

Model: TLHM-140220-0230-05
Sub-Harmonic Mixer
RF:140-220 GHz,LO:70-110GHz,IF:DC-30 GHz
Feature:

- Low LO Power Requirement
- Subharmonic Mixing
- Compact Package

Electrical Specifications:

Parameter	Min	Typ	Max	Units
RF Frequency	140		220	GHz
LO Frequency	70		110	GHz
IF Frequency	DC		30	GHz
LO-Input power		8		dBm
RF Input Power		-15	0	dBm
2XLO to RF Isolation		-20		dBc
SSB Conversion Loss	-6	-8	-10	dB

Mechanical Specifications:

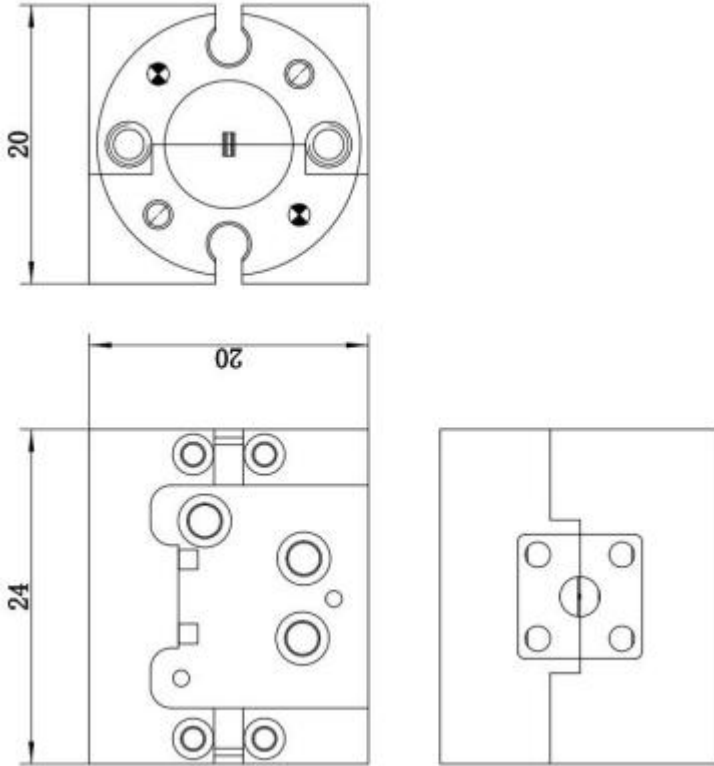
Parameter	Value	Units
RF Connector	WR-5.1/UG-387	
LO Connector	WR-10/UG-387	
IF Connector	2.92mm Female	
Size	24*20*20	mm

Absolute Maximum Ratings:

Parameter	Value
RF Input Power	0dBm
I IF Input Power	0dBm
LO Input Power	15dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit: mm



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature	0		+50	°C
Non-operating Temperature	-45		+85	°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-140220-0230-05	Subharmonically Mixer RF:140-220GHz,LO:70-110GHz,IF:DC-30GHz	Rev.1.1

Typical Performance Data:

Conversion Loss vs RF Frequency

