泰莱微波
Talent Microwave

Suzhou Talent Microwave,Inc
sales@talentmw.com
www.talentmw.com

F-Band Subharmonic Mixer

RF:90-140GHz/LO:11.25-17.5GHz/IF:DC-2GHz Model: TLHM-090140-08-8.0

TLHM-090140-08-8.0 is a F-Band Subharmonic mixer. The mixer supports the full waveguide band operation for LO frequency from 11.25 to 17.5 GHz and RF frequency from 90 to 140 GHz with an extremely broad IF output from DC to 2 GHz. The mixer offers a conversion loss of 25 dB typical and LO input power of 14 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	90		140	GHz
LO Frequency	11.25		17.5	GHz
IF Frequency	DC		2	GHz
Multiply Factor		8		
LO-Input power	12	14	16	dBm
Conversion Loss	18	25	35	dB

Mechanical Specifications:

Parameter	Value	Units
RF Connector	WR-08/UG-387/U	
LO Connector	SMA Female	
IF Connector	SMA Female	
Size	30.8*25*19.1	mm

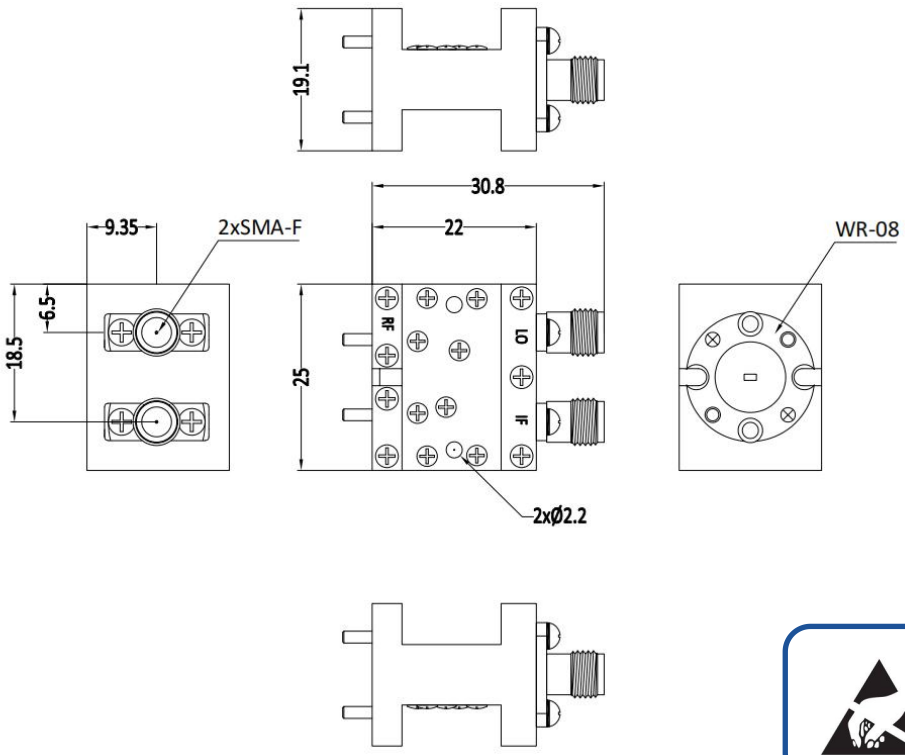
Suzhou Talent Microwave,Inc
sales@talentmw.com
www.talentmw.com

Absolute Maximum Ratings:

Parameter	Value
RF Input Power	0 dBm
IF Input Power	16 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.

Environmental Conditions:

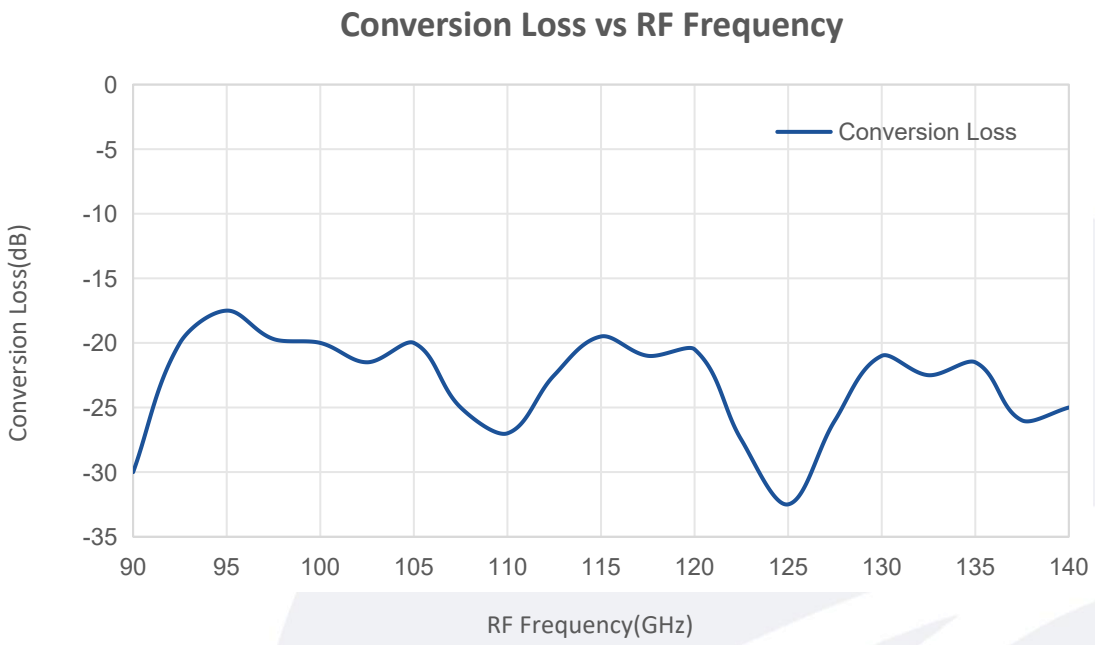
Parameter	Min	Typ	Max	Units
Operating Temperature	-10		+65	℃
Non-operating Temperature	-45		+85	℃
Relative humidity		95		%
Altitude	10,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Suzhou Talent Microwave,Inc
sales@talentmw.com
www.talentmw.com

Ordering Information:

Base Number	Description	Revision
TLHM-090140-08-8.0	F-Band Subharmonic Mixer RF:90-140GHz,LO:11.25-17.5GHz,IF:DC-2GHz	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.