泰莱微波
Talent Microwave

Suzhou Talent Microwave,Inc
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U-band,Active Tx/Rx Converter

WR-19/ 40-60GHz /-10dB Conversion Loss

Model: TLAMCM-040060-20-19-L

TLAMCM-040060-20-19-L is an up and down fundamental mixer integrated with x4 active frequency multiplier chain. The converter has an input LO frequency of 10 to 15 GHz with a typical input power of +3 dBm. RF frequency can range from 40 to 60 GHz and IF port can range from DC to 20GHz with 2.92mm connector. The DC power requirement for the multiplier is +5 V DC/350 mA.

Features:

- RF Frequency: 40-60GHz
- LO Frequency: 10-15GHz
- IF Frequency: DC-20GHz
- Low Conversion Loss

Applications:

- Test Equipment
- Radar System
- U-band Imaging

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
RF Frequency	40		60	GHz
4XLO Frequency	40		60	GHz
LO Frequency	10		15	GHz
IF Frequency	DC		20	GHz
LO-Input power	3	5	8	dBm
LO Multiplier factor		4		
Conversion Loss(IF=100MHz)		-9		dB
Conversion Loss(LO=12.5GHz)		-10		dB
IF Input P1dB		3		dBm
RF Input P1dB		3		dBm
DC Supply Voltage		+5		V DC
DC Supply Current		350		mA

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Mechanical Specifications:

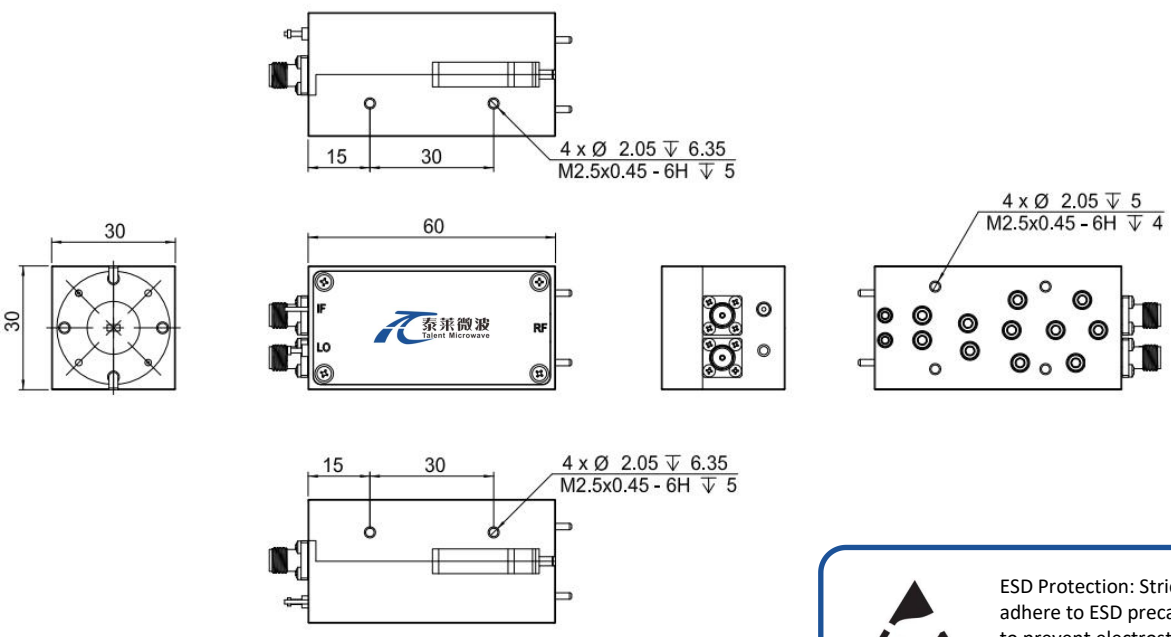
Parameter	Value	Units
RF Connector	WR-19/UG-383/U	
LO Connector	SMA Female	
IF Connector	2.92mm Female	
Size	60*30*30	mm

Absolute Maximum Ratings:

Parameter	Value
RF Input Power	10 dBm
LO Input Power	10 dBm
IF Input Power	10 dBm
DC Supply Voltage	+8 V
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.

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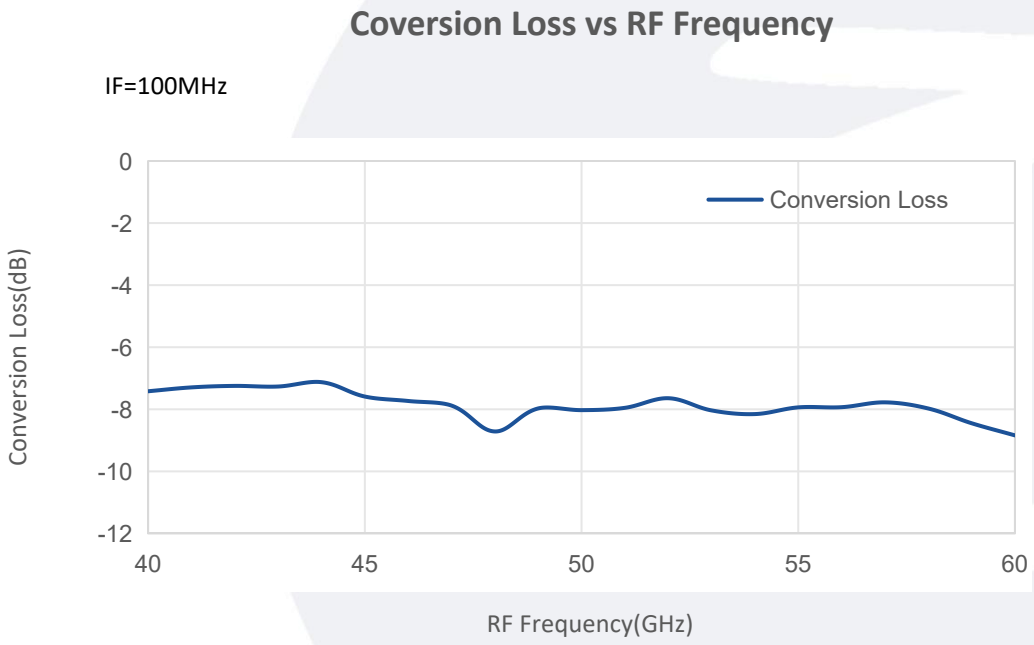
Environmental Conditions:

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-040060-20-19-L	U-band Active Tx/Rx Converter, Conversion Loss:-10dB,WR-19/UG-383/U	Rev.1.1

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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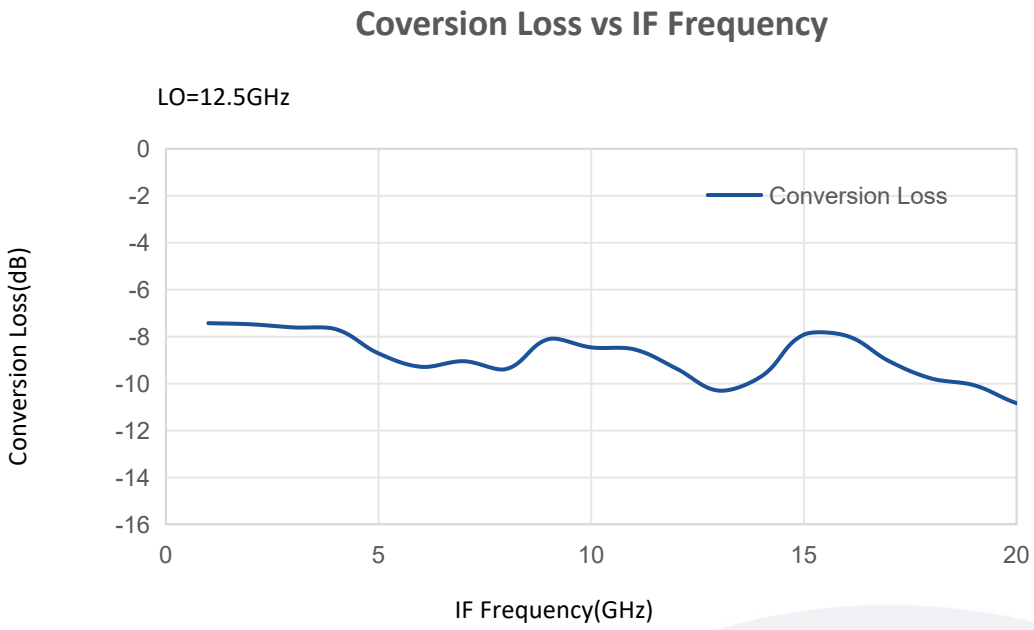
典型曲线 Typical Performance Data:



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