泰莱微波 Talent Microwave

Suzhou Talent Microwave,Inc
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Dual Balance Mixer

RF:18-50 GHz/LO:18-50 GHz/IF:DC-20 GHz　　Model: TLBM-1850-LS-E

TLBM-1850-LS-E is a dual balance mixer. The mixer covers the RF frequency from 18 to 50 GHz ,LO frequency from 18 to 50 GHz with an extremely broad IF output from DC to 20 GHz. The mixer offers a conversion loss of 11 dB typical and LO input power of 15 dBm typical.

Features:

- RF coverage: 18-50GHz
- LO coverage: 18-50GHz
- IF operation: DC-20GHz
- Conversion loss: 11dB Typ
- High LO to RF isolation
- Dual Balanced Mixer

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	18		50	GHz
LO频率 LO Frequency	18		50	GHz
LO 驱动功率 LO-Input power	12	13	14	dBm
IF频率 IF Frequency	DC		20	GHz
输入1dB压缩点 Input P1dB		9		dBm
变频损耗 Conversion Loss		13		dB
RF至IF隔离度 RF to IF Isolation		25		dB
RF至LO隔离度 RF to LO Isolation		30		dB
LO至IF隔离度 LO to IF Isolation		30		dB

机械特性 Mechanical Specifications:

参数 Parameter	指标 Value	单位 Units
端口1 Connector1	2.4mm Female	
端口2 Connector 2	2.4mm Female	
端口3 Connector 3	SMA Female	
尺寸 Size	23.6*14.4*8	mm

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绝对最大值 Absolute Maximum Ratings:

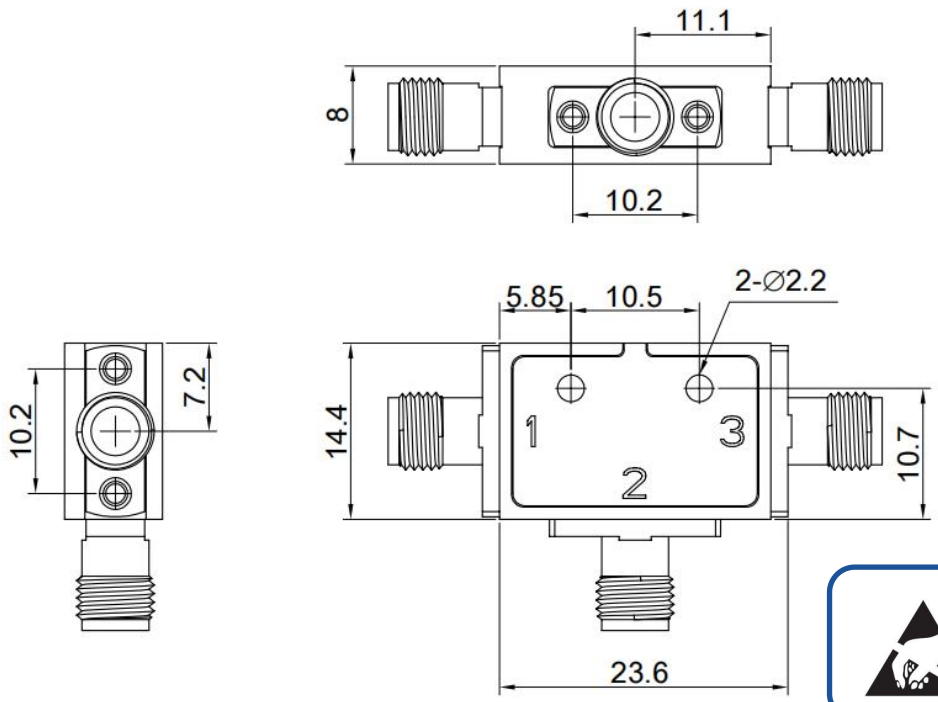
参数 Parameter	指标 Value
RF/LO功率 RF/LO Input Power	23 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

接口定义 Port Functions

端口 Port	功能 Function
Port1	RF/LO
Port2	LO/RF
Port3	IF

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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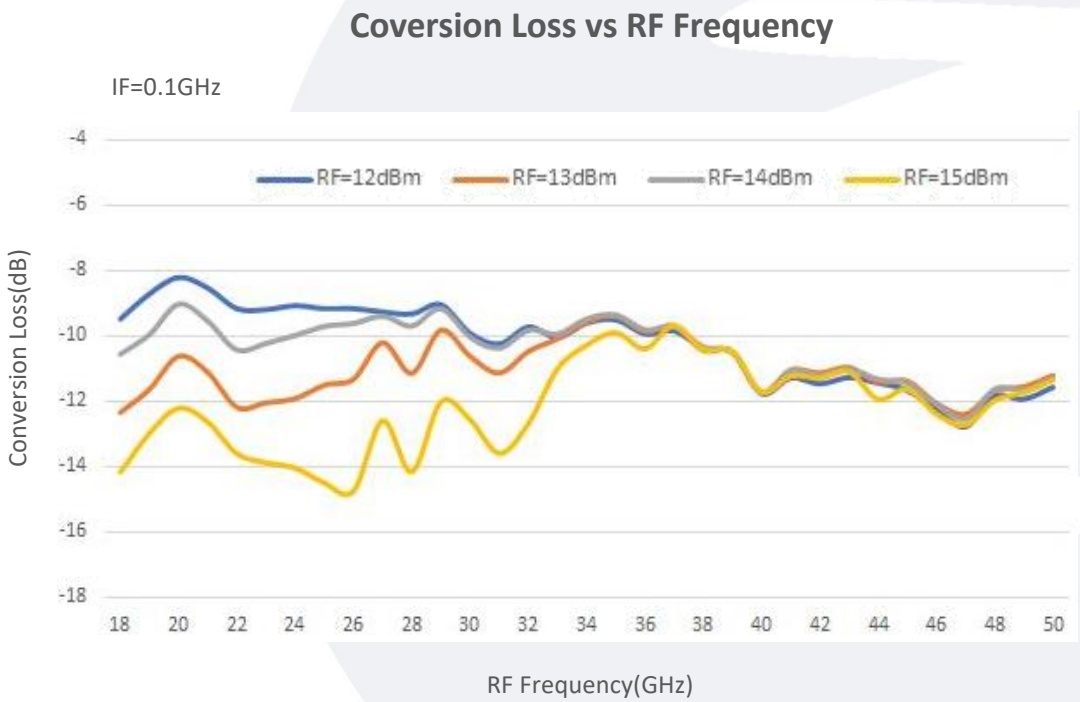
温度环境 Environmental Conditions:

参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature	-40		+70	℃
存储温度 Non-operating Temperature	-55		+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-1850-LS-E	Dual Balanced Mixer RF:18-50GHz,LO:18-50GHz,IF:DC-20GHz	Rev.1.1

典型曲线 Typical Performance Data:

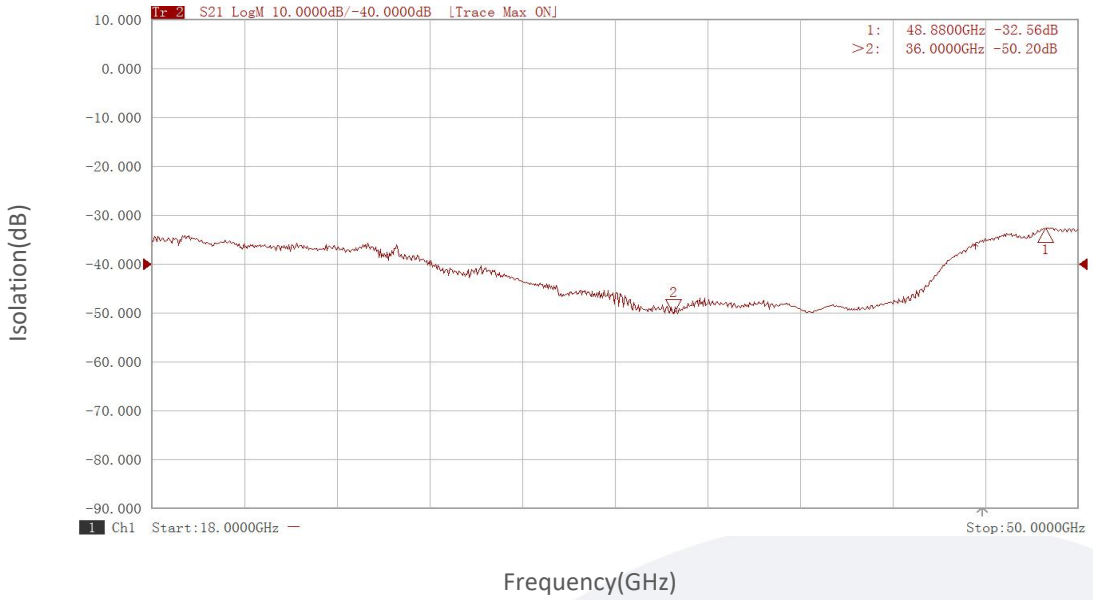


Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

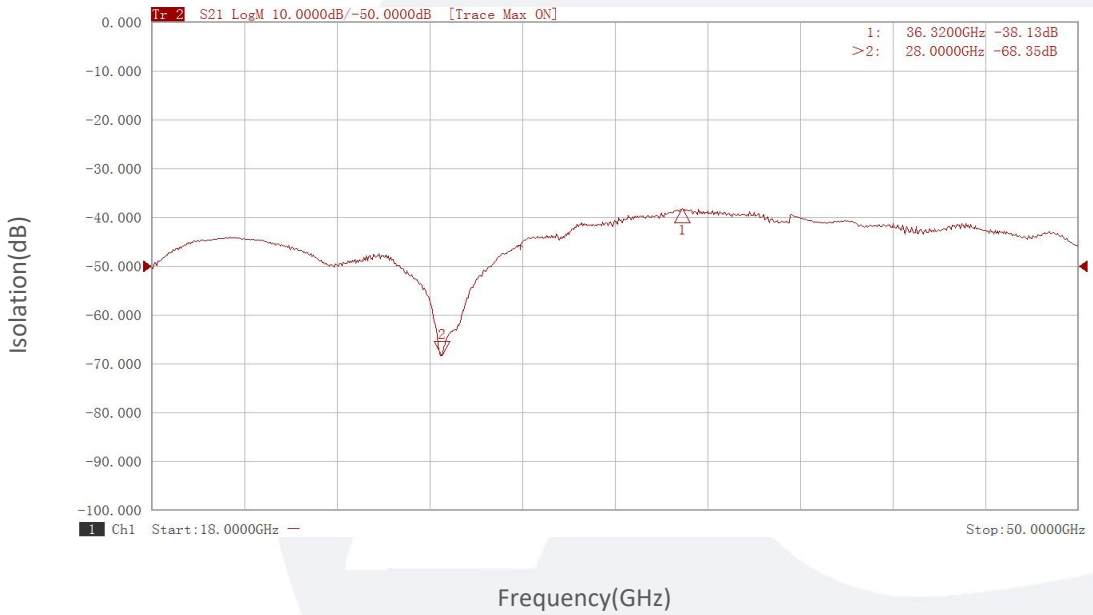
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典型曲线 Typical Performance Data:

LO to IF Isolation vs Frequency



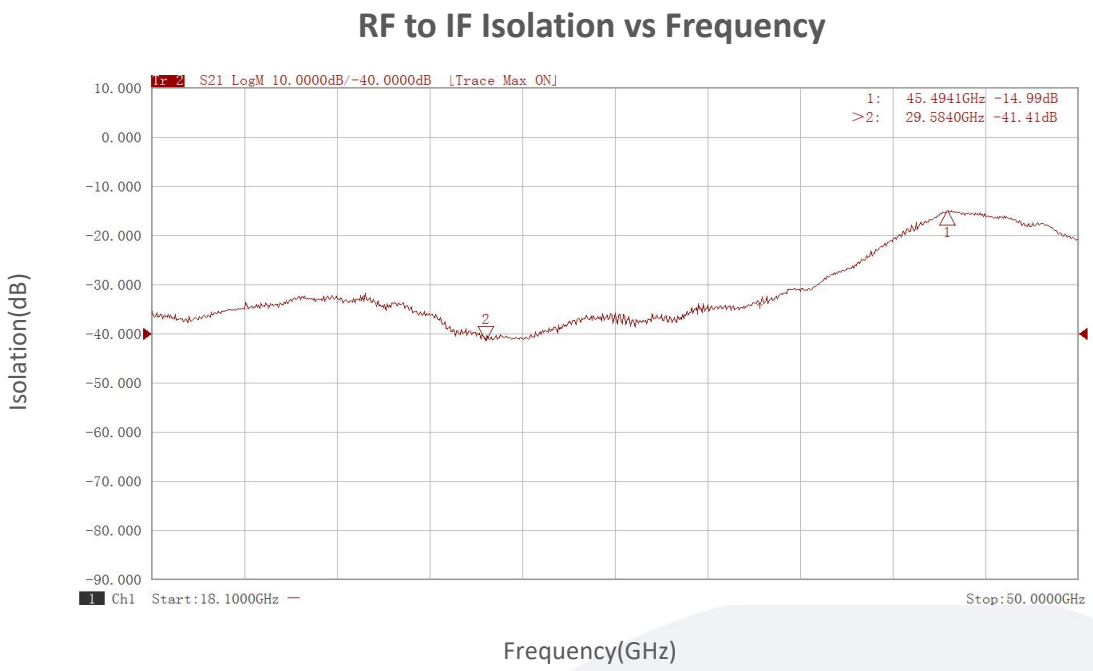
LO to RF Isolation vs Frequency



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