

Model: TLHM-110170-0215-06
Sub-Harmonic Mixer
RF:110-170 GHz,LO:55-85GHz,IF:DC-15 GHz
Feature:

- Low LO Power Requirement
- Subharmonic Mixing
- Compact Package

Electrical Specifications:

Parameter	Min	Typ	Max	Units
RF Frequency	110		170	GHz
LO Frequency	55		85	GHz
IF Frequency	DC		15	GHz
LO-Input power	6	8	10	dBm
RF Input VSWR			3	:1
SSB Conversion Loss		-12		dB

Conversion Loss degrade below 120GHz

Mechanical Specifications:

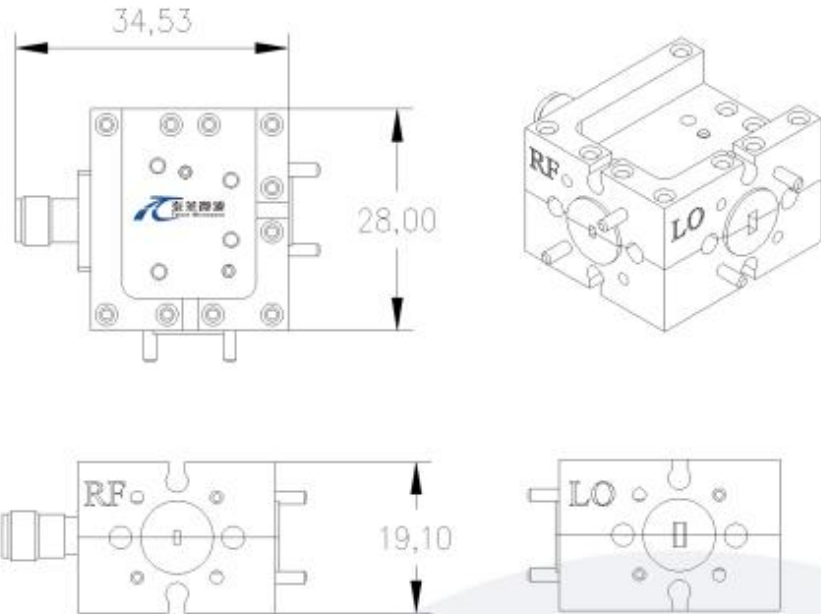
Parameter	Value	Units
RF Connector	WR-06/UG-387	
LO Connector	WR-12/UG-387	
IF Connector	SMA Female	
Size	28*25*20	mm
Weight	200	g

Absolute Maximum Ratings:

Parameter	Value
RF Input Power	TBD
LO Input Power	10dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit: mm



Environmental Conditions:



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

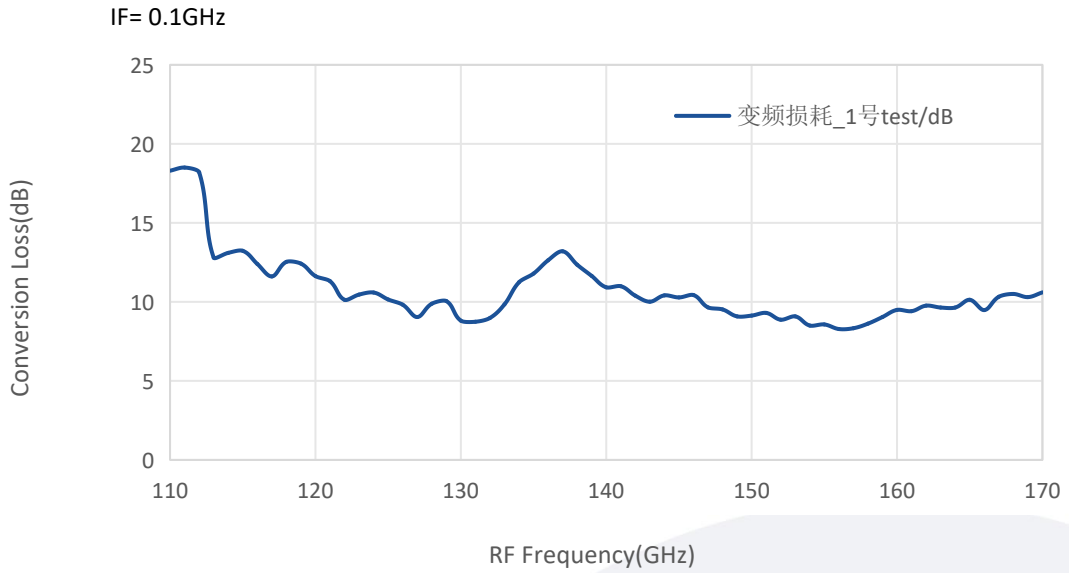
Parameter	Min	Typ	Max	Units
Operating Temperature	0		+40	°C
Non-operating Temperature	-25		+65	°C
Relative humidity		95		%
Altitude	50,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

Part Number	Description	Revision
TLHM-110170-0215-06	Subharmonically Mixer RF:110-170GHz,LO:55-85GHz,IF:DC-15GHz	Rev.1.1

Typical Performance Data:

Conversion Loss vs RF Frequency



Conversion Loss vs IF Frequency

