

J-Band Subharmonic Mixer

RF:220-330GHz/IF:DC-1.8GHz

Model: TLHM-220330-24-03-2

TLHM-220330-24-03-2 is a J-Band Subharmonic mixer. The mixer supports the full waveguide band operation for RF frequency from 220 to 330 GHz with an extremely broad IF output from DC to 1.8 GHz. The mixer offers a conversion loss of 45 dB typical and LO input power of 16 dBm typical.

Features:

- Low LO Power Requirement
- Subharmonic mixer
- Compact Package

Applications:

- Radar Systems
- Communication Systems
- Test Equipment

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
RF Frequency	220		330	GHz
RF Input Power			0	dBm
IF Frequency	DC		1.8	GHz
Harmonics Factor		24		
LO-Input power		16		dBm
Conversion Loss	35	45	55	dB

Mechanical Specifications:

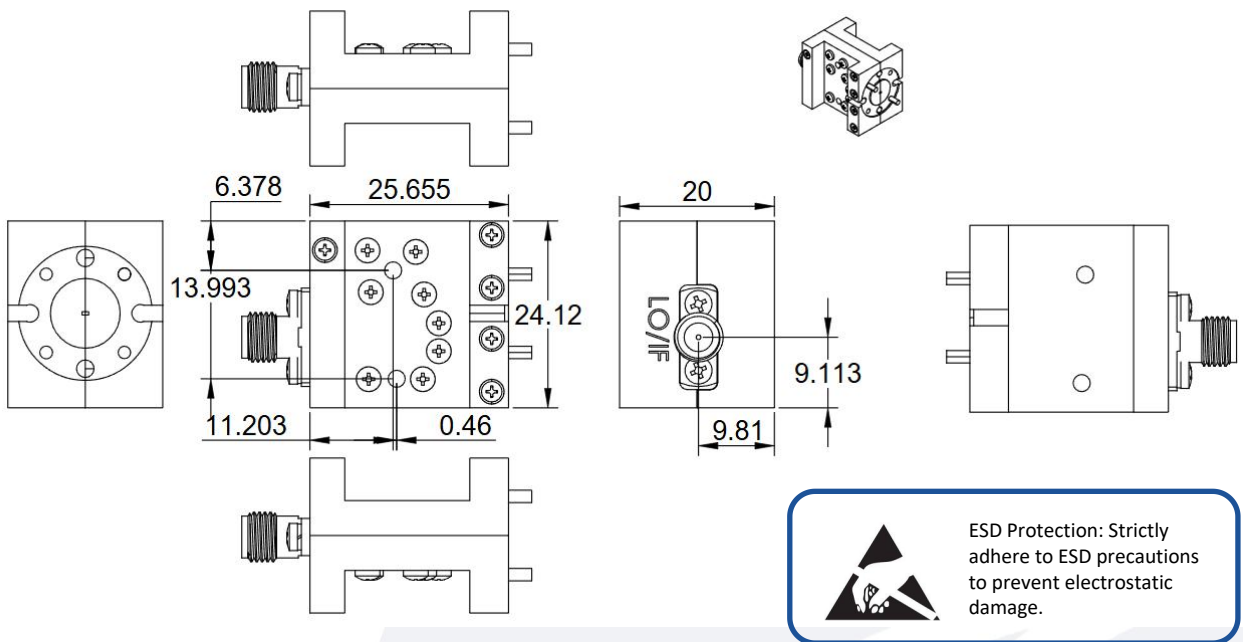
Parameter	Value	Units
RF Connector	WR-3.4/UG-387/U	
IF/LO Connector	SMA Female	
Size	25.655*24.12*20	mm

Absolute Maximum Ratings:

Parameter	Value
RF Input Power	0 dBm
LO Input Power	17 dBm
ESD sensitivity (HBM)	Class 0, passed 150V

Outline Drawing:

Unit:mm; Tolerance:±0.1mm



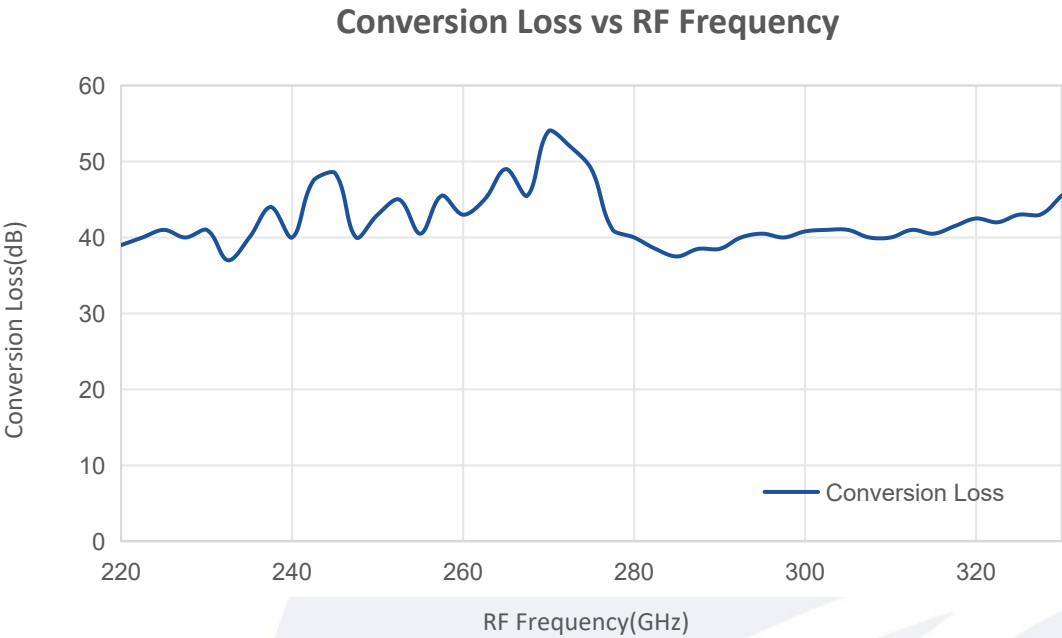
Environmental Conditions:

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
TLHM-220330-24-03-2	J-Band Subharmonic Mixer RF:220-330GHz, IF:DC-1.8GHz	Rev.1.0

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.