泰莱微波 Talent Microwave

Suzhou Talent Microwave,Inc
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U-Band Dual Balance Mixer

RF:40-60 GHz/LO:40-60 GHz/IF:DC-20 GHz Model: TLBM-040060-20-19

TLBM-040060-20-19 is a dual balance mixer. The mixer covers the LO and RF frequency from 40 to 60 GHz with an extremely broad IF output from DC to 20 GHz. The mixer offers a conversion loss of 9 dB typical @IF=1GHz and LO input power of 15 dBm typical. The U-band,X4 multiplier of Talent model TMAM-040060-0415-19 can be used as the LO driver for this mixer.

Features:

- RF/LO coverage : 40-60 GHz
- IF operation : DC-20 GHz
- Conversion loss: 9 dB Typ
- High LO to RF isolation
- Dual Balanced Mixer
- Suggested LO drive model: TMAM-040060-0415-19

Applications:

- Defense & federal communications
- Instrumentations

电气特性 Electrical Characteristics:

参数 Parameter	Min	Typ	Max	单位 Units
RF频率 RF Frequency	40		60	GHz
LO频率 LO Frequency	40		60	GHz
LO驱动功率 LO-Input power	12	15	18	dBm
IF频率 IF Frequency	DC		20	GHz
RF输入P1dB RF Input P1dB		9		dBm
变频损耗 Conversion Loss@IF=1GHz		9		dB
变频损耗 Conversion Loss@LO=40GHz		10		dB

机械特性 Mechanical Specifications:

参数 Parameter	指标 Value	单位 Units
RF 接口 RF Connector	WR-19/UG-383/U	
LO 接口 LO Connector	WR-19/UG-383/U	
IF 接口 IF Connector	2.92mm Female	
尺寸 Size	30*30*30	mm

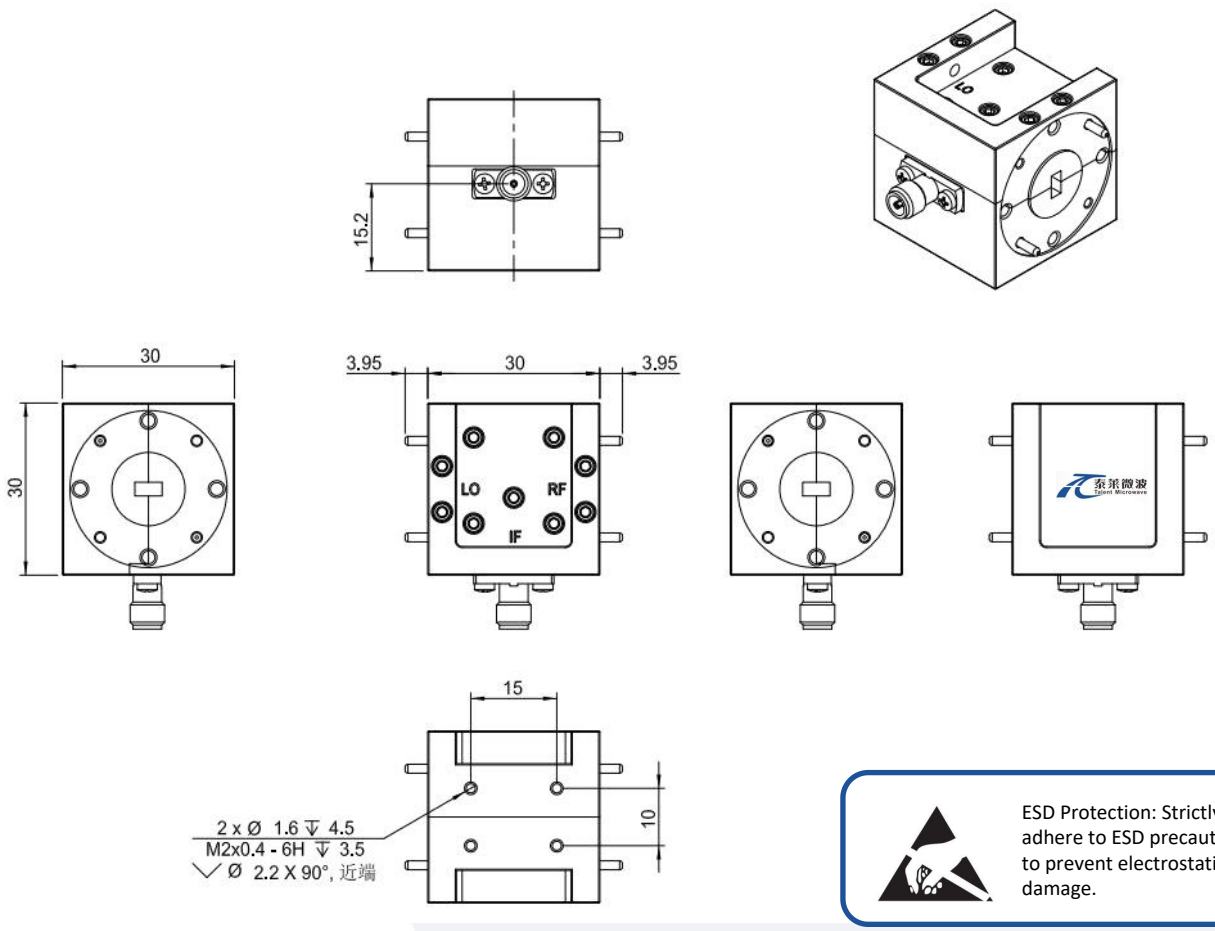
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绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
RF 功率 RF Input Power	+27 dBm
IF 功率 IF Input Power	+27 dBm
LO 功率 LO Input Power	+27 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

外形图 Outline Drawing:

Unit:mm; Tolerance:±0.1mm



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

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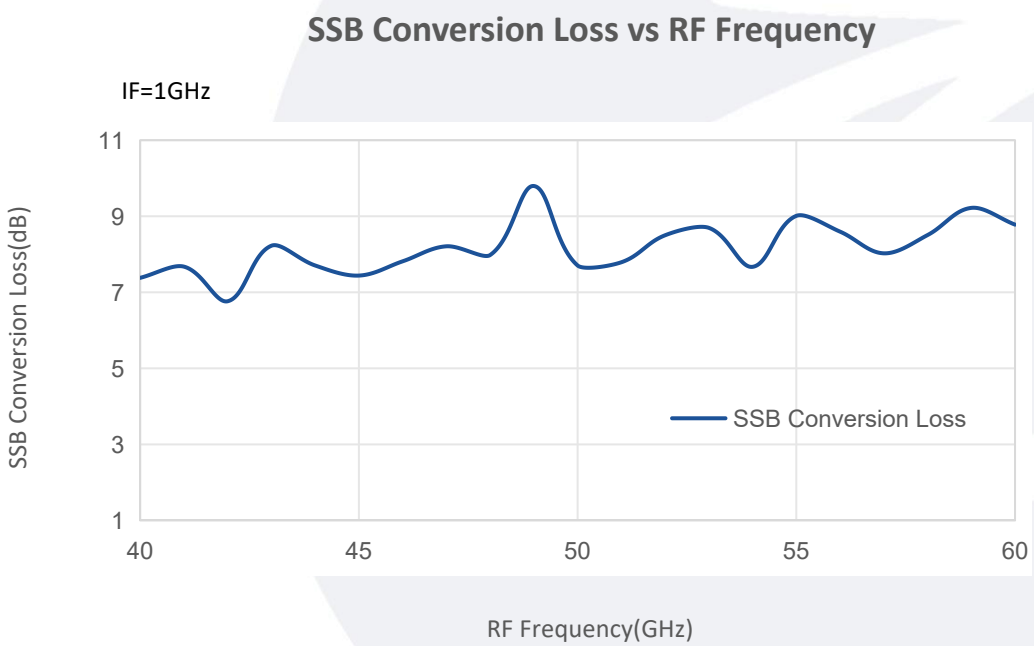
温度环境 Environmental Conditions:

参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature	-25		+50	℃
存储温度 Non-operating Temperature	-45		+85	℃
相对湿度 Relative humidity		95		%
海拔 Altitude	10,000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

订货信息 Ordering Information:

标准型号 Base Number	描述 Description	版本号 Revision
TLBM-040060-20-19	U-Band Dual Balanced Mixer RF:40-60GHz,LO:40-60GHz,IF:DC-20GHz	Rev.1.1

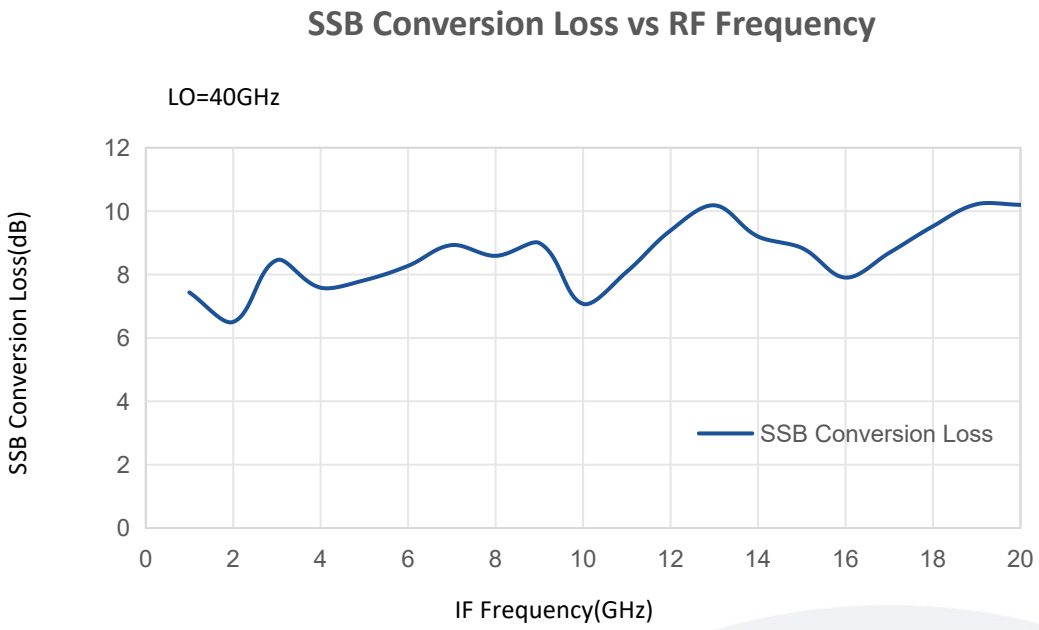
典型曲线 Typical Performance Data:



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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