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50-110GHz Double Balanced Mixer

RF:50-110 GHz/LO:50-110 GHz/IF:DC-40 GHz Model: TLBM-050110-40-1.0

TLBM-050110-40-1.0 is a double balanced mixer. The mixer supports the full waveguide band operation for both LO and RF frequency from 50 to 110 GHz with an extremely broad IF output from DC to 40 GHz. The mixer offers a conversion loss of 10 dB typical and LO input power of 15 dBm typical.

Features:

- Ultra broadband, high linearity
- Compact Package

Applications:

- Radar Systems
- Communication Systems
- Test Equipment

电气特性 Electrical Characteristics:

参数 Parameter	Min	Typ	Max	单位 Units
RF频率 RF Frequency	50		110	GHz
LO频率 LO Frequency	50		110	GHz
IF频率 IF Frequency	DC		40	GHz
LO 驱动功率 LO-Input power		15		dBm
射频输入驻波 RF Input VSWR			3	:1
单边带变频损耗 SSB Conversion Loss (IF=100MHz)		-10		dB

机械特性 Mechanical Specifications:

参数 Parameter	指标 Value	单位 Units
RF 接口 RF Connector	1.0mm Female	
LO 接口 LO Connector	1.0mm Female	
IF 接口 IF Connector	2.4mm Female	

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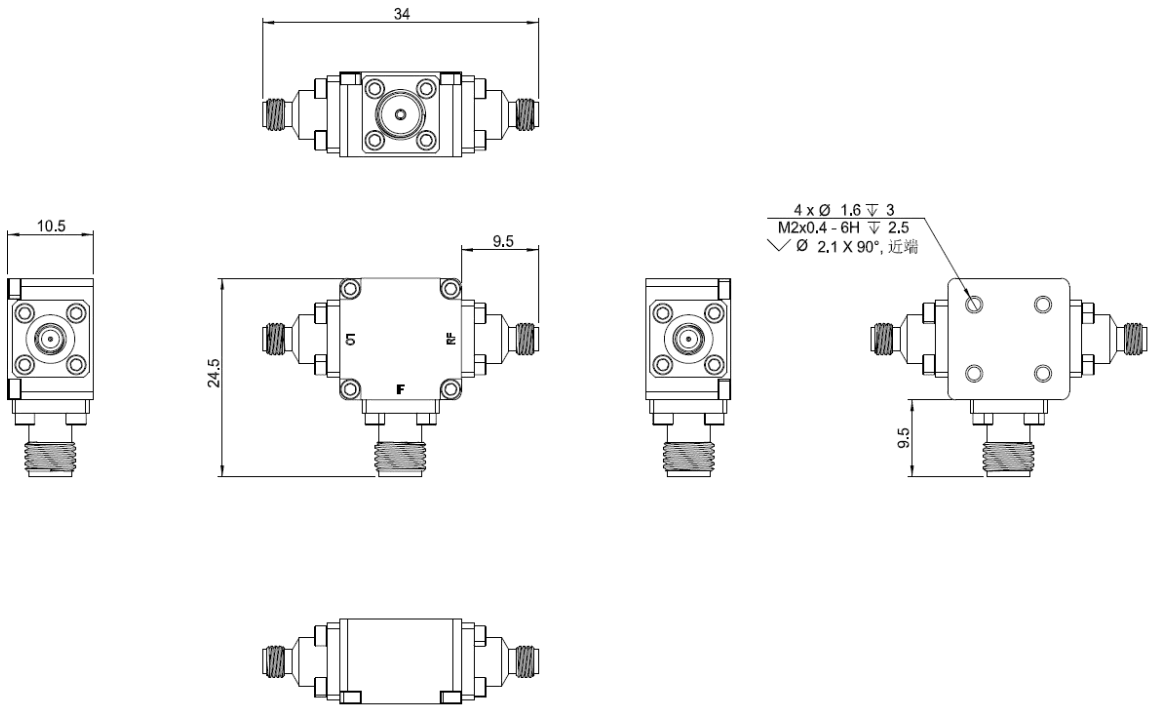
绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
RF 功率 RF Input Power	30 dBm
IF 功率 IF Input Power	30 dBm
LO 功率 LO Input Power	30 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

外形图 Outline Drawing:

Unit:mm



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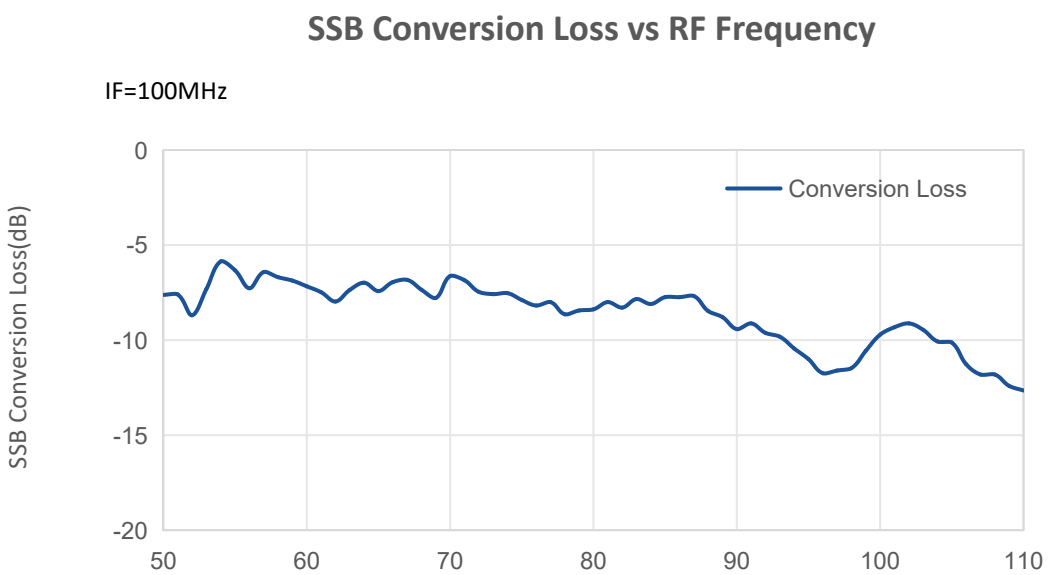
温度环境 Environmental Conditions:

参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature	-10		+65	℃
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 Desciption	版本号 Revision
TLBM-050110-40-1.0	50-110GHz Double Balanced Mixer RF:50-110GHz,LO:50-110GHz,IF:DC-40GHz	Rev.1.1

典型曲线 Typical Performance Data:



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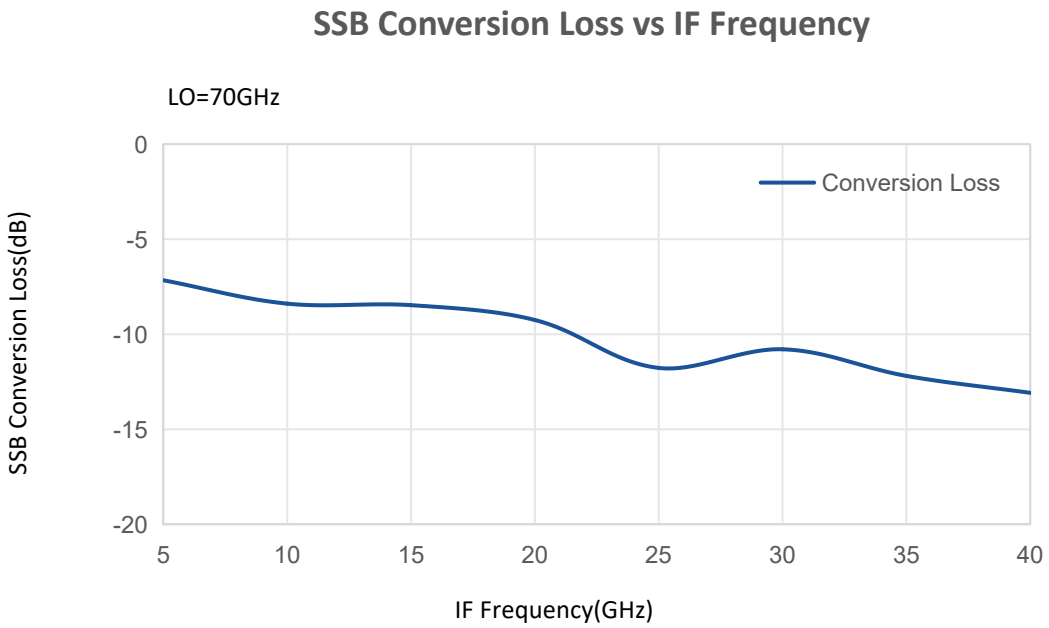
典型曲线 Typical Performance Data:



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.