

E-band,Active Tx/Rx Converter

WR-12/60-90GHz /-9dB Conversion Loss

Model: TLAMCM-060090-25-12-AC

TLAMCM-060090-25-12-AC is an up and down fundamental mixer integrated with x6 active frequency multiplier chain. The converter has an input LO frequency of 10 to 15 GHz with a typical input power of 5 dBm. RF frequency can range from 60 to 90 GHz and IF port can range from DC to 25GHz with 2.92mm connector.

Features:

- RF Frequency:60-90GHz
- LO Frequency:10-15GHz
- IF Frequency:DC-25GHz
- Low Conversion Loss

Applications:

- Test Equipment
- Radar System
- Defense & federal communications
- Instrumentations

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
RF Frequency	60		90	GHz
6XLO Frequency	60		90	GHz
LO Frequency	10		15	GHz
IF Frequency	DC		25	GHz
LO-Input power	3	5	7	dBm
LO Multiplier factor		6		
中频输入P1dB IF Input P1dB		8		dBm
射频输入P1dB RF Input P1dB		8		dBm
Conversion Loss(IF=100MHz)		-9		dB
Conversion Loss(LO=60GHz)		-10		dB

Mechanical Specifications:

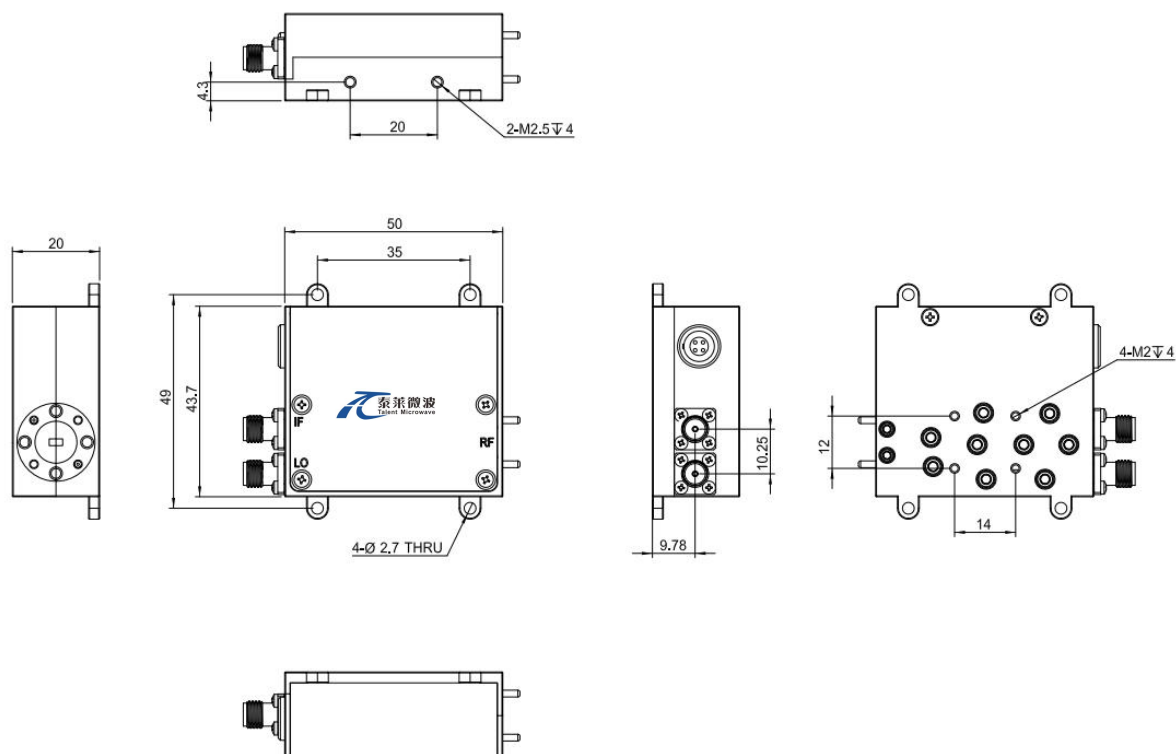
Parameter	Value	Units
RF Connector	WR-12/UG-387/U	
LO Connector	SMA Female	
IF Connector	2.92mm Female	
Size	50*43.7*20	mm
Weight	/	g

Absolute Maximum Ratings:

Parameter	Value
RF Input Power	12 dBm
LO Input Power	10 dBm
IF Input Power	12 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm



Environmental Conditions:

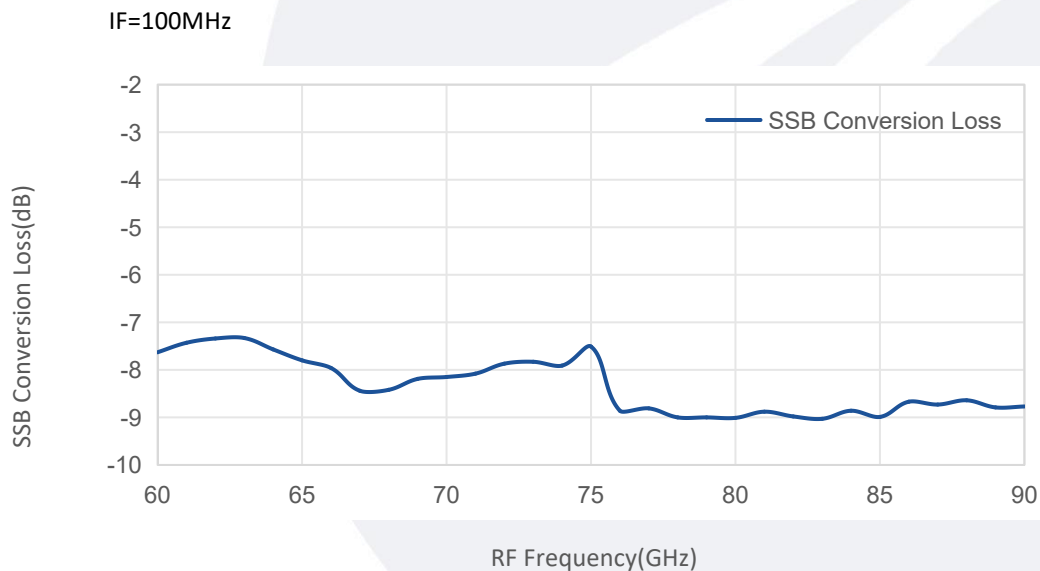
Parameter	Min	Typ	Max	Units
Operating Temperature	0		+50	°C
Non-operating Temperature	-45		+85	°C
Relative humidity		95		%
Altitude	10,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

Base Number	Description	Revision
TLAMCM-060090-25-12-AC	E-band Active Tx/Rx Converter, Conversion Loss:-9dB,WR-12/UG-387/U	Rev.1.1

Typical Performance Data:

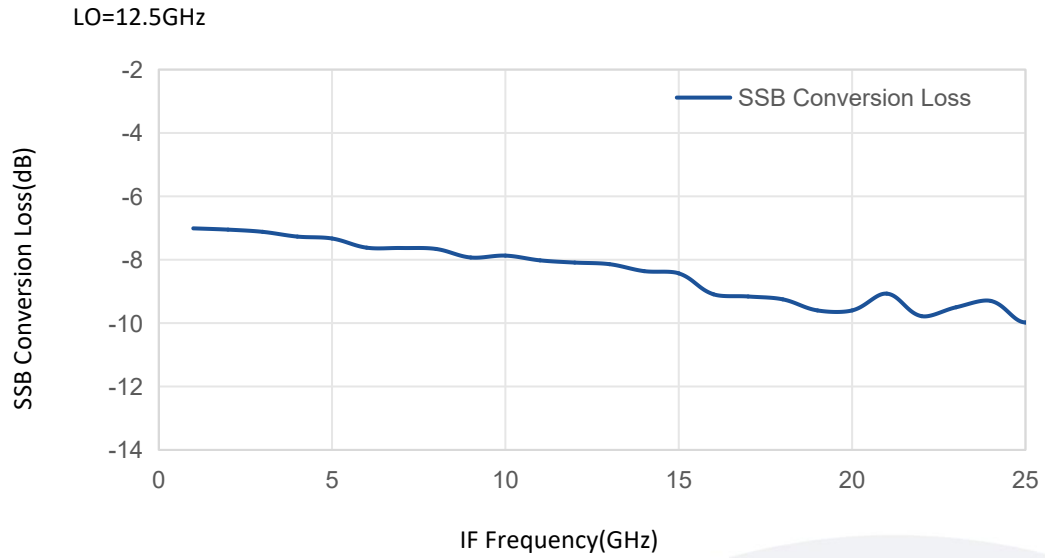
SSB Conversion Loss vs RF Frequency



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:

SSB Conversion Loss vs IF Frequency



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