Suzhou Talent Microwave,Inc
sales@talentmw.com
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W-band,Active Tx/Rx Converter

WR-10/75-110GHz /-11dB Conversion Loss

Model: TLAMCM-075110-0420-10

TLAMCM-075110-0420-10 is an up and down fundamental mixer integrated with x4 active frequency multiplier chain. The converter has an input LO frequency of 18.75 to 27.5 GHz with a typical input power of 5 dBm. RF frequency can range from 75 to 110 GHz and IF port can range from DC to 20GHz with 2.92mm connector.

Features:

- RF Frequency:75-110GHz
- LO Frequency: 18.75-27.5GHz
- IF Frequency: DC-20GHz
- Low Conversion Loss

Applications:

- Test Equipment
- Radar System
- Defense & federal communications
- Instrumentations

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
RF Frequency	75		110	GHz
4XLO Frequency	75		110	GHz
LO Frequency	18.75		27.5	GHz
IF Frequency	DC		20	GHz
LO-Input power	3	5	7	dBm
LO Multiplier factor		4		
Conversion Loss(IF=1GHz)		-11		dB
Conversion Loss(LO=18.75GHz)		-12		dB
DC Supply Voltage		12		V DC
DC Supply Current		220		mA

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Mechanical Specifications:

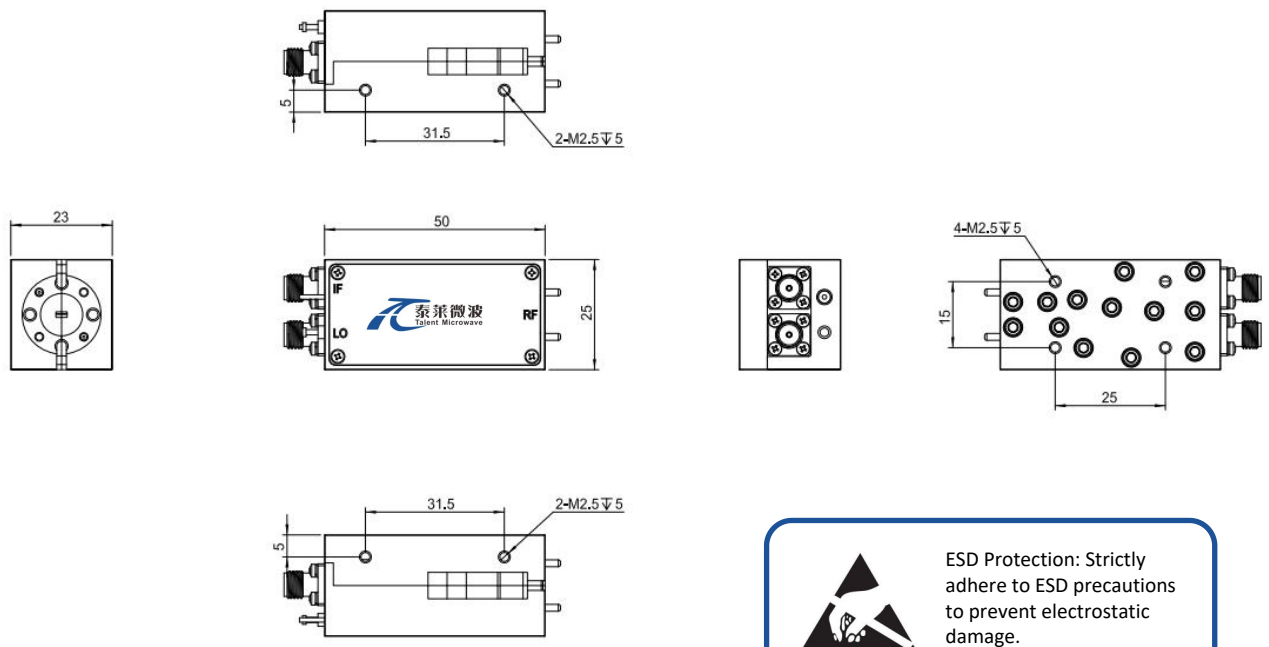
Parameter	Value	Units
RF Connector	WR-10/UG-387/U	
LO Connector	2.92mm Female	
IF Connector	2.92mm Female	
Size	50*25*23	mm

Absolute Maximum Ratings:

Parameter	Value
RF Input Power	12 dBm
LO Input Power	10 dBm
IF Input Power	12 dBm
DC Supply Voltage	+15 V
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm



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

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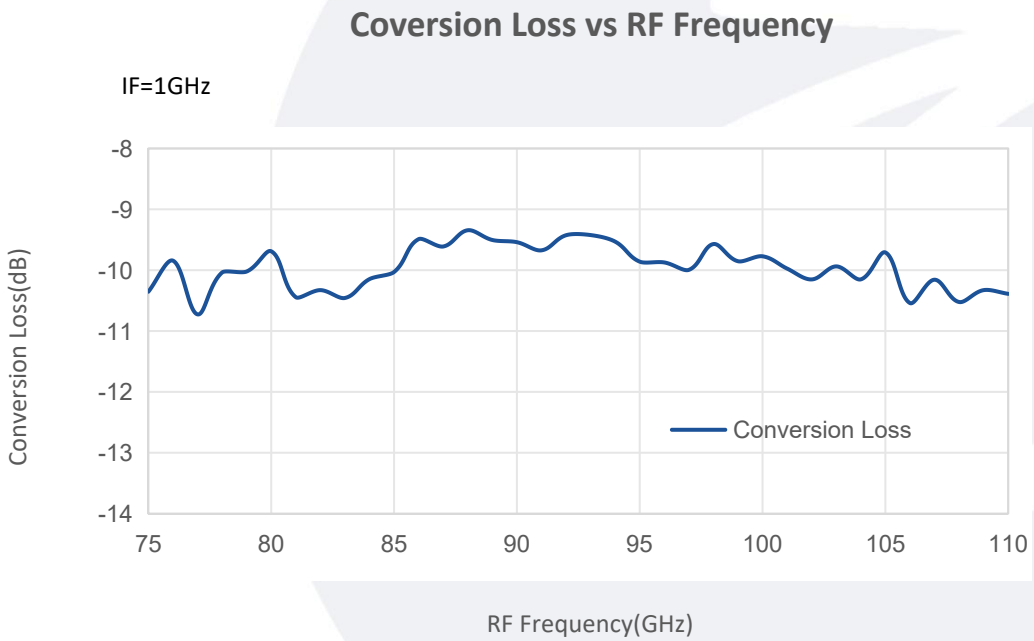
Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature	0		+50	℃
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
TLAMCM-075110-0420-10	W-band Active Tx/Rx Converter, Conversion Loss:-11dB,WR-10/UG-387/U	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.

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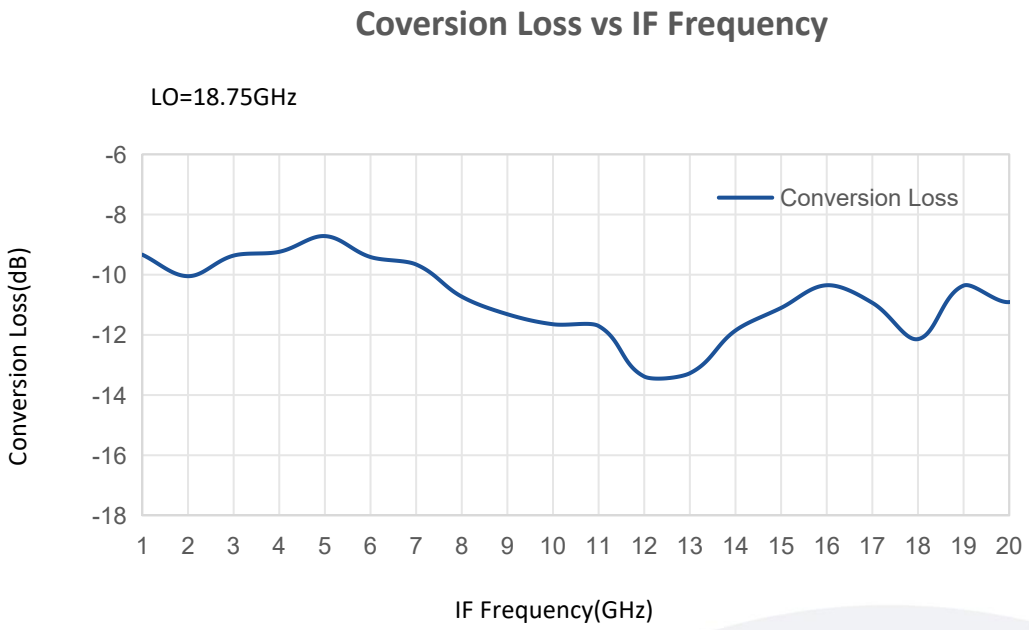

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