		V
DC Supply Current		150		mA

#### Mechanical Specifications:

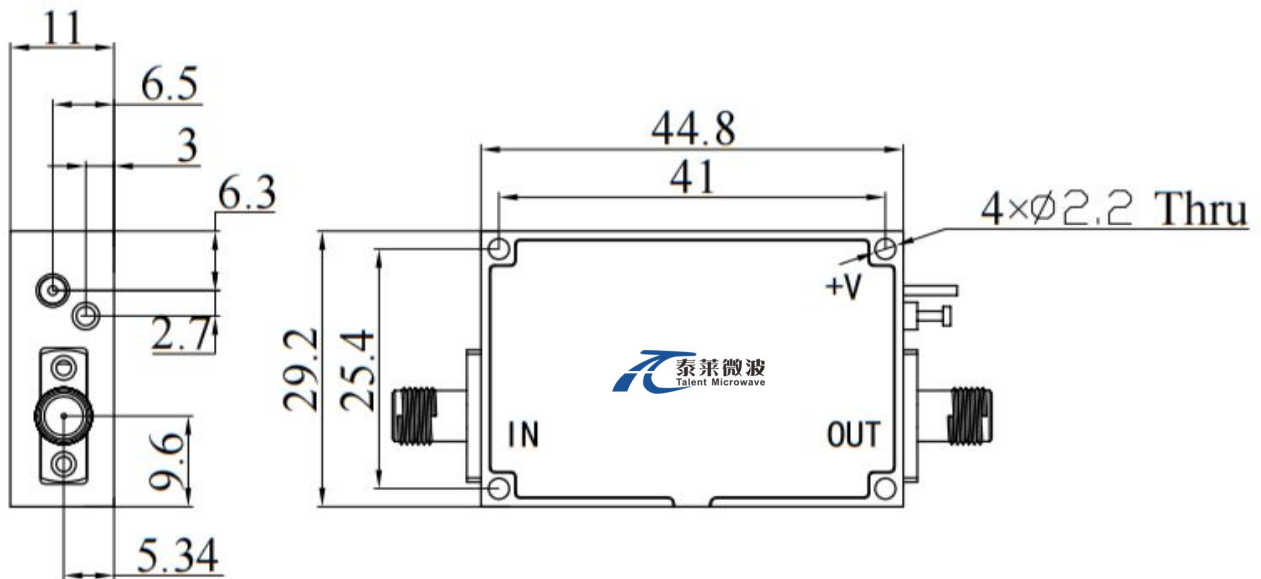
Parameter	Value	Units
Output Connector	1.85mm Female	
Input Connector	SMA Female	
DC Bias	Solder Pin	
Size	44.8*29.2*11	mm

### Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+15 V
RF Input Power	+10 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:

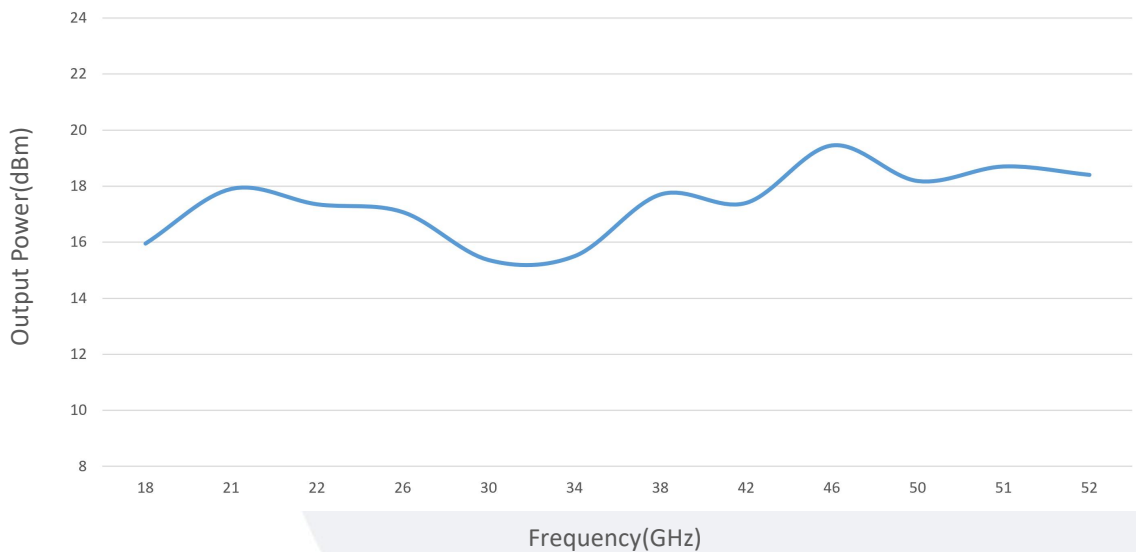
Parameter	Min	Typ	Max	Units
Operating Temperature	-55		+85	°C
Non-operating Temperature	-68		+150	°C
Relative humidity		95		%
Altitude	50,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

### Ordering Information:

Base Number	Description	Revision
TLAM-1852-0216-V	Active Multiplier , X2, 18-52GHz,+16dBm Output Power	Rev.1.0

### Typical Performance Data:

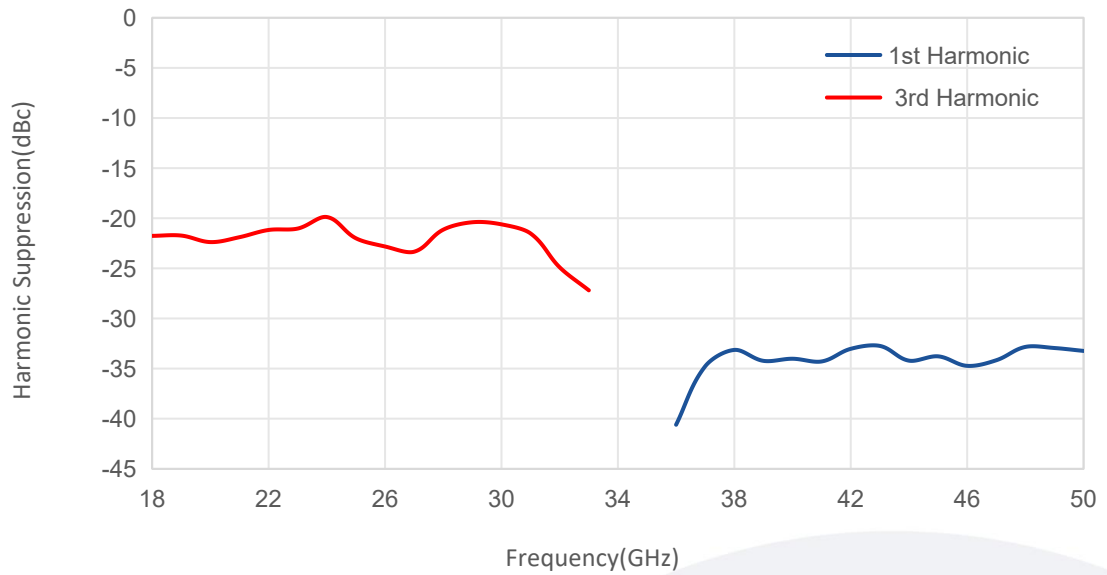
Output Power vs Frequency



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



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.