

Active Tx/Rx Converter

RF:20-50 GHz/LO:10-25 GHz/IF:DC-5 GHz

Model: TLAMCM-020050-05-2

TLAMCM-020050-05-2 is an up and down fundamental mixer integrated with x2 active frequency multiplier chain. The converter has an input LO frequency of 10 to 25 GHz with a typical input power of -6 dBm. RF frequency can range from 20 to 50 GHz and IF port can range from DC to 5GHz with SMA connector. The DC power requirement for the multiplier is +12 V DC.

Features:

- RF Frequency:20-50GHz
- LO Frequency:10-25GHz
- IF Frequency:DC-5GHz
- Low Conversion Loss

Applications:

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

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
RF Frequency	20		50	GHz
LO Frequency	10		25	GHz
IF Frequency	DC		5	GHz
LO-Input power		-6	-4	dBm
IF Input power		-10		dBm
Conversion Loss		-10		dB
DC Supply Voltage		12		V DC
DC Supply Current		150		mA

Mechanical Specifications:

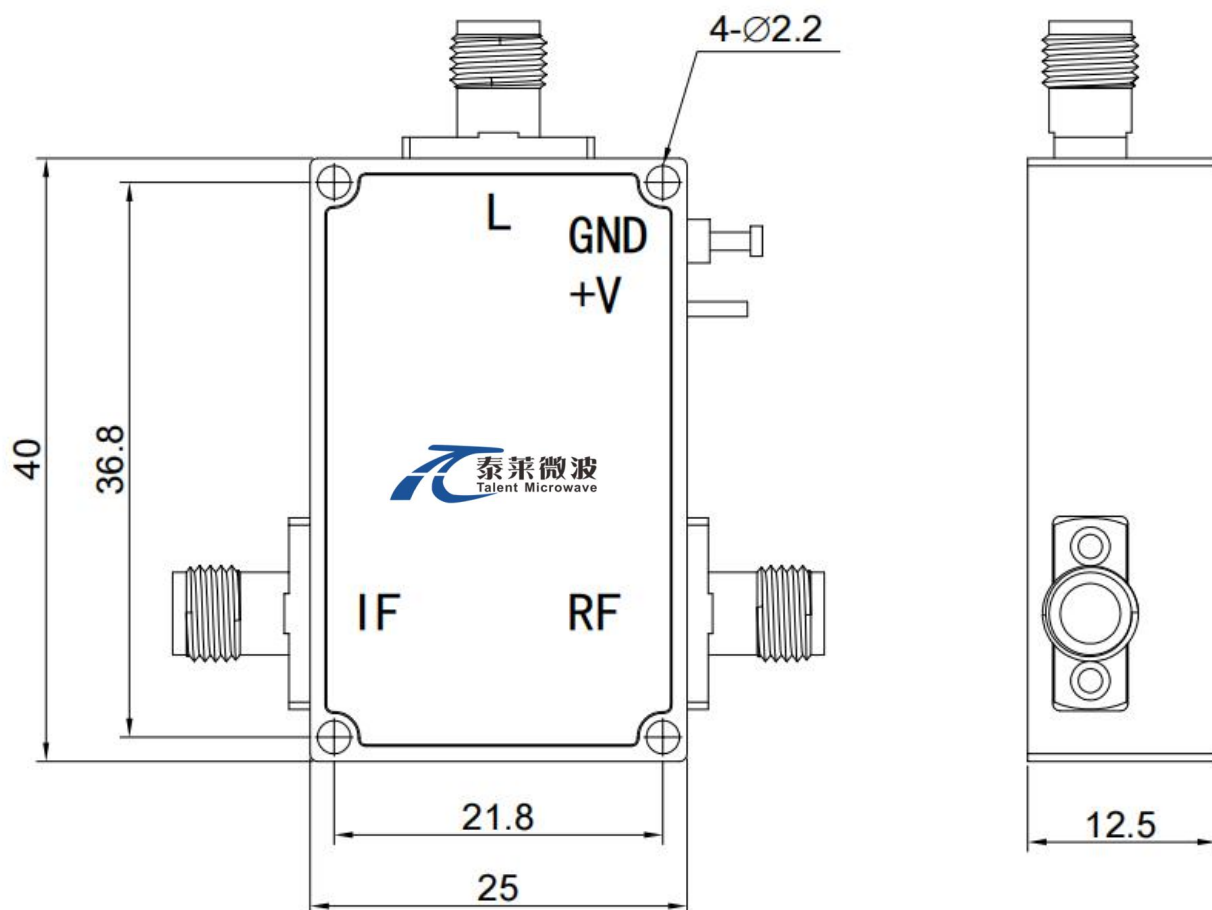
Parameter	Value	Units
RF Connector	2.4mm Female	
LO Connector	2.92mm Female	
IF Connector	SMA Female	
DC Supply	Solder Pin	
Size	40*25*12.5	mm

Absolute Maximum Ratings:

Parameter	Value
LO Input Power	-4 dBm
DC Supply Voltage	+15 V
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-020050-05-2	Active Tx/Rx Converter, RF:20-50GHz,LO:10-25GHz,IF:DC-5GHz	Rev.1.1