

Active Tx/Rx Converter

40-50GHz/12dB Conversion Loss

Model: TLAMCM-040050-22-4

TLAMCM-040050-22-4 is an up and down fundamental mixer integrated with x4 active frequency multiplier chain. The converter has an input LO frequency of 10 to 12.5 GHz with a typical input power of 0 dBm. RF frequency can range from 40 to 50 GHz and IF port can range from DC to 22GHz with SMA connector.

Features:

- RF Frequency: 40-50GHz
- LO Frequency: 10-12.5GHz
- IF Frequency: DC-22GHz
- Low Conversion Loss

Applications:

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

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
RF Frequency	40		50	GHz
4XLO Frequency	40		50	GHz
LO Frequency	10		12.5	GHz
IF Frequency	DC		22	GHz
LO-Input power		2		dBm
LO Multiplier factor		4		
Conversion Loss			12	dB
RF Input P1dB	6	10		dBm
DC Supply Voltage		12		V DC
DC Supply Current		220		mA

Mechanical Specifications:

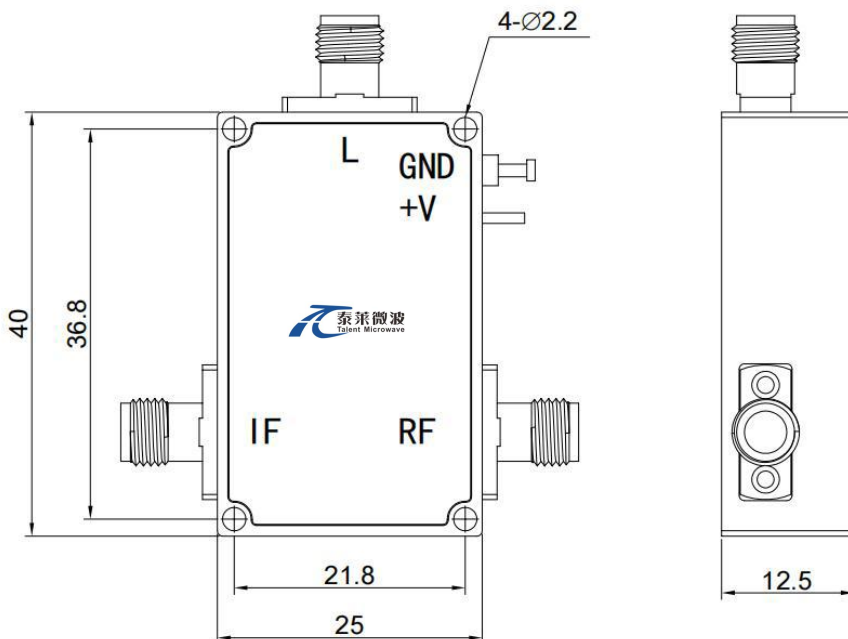
Parameter	Value	Units
RF Connector	2.4mm Female	
LO Connector	2.4mm Female	
IF Connector	SMA Female	
Size	40*25*12.5	mm

Absolute Maximum Ratings:

Parameter	Value
RF Input Power	22 dBm
DC Supply Voltage	+15 V
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	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-040050-22-4	Active Tx/Rx Converter, RF: 40-50GHz, Conversion Loss: 12dB	Rev.1.0