

Balance Mixer

RF:1-4GHz/LO:1-4GHz/IF:DC-1.5GHz

Model: TLBM-0104-S

TLBM-0104-S is a balance mixer. The mixer covers the LO and RF frequency from 1 to 4 GHz with an extremely broad IF output from DC to 1.5 GHz. The mixer offers a conversion loss of 9 dB typical and LO input power of 15 dBm typical.

Features:

- RF/LO coverage: 1-4GHz
- IF operation: DC-1.5GHz
- 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	1		4	GHz
LO Frequency	1		4	GHz
LO-Input power		15		dBm
IF Frequency	DC		1.5	GHz
Input P1dB		15		dBm
Conversion Loss		9	10	dB
LO to IF Isolation		35		dB
LO to RF Isolation		45		dB
RF to IF Isolation		10		dB
Impedance		50		Ohms

Mechanical Specifications:

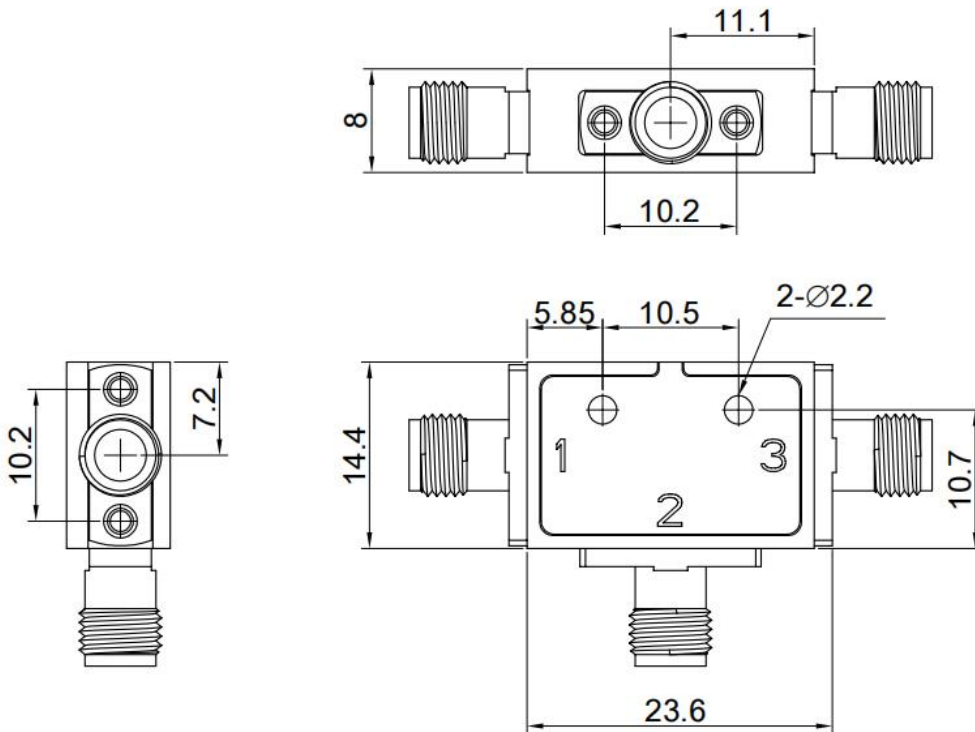
Parameter	Value	Units
Connector 1	SMA Female	
Connector 3	SMA Female	
Connector 2	SMA Female	
Size	23.6*14.4*8	mm

Absolute Maximum Ratings:

Parameter	Value
RF Input Power	24 dBm
LO Input Power	27 dBm
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	-40		+70	°C
Non-operating Temperature	-55		+85	°C
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
TLBM-0104-S	Balanced Mixer RF:1-4GHz,LO:1-4GHz,IF:DC-1.5GHz	Rev.1.1