

Dual Balance Mixer

RF:6-26 GHz/LO:6-26 GHz/IF:DC-12 GHz

Model: TLBM-0626-S

TLBM-0626-S is a dual balance mixer. The mixer covers the LO and RF frequency from 6 to 26 GHz with an extremely broad IF output from DC to 12 GHz. The mixer offers a conversion loss of 10 dB typical and LO input power of 15 dBm typical.

Features:

- RF/LO coverage : 6-26GHz
- IF operation : DC-12GHz
- 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	6		26	GHz
LO Frequency	6		26	GHz
LO-Input power	13	15	21	dBm
IF Frequency	DC		12	GHz
IF Input Power		-10		dBm
Conversion Loss		10		dB
Isolation "LO-RF"		30		dB
Isolation "LO-IF"		25		dB
Isolation "RF-IF"		7		dB

Mechanical Specifications:

Parameter	Value	Units
Connector 1	2.92mm Female	
Connector 3	2.92mm Female	
Connector 2	SMA Female	
Size	23.6*14.4*8	mm

Connector Functions:

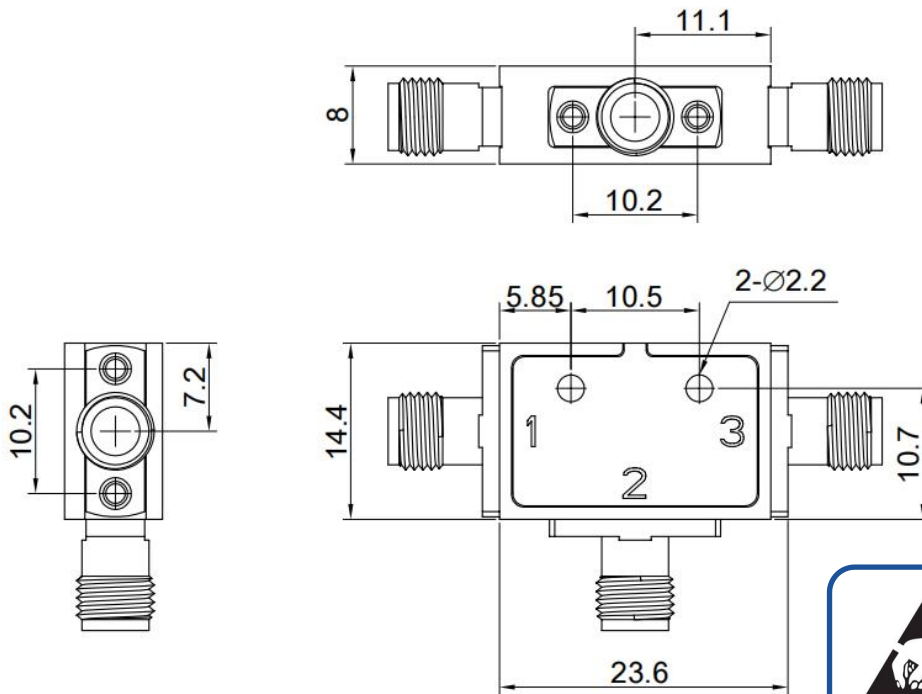
Port	Function
Port 1	LO
Port 2	IF
Port 3	RF

Absolute Maximum Ratings:

Parameter	Value
LO Input Power	+21 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:

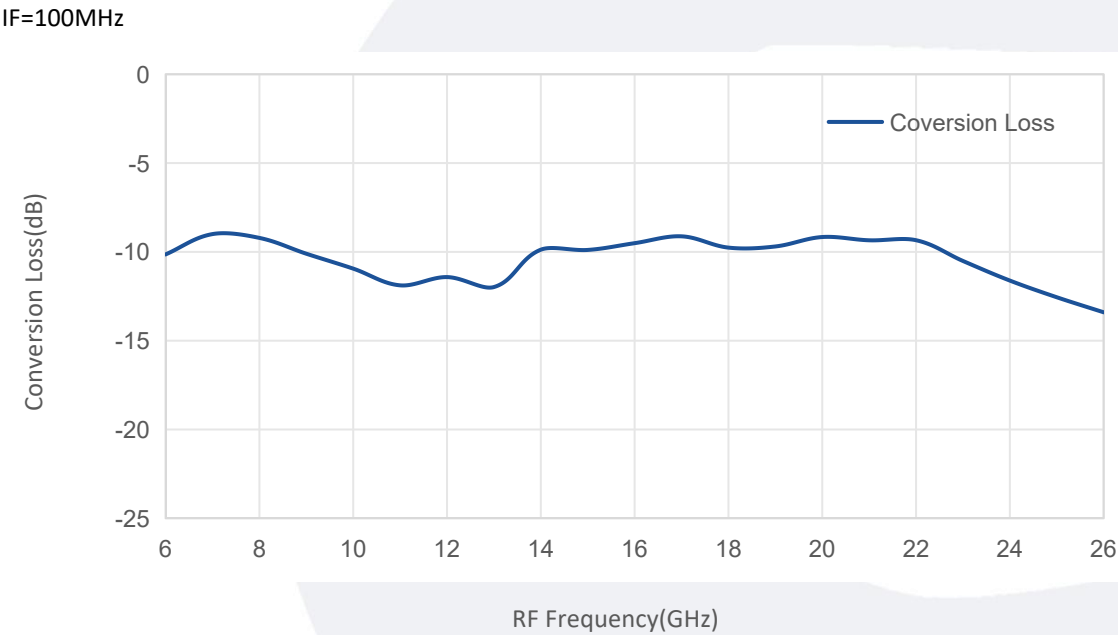
Parameter	Min	Typ	Max	Units
Operating Temperature	-40		+70	°C
Non-operating Temperature	-55		+85	°C
Relative humidity		95		%
Altitude	10,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

Base Number	Description	Revision
TLBM-0626-S	Dual Balanced Mixer RF:6-26GHz,LO:6-26GHz,IF:DC-12GHz	Rev.1.2

Typical Performance Data:

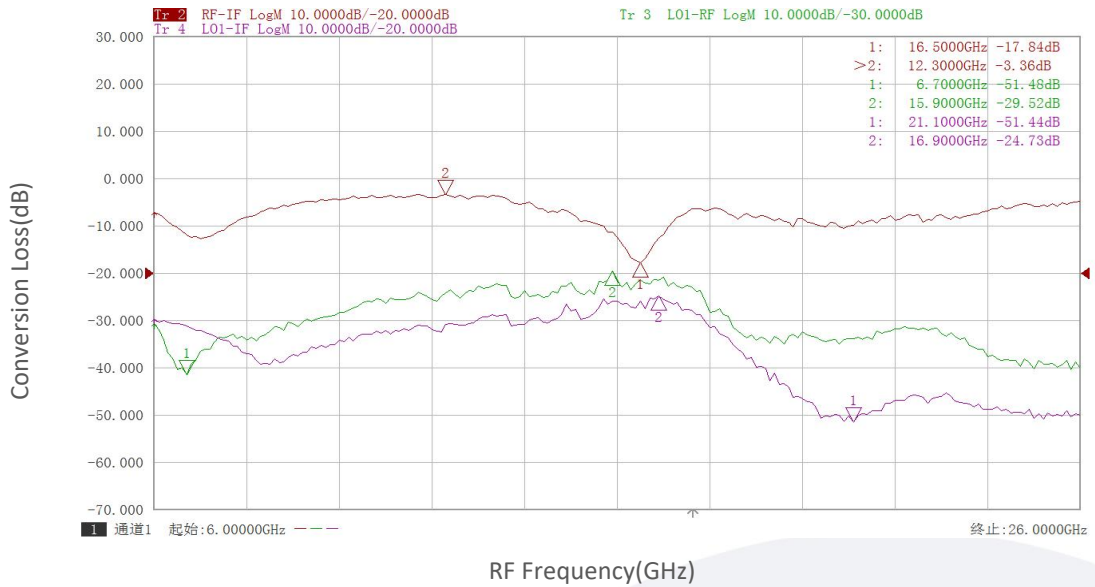
Conversion Loss vs RF Frequency



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.

Typical Performance Data:

Isolation Loss vs RF Frequency



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.