

Dual Balance Mixer

RF: 35-110GHz/LO: 35-110GHz/IF: DC-40GHz

Model: TLBM-035110-40-1.0

TLBM-035110-40-1.0 is a dual balance mixer. The mixer covers the LO and RF frequency from 35 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:

- RF/LO coverage : 35-110GHz
- IF operation : DC-40GHz
- Conversion loss: 10dB Typ
- High LO to RF isolation
- Dual Balanced Mixer

Applications:

- Defense & federal communications
- Instrumentations

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
RF Frequency	35		110	GHz
LO Frequency	35		110	GHz
LO-Input power		15		dBm
IF Frequency	DC		40	GHz
SSB Conversion Loss@IF=100MHz		10		dB
RF Input VSWR			3	:1

Mechanical Specifications:

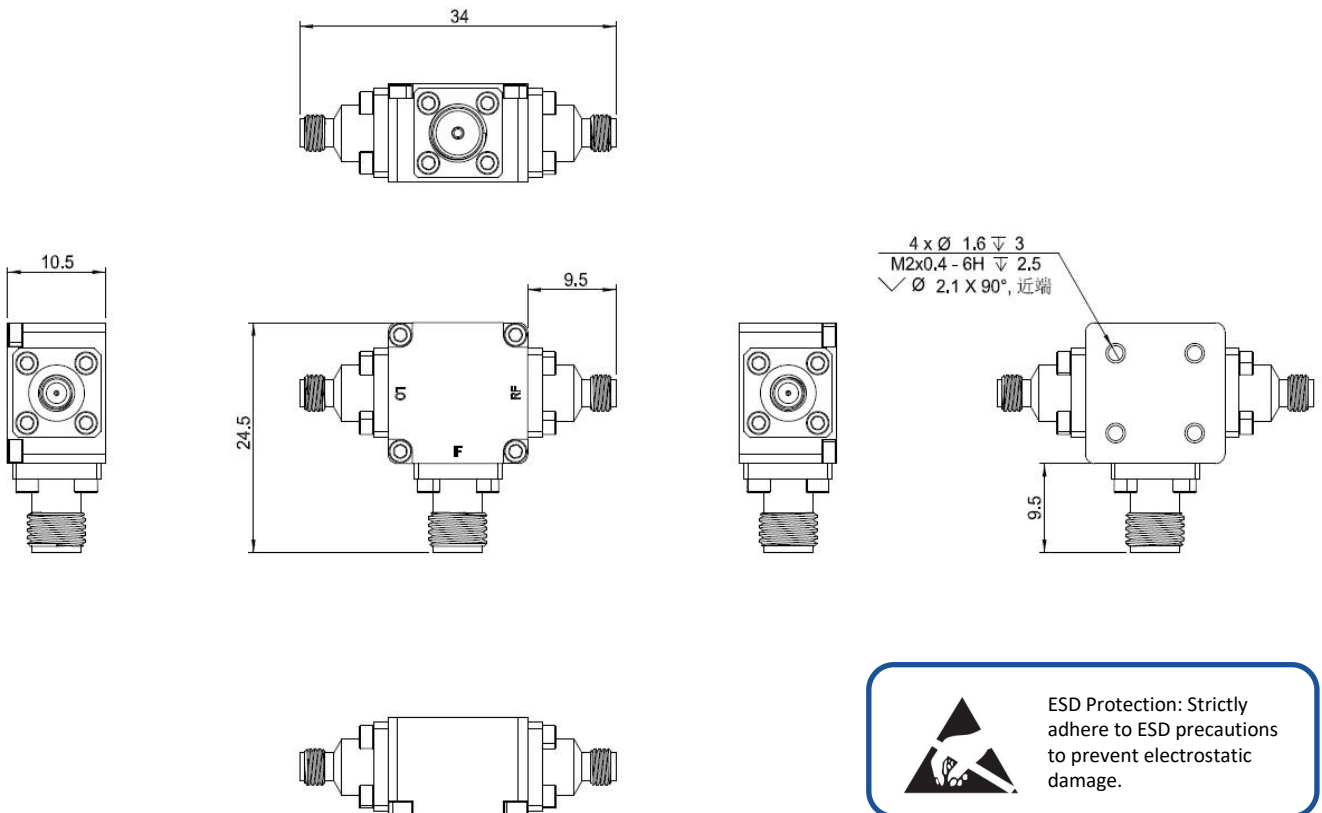
Parameter	Value	Units
RF Connector	1.0mm Female	
LO Connector	1.0mm Female	
IF Connector	2.4mm Female	
Size	34*24.5*10.5	mm

Absolute Maximum Ratings:

Parameter	Value
RF Input Power	30dBm
IF Input Power	30dBm
LO Input Power	30dBm
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.

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature	-45		+85	°C
存储温度 Non-operating Temperature	-55		+125	°C
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			

Ordering Information:

Base Number	Description	Revision
TLBM-035110-40-1.0	Dual Balanced Mixer RF:35-110GHz,LO:35-110GHz,IF:DC-40GHz	Rev.1.0