

V-band, Active Tx/Rx Converter

WR-15/50-75 GHz/-9dB Conversion Loss

Model: TLAMCM-050075-10-15

TLAMCM-050075-10-6 is an up and down fundamental mixer integrated with x6 active frequency multiplier chain. The converter has an input LO frequency of 8.25 to 12.5 GHz with an input power range from -3dB to +3dB. RF frequency can range from 50 to 75 GHz and IF port can range from DC to 10GHz with SMA connector. The DC power requirement for the multiplier is +12 V DC.

Features:

- RF Frequency: 50-75GHz
- LO Frequency: 8.25-12.5GHz
- IF Frequency: DC-10GHz
- Low Conversion Loss

Applications:

- Test Equipment
- Radar System
- V-band Imaging

电气特性 Electrical Characteristics:

参数 Parameter	Min	Typ	Max	单位 Units
RF频率 RF Frequency	50		75	GHz
LO频率 LO Frequency	8.25		12.5	GHz
IF频率 IF Frequency	DC		10	GHz
LO 驱动功率 LO-Input power	-3	0	+3	dBm
变频损耗 Conversion Loss(IF = 100MHz)		8		dB
变频损耗 Conversion Loss(LO = 12.5GHz)		9		dB
直流电压 DC Supply Voltage		12		V
直流电流 DC Supply Current		100		mA

机械特性 Mechanical Specifications:

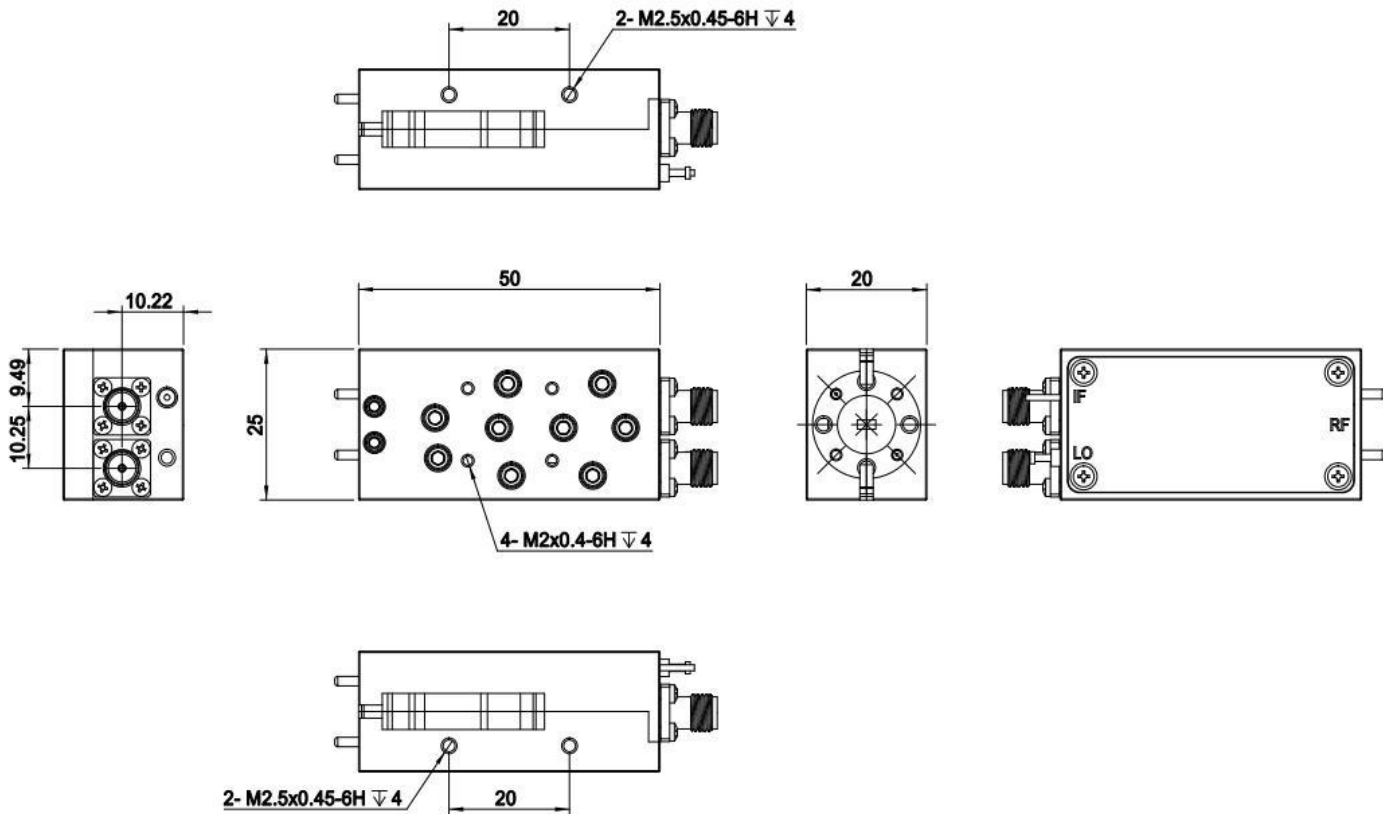
参数 Parameter	指标 Value	单位 Units
RF 接口 RF Connector	WR-15/UG-385/U	
LO 接口 LO Connector	SMA Female	
IF 接口 IF Connector	SMA Female	
直流供电 DC Supply	Solder Pin	
尺寸 Size	50x25x20	mm

绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
RF 功率 RF Input Power	20 dBm
IF 功率 IF Input Power	20 dBm
LO 功率 LO Input Power	4 dBm
直流电压 DC Supply Voltage	+15V
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	°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-050075-10-15	V-band Active Tx/Rx Converter, Conversion Loss:-9dB,WR-15/UG 385/U	Rev.1.1