

Active Tx/Rx Converter

10-20GHz/11dB Conversion Loss

Model: TLAMCM-010020-06-2

TLAMCM-010020-06-2 is an up and down fundamental mixer integrated with x2 active frequency multiplier chain. The converter has an input LO frequency of 5 to 10 GHz with a typical input power of 0 dBm. RF frequency can range from 10 to 20 GHz and IF port can range from DC to 6GHz with SMA connector.

Features:

- RF Frequency: 10-20GHz
- LO Frequency: 5-10GHz
- IF Frequency: DC-6GHz
- Low Conversion Loss

Applications:

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

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
RF Frequency	10		20	GHz
2XLO Frequency	10		20	GHz
LO Frequency	5		10	GHz
IF Frequency	DC		6	GHz
LO-Input power		0		dBm
LO Multiplier factor		2		
Conversion Loss		11		dB
RF Input P1dB		12		dBm
DC Supply Voltage		12		V DC
DC Supply Current		200		mA

Mechanical Specifications:

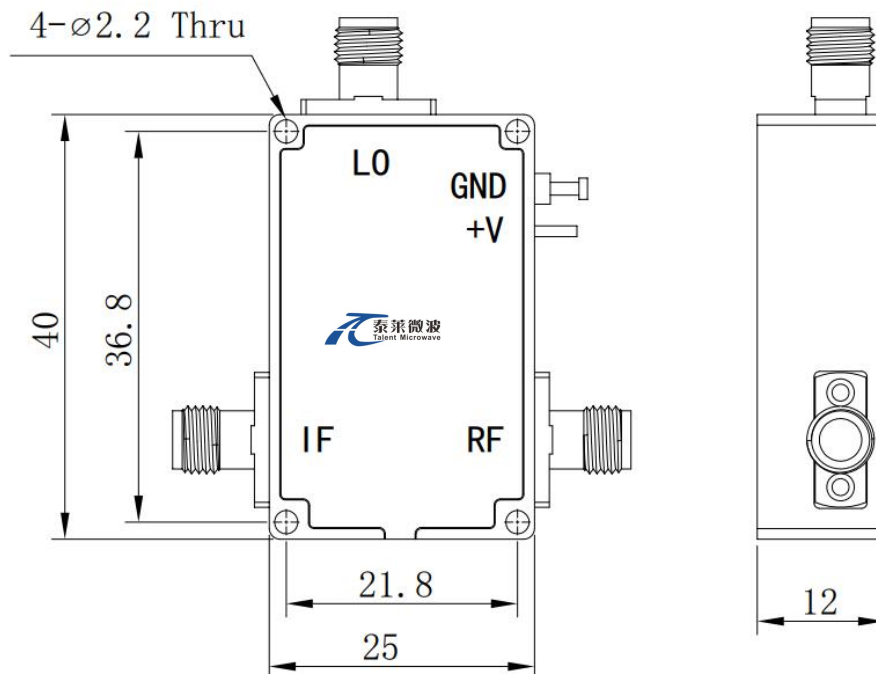
Parameter	Value	Units
RF Connector	SMA Female	
LO Connector	SMA Female	
IF Connector	SMA Female	
Size	40*25*12.5	mm

Absolute Maximum Ratings:

Parameter	Value
RF Input Power	24 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-010020-06-2	Active Tx/Rx Converter, RF: 10-20GHz, Conversion Loss: 11dB	Rev.1.0