

E-band, Active Tx/Rx Converter

WR-12/60-90GHz/10dB Conversion Loss

Model: TLAMCM-060090-30-12

TLAMCM-160090-30-12 is an up and down fundamental mixer integrated with x6 active frequency multiplier chain. The converter has an input LO frequency of 10 to 15GHz with a typical input power of +5 dBm. RF frequency can range from 60 to 90 GHz and IF port can range from DC to 30 GHz with 2.92mm connector. The DC power requirement for the multiplier is +12 V DC.

Features:

- RF Frequency: 60-90GHz
- LO Frequency: 10-15GHz
- IF Frequency: DC-30GHz
- Low Conversion Loss

Applications:

- Test Equipment
- Radar System
- E band Imaging

电气特性 Electrical Characteristics:

参数 Parameter	Min	Typ	Max	单位 Units
射频频率 RF Frequency	60		90	GHz
本振频率 LO Frequency	10		15	GHz
中频频率 IF Frequency	DC		30	GHz
本振输入功率 LO Input Power	3	5	7	dBm
射频输入P1dB压缩点 RF Input P1dB		8		dBm
中频输入P1dB压缩点 IF Input P1dB		8		dBm
变频损耗 Conversion Loss(IF=100MHz)		10		dB
供电电压 DC Voltage		+12		V

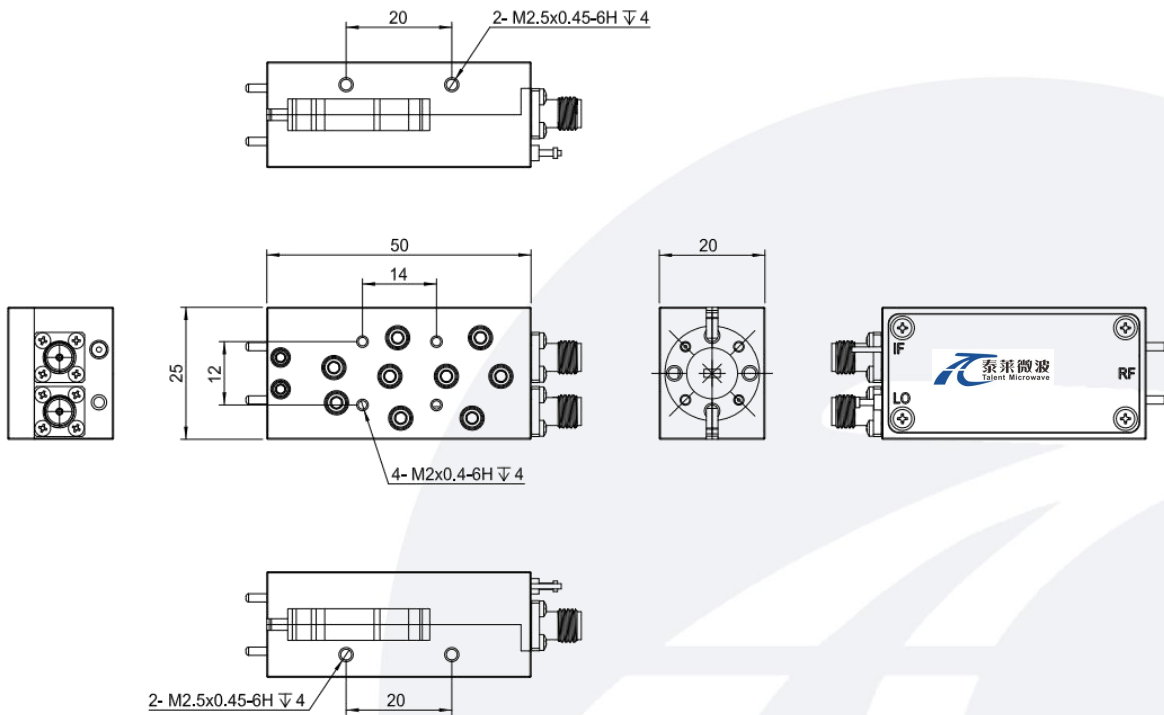
机械特性 Mechanical Specifications:

参数 Parameter	指标 Value	单位 Units
RF 接口 RF Connector	WR-12/UG-387/U	
LO 接口 LO Connector	SMA Female	
IF 接口 IF Connector	2.92mm Female	
尺寸 Size	50*25*20	mm
重量 Weight	/	g
直流偏置 DC Bias	Solder Pin	

绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+15V
本振输入功率 LO Input Power	10 dBm
射频输入功率 RF Input Power	12 dBm
中频输入功率 IF Input Power	12 dBm
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	-10		+65	℃
存储温度 Non-operating Temperature	-45		+85	℃
相对湿度 Relative humidity		95		%
海拔 Altitude	50,000			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-060090-30-12	E band Active Tx/Rx Converter, Conversion Loss:10dB,WR-12/UG-387/U;	Rev.1.1

Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factorslike material lots etc.