

## Active Frequency Multiplier

### X2/24-40GHz/15dBm Output Power

**Model: TLAM-2440-0215-K**

TLAM-2440-0215-K is an active X2 frequency multiplier. The multiplier has an input frequency of 12 to 20 GHz with a typical input power of +2 dBm and an output frequency of 24 to 40 GHz with a typical output power of +15 dBm. The DC power requirement for the multiplier is +5 V DC/100 mA. The input port configuration is female SMA connector and output port configuration is female 2.92mm connector.

#### Features:

- Output Frequency:24-40GHz
- 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	24		40	GHz
Output Power		+15		dBm
Input Frequency	12		20	GHz
Input Power		-2	+6	dBm
Multiply Factor		2		
3rd Harmonic			-10	dBc
DC Voltage		+5		V
DC Supply Current		100		mA

#### Mechanical Specifications:

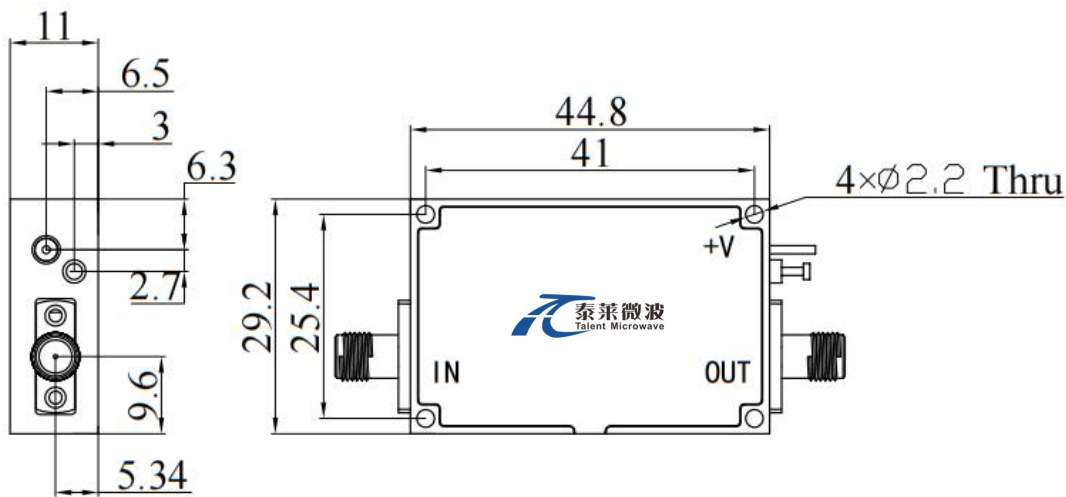
Parameter	Value	Units
Output Connector	2.92mm Female	
Input Connector	SMA Female	
DC Bias	Solder Pin	
Size	44.8*29.2*11	mm

### Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+8 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:

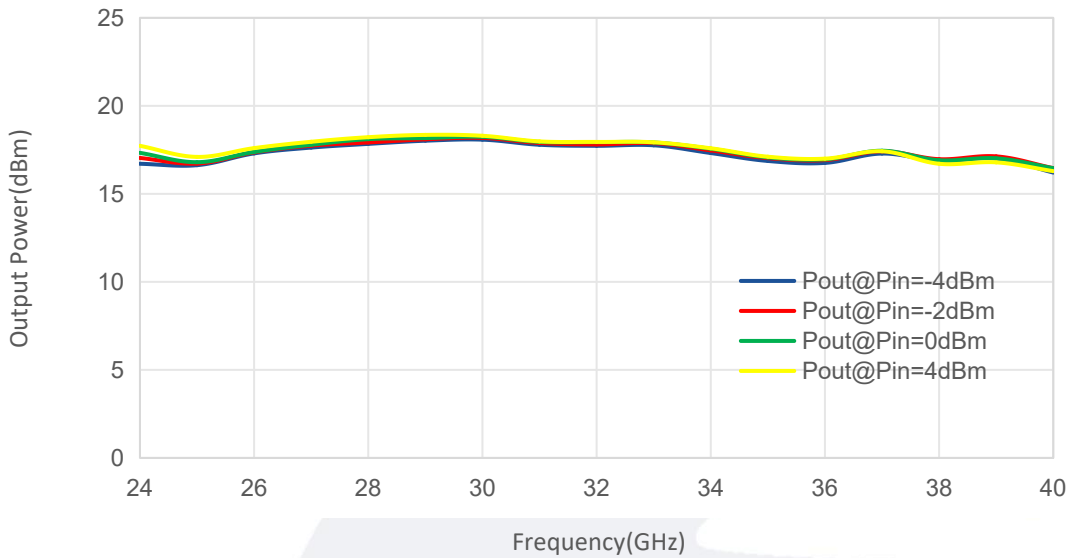
Parameter	Min	Typ	Max	Units
Operating Temperature	-55		+85	°C
Non-operating Temperature	-65		+150	°C
Relative humidity		95		%
Altitude		50,000		feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

### Ordering Information:

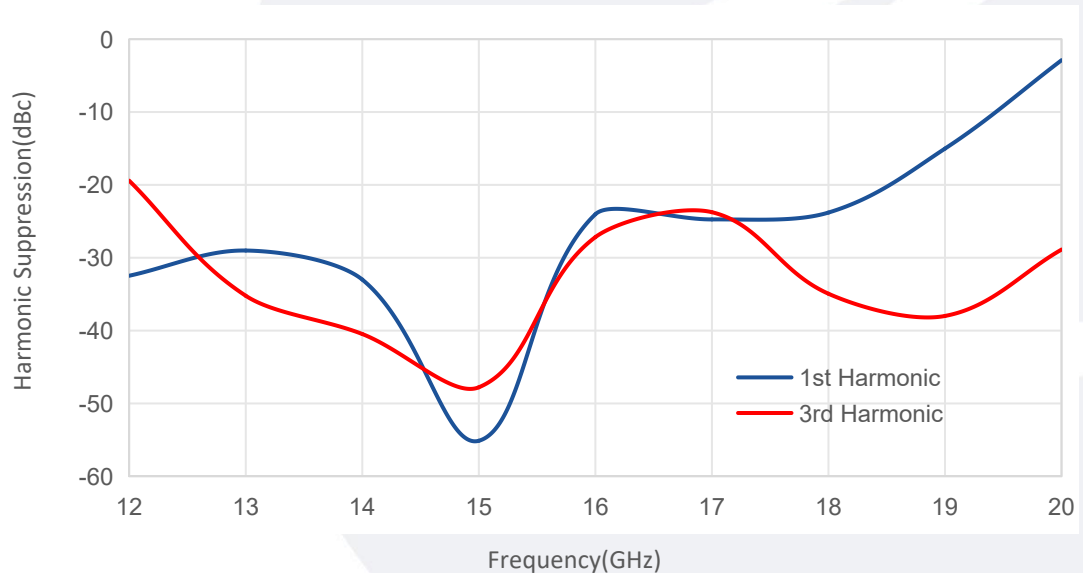
Base Number	Description	Revision
TLAM-2440-0215-k	Active Multiplier X2, 24-40 GHz, +15 dBm Output Power	Rev.1.1

### 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.