

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

电气特性 Electrical Characteristics:

参数 Parameter	Min	Typ	Max	单位 Units
RF频率 RF Frequency	10		20	GHz
2XLO频率 2XLO Frequency	10		20	GHz
LO频率 LO Frequency	5		10	GHz
IF频率 IF Frequency	DC		6	GHz
LO驱动功率 LO-Input power		0		dBm
LO倍频次数 LO Multiplier factor		2		
变频损耗 Conversion Loss		11		dB
RF输入P1dB RF Input P1dB		12		dBm
直流电压 DC Supply Voltage		12		V DC
直流电流 DC Supply Current		200		mA

机械特性 Mechanical Specifications:

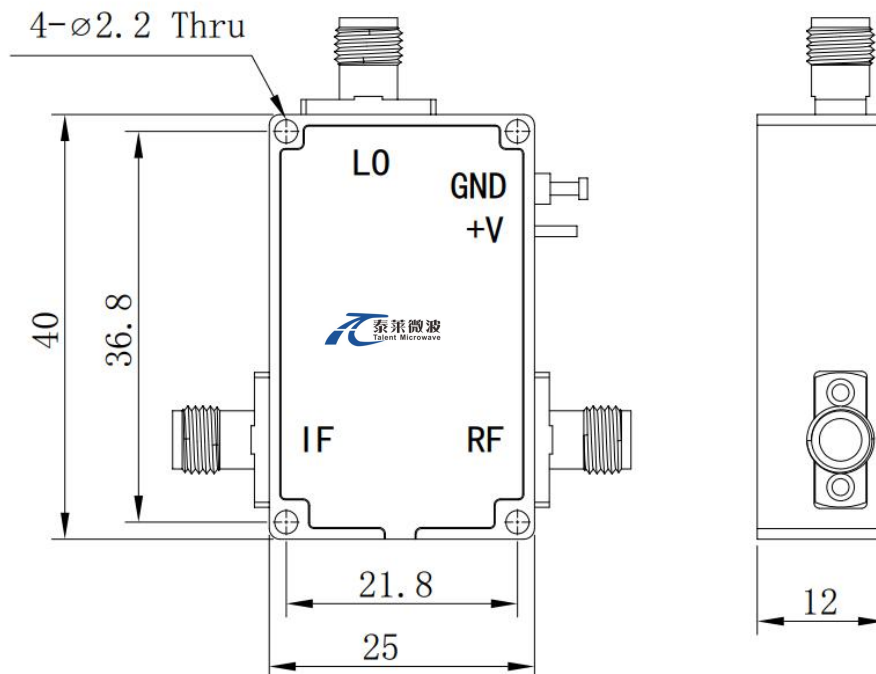
参数 Parameter	指标 Value	单位 Units
RF 接口 RF Connector	SMA Female	
LO 接口 LO Connector	SMA Female	
IF 接口 IF Connector	SMA Female	
尺寸 Size	40*25*12.5	mm

绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
RF输入功率 RF Input Power	24 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; Tolerance:±0.1mm



ESD Protection: Strictly adhere to ESD precautions to prevent electrostatic damage.

温度环境 Environmental Conditions:

参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature	0		+50	°C
存储温度 Non-operating Temperature	-45		+85	°C
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 Description	版本号 Revision
TLAMCM-010020-06-2	Active Tx/Rx Converter, RF: 10-20GHz, Conversion Loss: 11dB	Rev.1.0