

## Passive Multiplier

### X2/12-24GHz /2dBm Output Power

Model: TLPM-1224-0202-K

TLPM-1224-0202-K is a X2 passive multiplier. The multiplier has an input frequency of 6 to 12 GHz with a typical input power of +15 dBm and an output frequency of 12 to 24 GHz with a typical output power of +2 dBm. The input and output ports configuration are 2.92mm connector.

#### Features:

- Output Frequency:12-24GHz
- Output Power :2dBm Typ
- Low power consumption
- 50 Ohm Matched Input / Output

#### Applications:

- Synthesizers
- Local oscillators

#### Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Output Frequency	12		24	GHz
Output Power		2		dBm
Input Frequency	6		12	GHz
Input Power		15		dBm
Multiply Factor		2		
1st Harmonic Isolation		-40		dBc
3rd Harmonic Isolation		-50		dBc
4th Harmonic Isolation		-25		dBc

The value of harmonic isolation is compared to input power.

#### Mechanical Specifications:

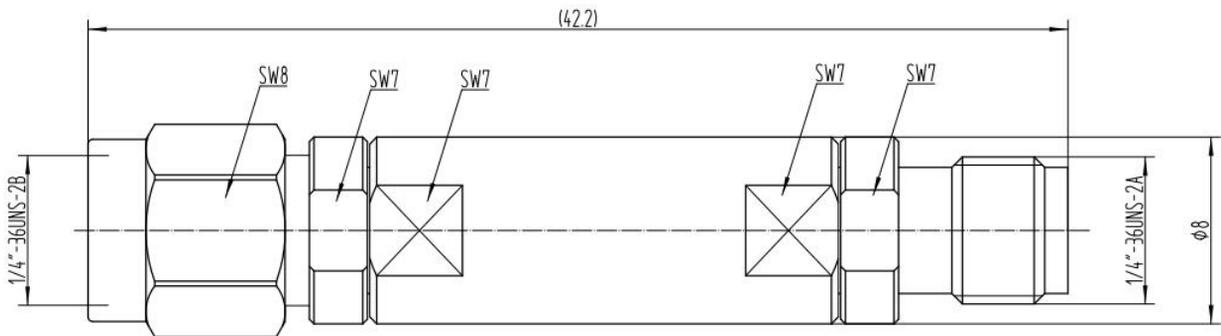
Parameter	Value	Units
Output Connector	2.92mm Female	
Input Connector	2.92mm Male	
Length	42.2	mm

### Absolute Maximum Ratings:

Parameter	Value
RF Input Power	+24 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

### Outline Drawing:

Unit:mm



### Environmental Conditions:

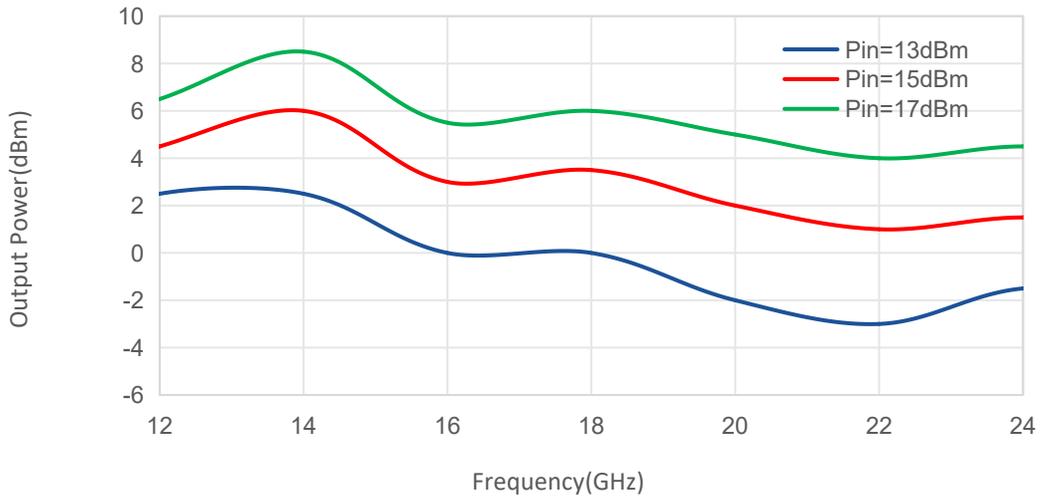
Parameter	Min	Typ	Max	Units
Operating Temperature	-10		+65	°C
Non-operating Temperature	-45		+85	°C
Relative humidity		95		%
Altitude	10,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

### Ordering Information:

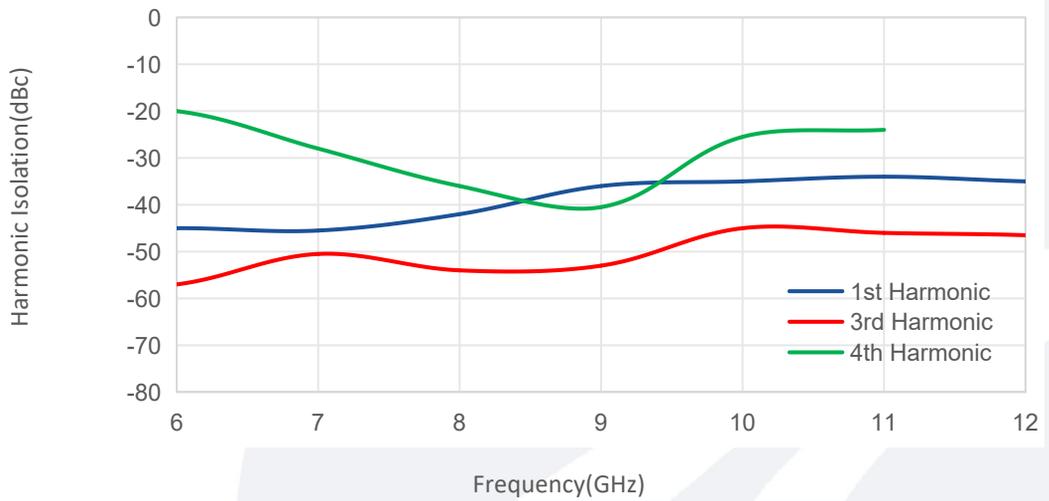
Base Number	Description	Revision
TLPM-1224-0202-K	Passive Multiplier , X2, 12-24GHz , +2 dBm Output Power,2.92mm	Rev.1.1

## Typical Performance Data:

### Output Power@Pin



### Harmonic Isolation 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.