

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

电气特性 Electrical Characteristics:

参数 Parameter	Min	Typ	Max	单位 Units
RF频率 RF Frequency	20		50	GHz
LO频率 LO Frequency	10		25	GHz
IF频率 IF Frequency	DC		5	GHz
LO 驱动功率 LO-Input power		-6	-4	dBm
中频输入功率 IF Input power		-10		dBm
变频损耗 Conversion Loss		-10		dB
直流电压 DC Supply Voltage		12		V DC
直流电流 DC Supply Current		150		mA

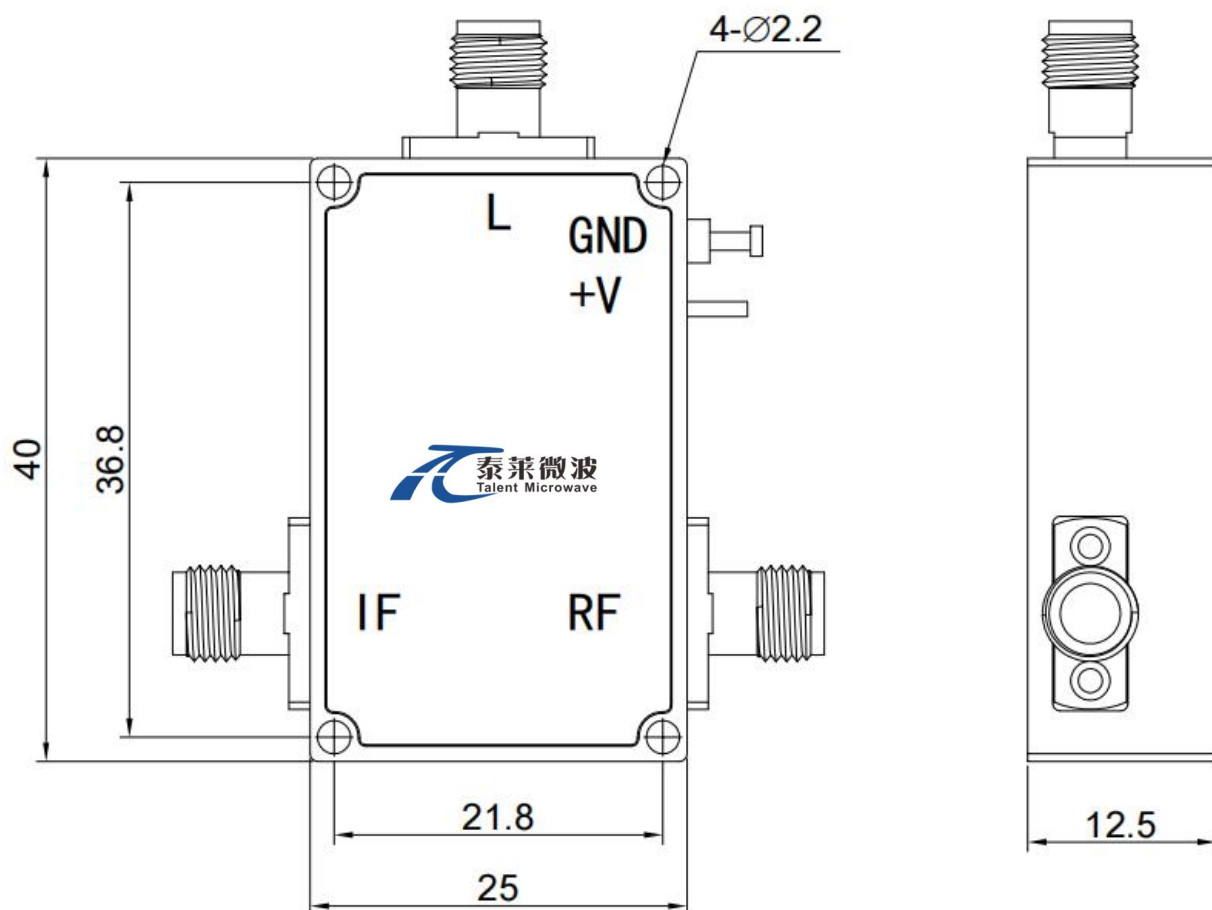
机械特性 Mechanical Specifications:

参数 Parameter	指标 Value	单位 Units
RF 接口 RF Connector	2.4mm Female	
LO 接口 LO Connector	2.92mm Female	
IF 接口 IF Connector	SMA Female	
直流供电 DC Supply	Solder Pin	
尺寸 Size	40*25*12.5	mm

绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
LO输入功率 LO Input Power	-4 dBm
直流电压 DC Supply Voltage	+15 V
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

外形图 Outline Drawing: Unit:mm



温度环境 Environmental Conditions:

参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature	0		+50	℃
存储温度 Non-operating Temperature	-45		+85	℃
相对湿度 Relative humidity		95		%
海拔 Altitude	10,000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

订货信息 Ordering Information:

标准型号 Base Number	描述 Desciption	版本号 Revision
TLAMCM-020050-05-2	Active Tx/Rx Converter, RF:20-50GHz,LO:10-25GHz,IF:DC-5GHz	Rev.1.1