

Passive Multiplier

X2/4-12GHz /1dBm Output Power

Model: TLPM-0412-0201-K

TLPM-0412-0201-K is a X2 passive multiplier. The multiplier has an input frequency of 2 to 6 GHz with a typical input power of 15 dBm and an output frequency of 4 to 12 GHz with a typical output power of 1 dBm. The input and output ports configuration are 2.92mm connector.

Features:

- Output Frequency: 4-12GHz
- Output Power : 1dBm Typ
- Low power consumption
- 50 Ohm Matched Input / Output

Applications:

- Synthesizers
- Local oscillators

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Output Frequency	4		12	GHz
Output Power		1		dBm
Input Frequency	2		6	GHz
Input Power		15		dBm
Multiply Factor		2		
1st Harmonic Suppression		-30		dBc
3rd Harmonic Suppression		-35		dBc
4th Harmonic Suppression		-20		dBc
1st Harmonic Isolation		-45		dBc
3rd Harmonic Isolation		-48		dBc
4th Harmonic Isolation		-35		dBc

The value of harmonic isolation is compared to input power and harmonic suppression is compared to output power.

Mechanical Specifications:

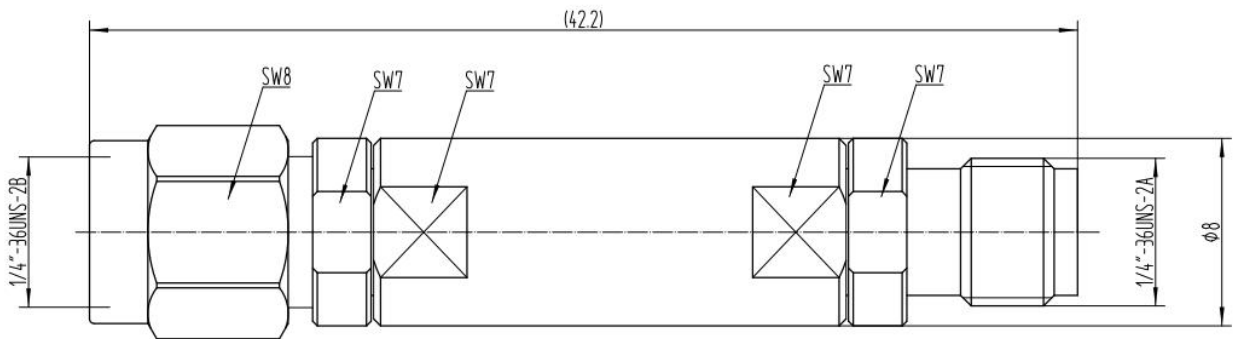
Parameter	Value	Units
Output Connector	2.92mm Female	
Input Connector	2.92mm Male	
Length	42.2	mm

Absolute Maximum Ratings:

Parameter	Value
RF Input Power	+22 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm



Environmental Conditions:

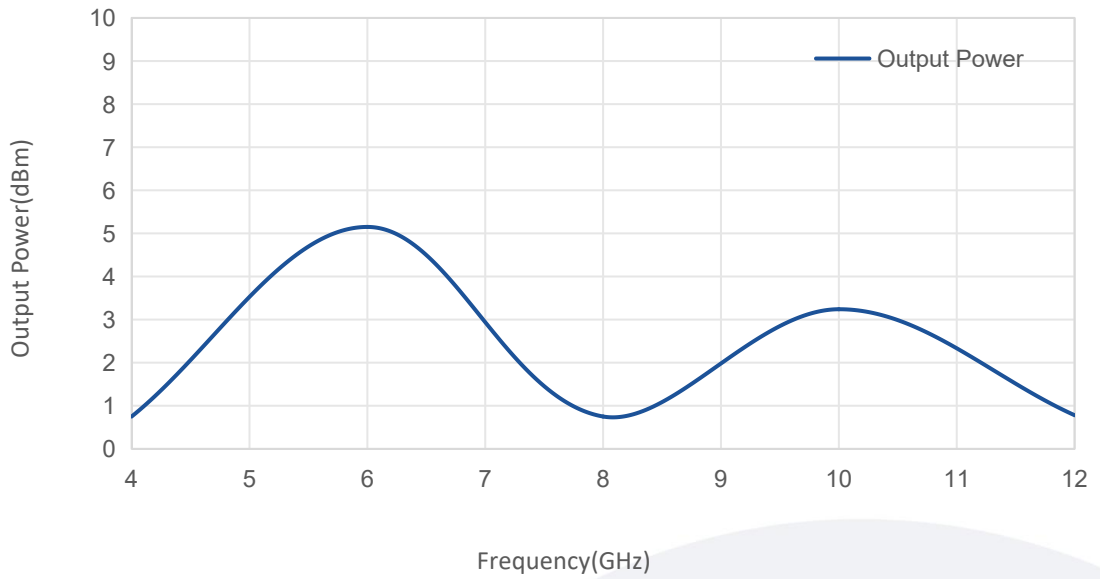
Parameter	Min	Typ	Max	Units
Operating Temperature	-10		+65	°C
Non-operating Temperature	-45		+85	°C
Relative humidity		95		%
Altitude	10,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

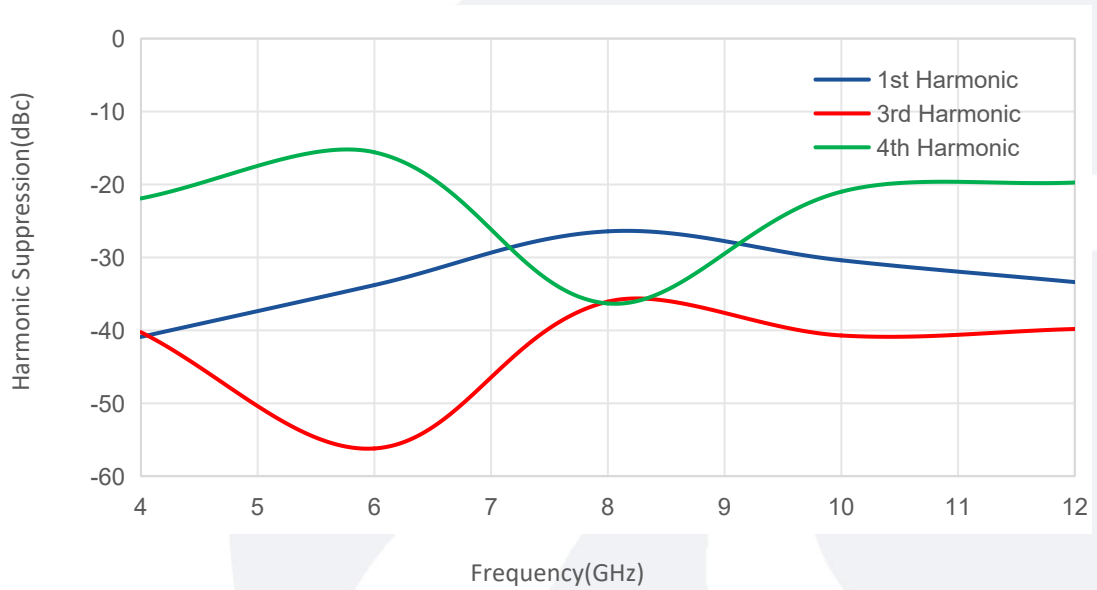
Base Number	Description	Revision
TLPM-0412-0201-K	Passive Multiplier , X2, 4-12GHz , 1 dBm Output Power,2.92mm	Rev.1.1

Typical Performance Data:

Output Power vs Frequency



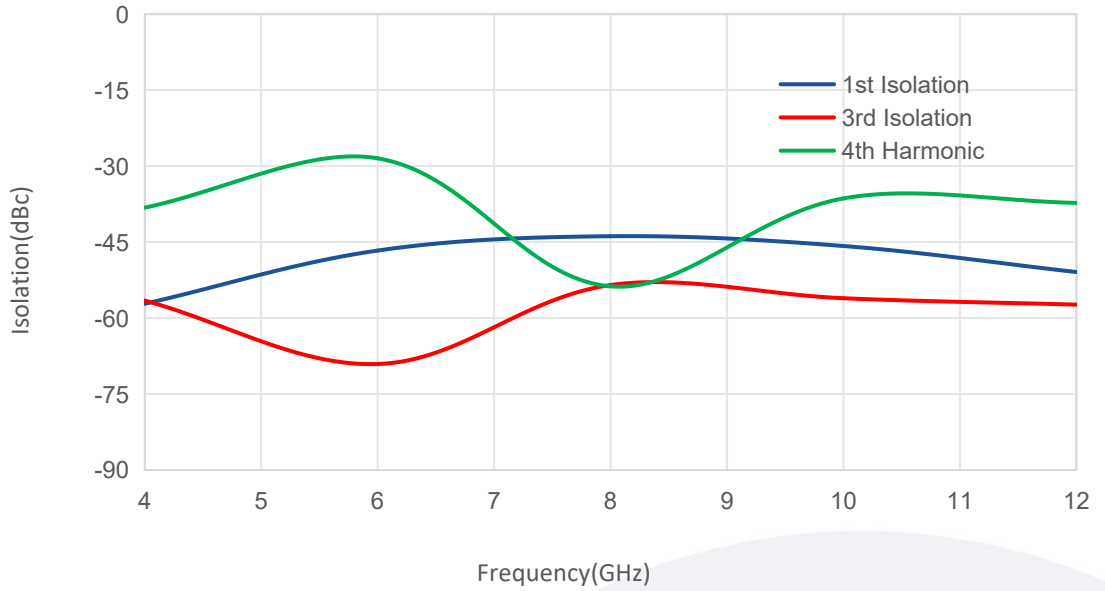
Harmonic Suppression vs Frequency



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.

Typical Performance Data:

Isolation vs Frequency



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