Suzhou Talent Microwave,Inc
sales@talentmw.com
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Sub-Harmonic Mixer

RF:260-400 GHz/LO:130-200 GHz/IF:DC-40 GHz Model: TLHM-260400-0240-2.8

TLHM-260400-0240-2.8 is a Sub-Harmonic mixer. The mixer supports the full waveguide band operation for LO frequency from 130 to 200 GHz and RF frequency from 260 to 400 GHz with an extremely broad IF output from DC to 40 GHz. The mixer offers a conversion loss of 12 dB typical@IF=1GHz and LO input power of 10dBm typical.

Features:

- Low LO Power Requirement
- Subharmonic Mixing
- Compact Package

Applications:

- Radar Systems
- Communication Systems
- Test Equipment

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
RF Frequency	260		400	GHz
LO Frequency	130		200	GHz
IF Frequency	DC		40	GHz
LO-Input power	8	10	13	dBm
SSB Conversion Loss@IF=1GHz		12		dB
SSB Conversion Loss@LO=135GHz		13		dB

Mechanical Specifications:

Parameter	Value	Units
RF Connector	WR-2.8/UG-387/U	
LO Connector	WR-5.1/UG-387/U	
IF Connector	2.92mm Female	
Size	23*23*20	mm

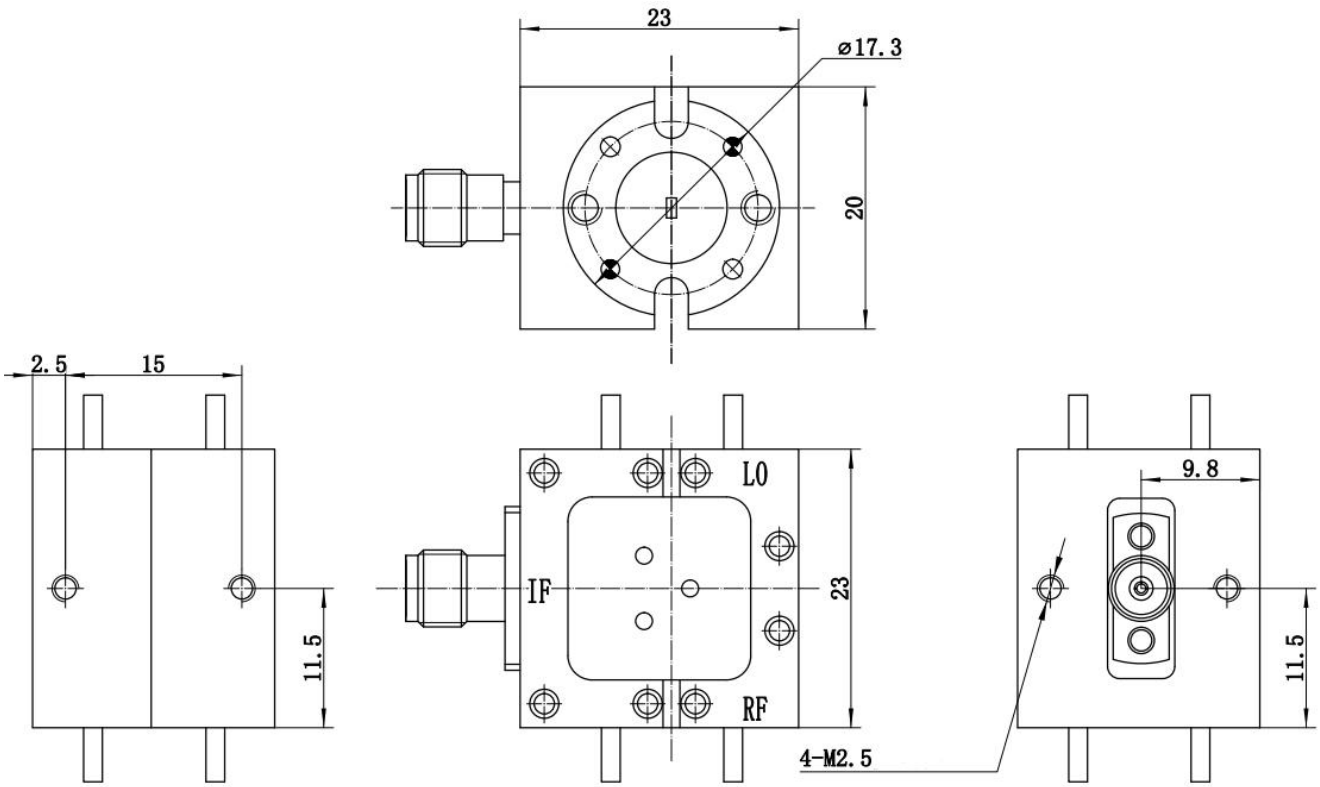
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Absolute Maximum Ratings:

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

Outline Drawing:

Unit:mm; Tolerance:±0.1mm



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

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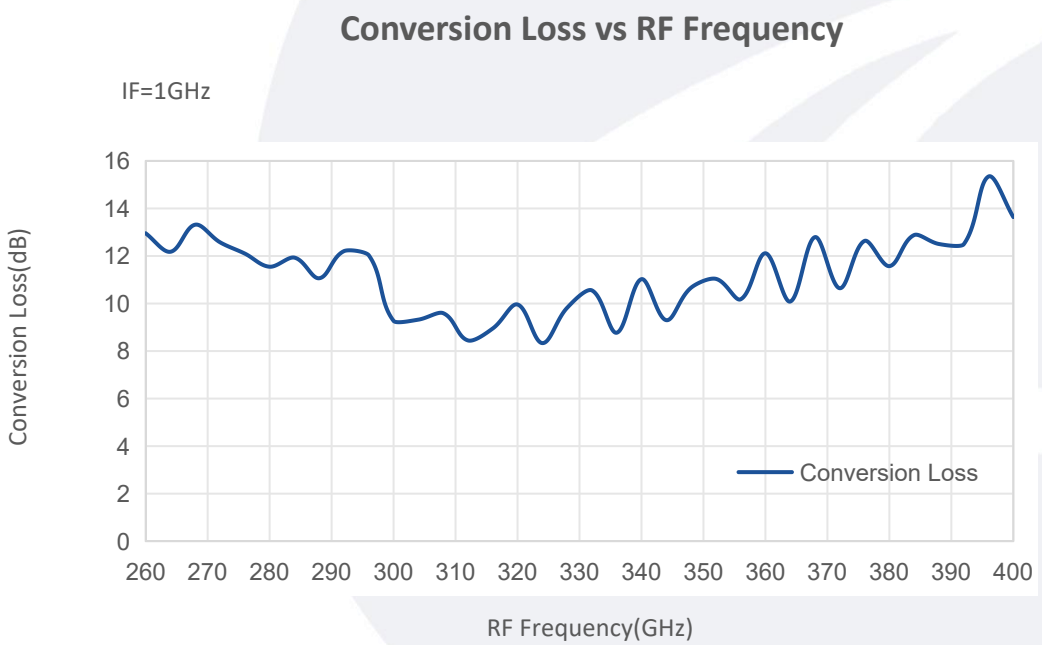
Environmental Conditions:

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
TLHM-260400-0240-2.8	Sub-Harmonic Mixer RF:260-400GHz,LO:130-200GHz,IF:DC-40GHz	Rev.1.1

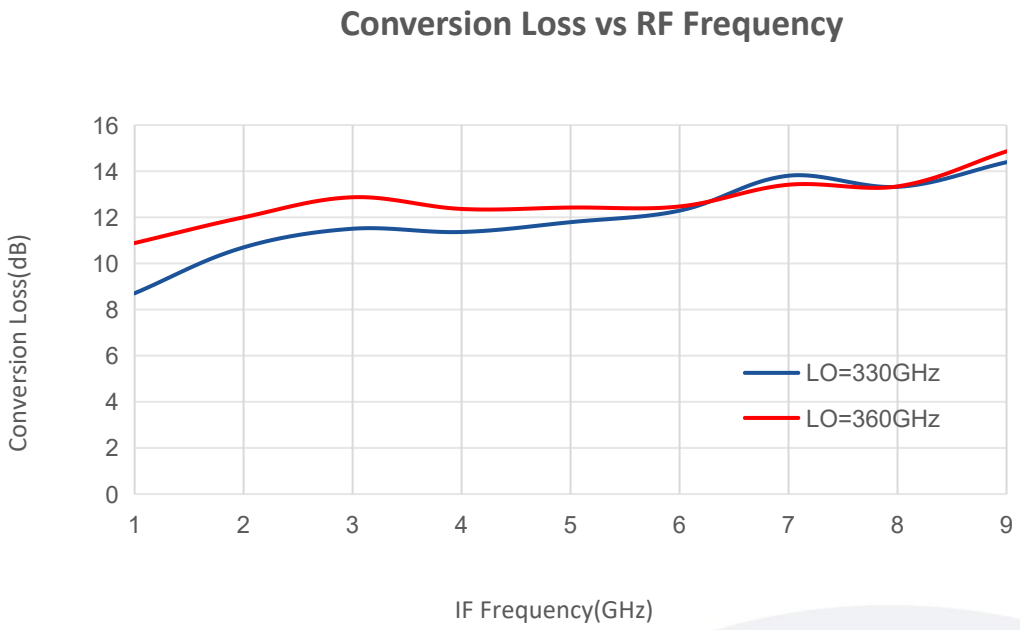
Typical Performance Data:



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.

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