Suzhou Talent Microwave,Inc
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Passive Frequency Multiplier

1.0mm/X3/55-110GHz/-2dBm Output Power

Model: TLPM-055110-03N2-1.0

TLPM-055110-0300-1.0 is a X3 passive multiplier that generates second order harmonics with good harmonic and fundamental suppression. This multiplier requires an input frequency range of 18.33 to 36.33 GHz at +16 dBm RF power to yield typical -2 dBm output power at 55 to 110 GHz. The input port configuration is 2.92mm connector and the output port is 1.0mm connector.

Features:

- Output Frequency: 55-110GHz
- Output Power: -2dBm Typ
- Low power consumption
- 50 Ohm Matched Input / Output

Applications:

- Frequency Extenders
- Source Modules

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Output Frequency	55		110	GHz
Input Frequency	18.33		36.33	GHz
Input Power	15		20	dBm
Conversion Loss		18		dB
Multiply Factor		3		
1st Harmonic Suppression		-15		dBc
2rd Harmonic Suppression		-20		dBc
4th Harmonic Suppression		-15		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	1.0mm female	
Input Connector	2.92mm female	
Size	28.32*9.5*9.5	mm

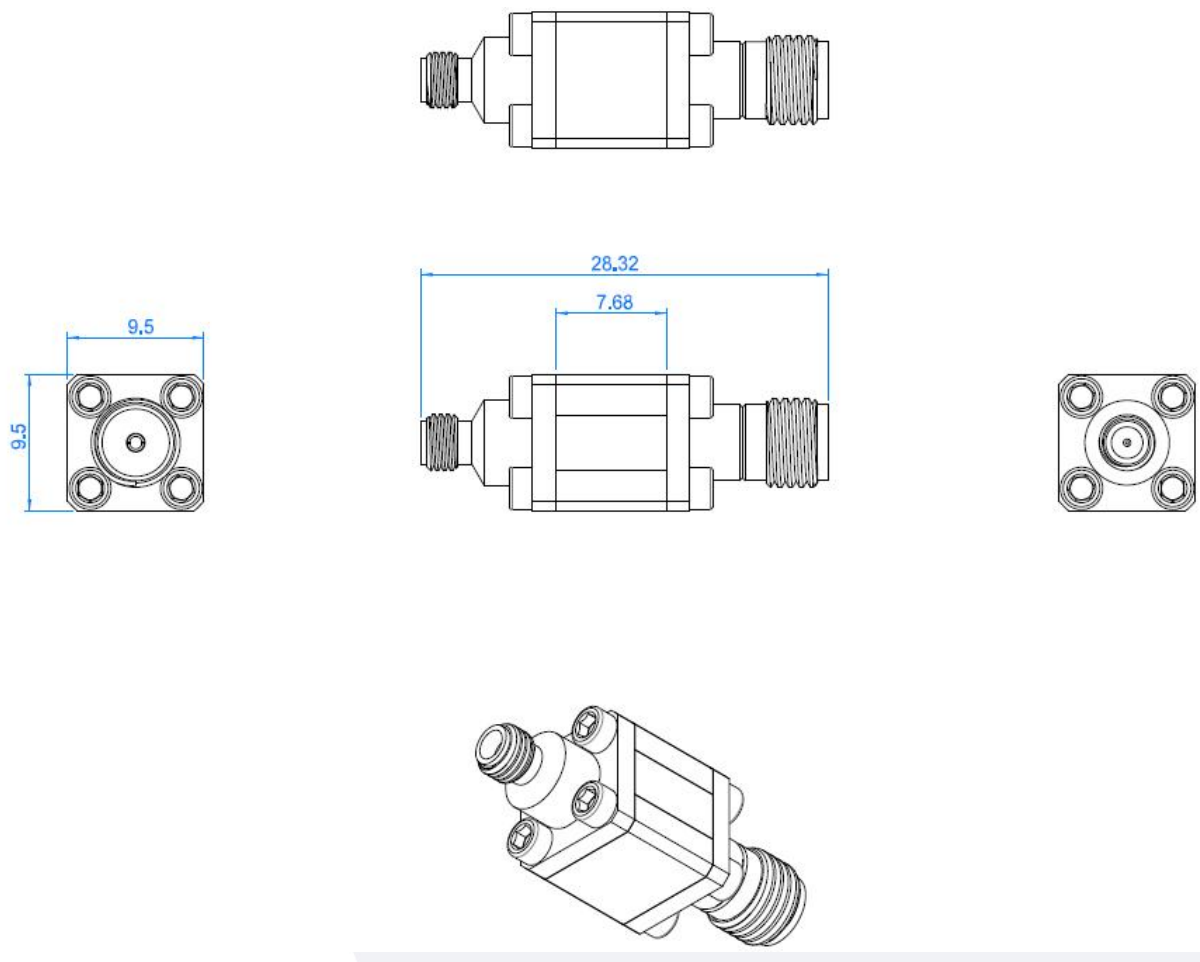
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Absolute Maximum Ratings:

Parameter	Value
RF Input Power	+21 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm



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

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Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature	-10		+65	℃
Non-operating Temperature	-45		+85	℃
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-055110-03N2-1.0	Passive Frequency Doubler X3,55-110GHz, -2dBm Output Power,1.0mm female	Rev.1.1

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.