

D-band Spectrum Frequency Extension Systems

110-170GHz/WR-6.5

Model: TLSM-110170-12-06

TLSM-110170-12-06 spectrum frequency extension systems are a dedicated Test & Measurement solution for extending the range of your signal source to 110-170 GHz.

Features:

- Frequency range: 110-170GHz
- Conversion Loss SSB: 12dB Typ
- Low conversion loss

Applications:

- Frequency Extension
- Antenna measurements
- Material characterisation

电气特性 Electrical Characteristics:

参数 Parameter	Min	Typ	Max	单位 Units
频率范围 Frequency range	110		170	GHz
中频输出频率 IF Output Frequency	DC		5	GHz
本振输入频率 LO Input Frequency	9.16		14.17	GHz
本振输入功率 LO Input Power	13	15	20	dBm
倍频次数 Multiplication Factor	12			
射频输入功率 RF Input Power		-10	0	dBm
变频损耗 Mixer Conversion Loss SSB		12	15	dB

机械特性 Mechanical Specifications:

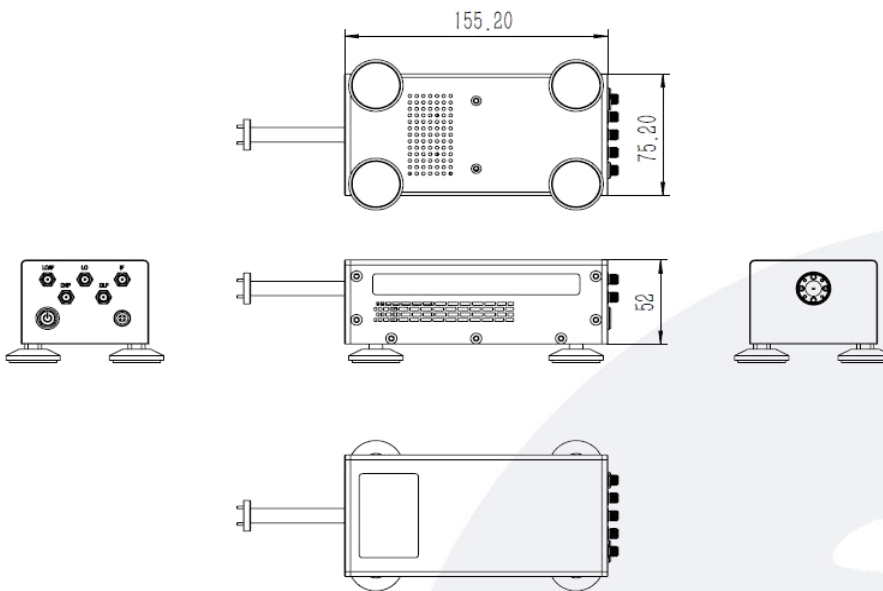
参数 Parameter	指标 Value	单位 Units
射频输入端口 RF Input Ports	WR-6.5/UG-387/U	
本振/中频端口 LO/IF Ports	SMA Female	
本振输入端口 LO Input Ports	SMA Female	
中频输出端口 IF Output Ports	SMA Female	
高通接口 DHP Ports	SMA Female	
低通接口 DLP Ports	SMA Female	
供电引脚 Power Supply Pin	FGG 0B 4 Core	
尺寸 Size	155.2*75.2*52	mm

绝对最大值 Absolute Maximum Ratings :

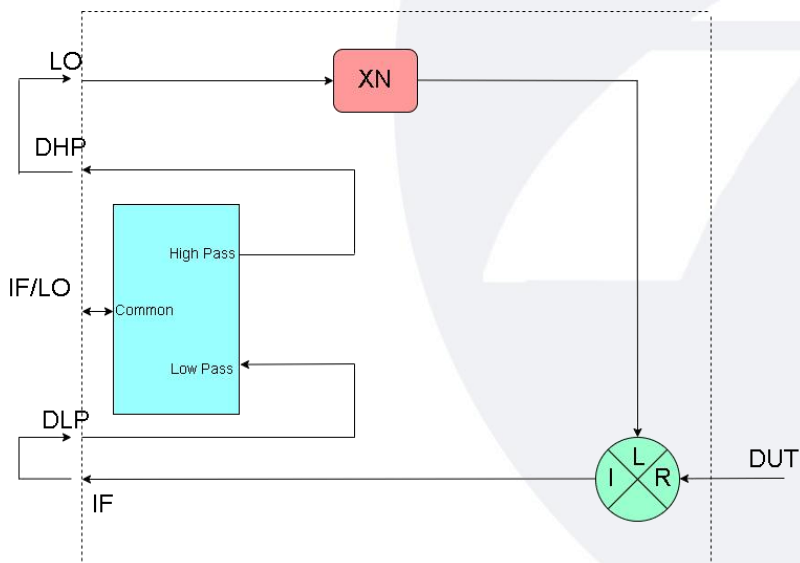
参数 Parameter	指标 Value
供电电压 Supply Bias Voltage	+240 V AC
射频输入功率 RF Input Power	0 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

外形图 Outline Drawing:

Unit:mm; Tolerance:±0.1mm



原理框图 Block Diagrams:



环境和物理特性 Envrionmental And Physical Characteristics:

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	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			

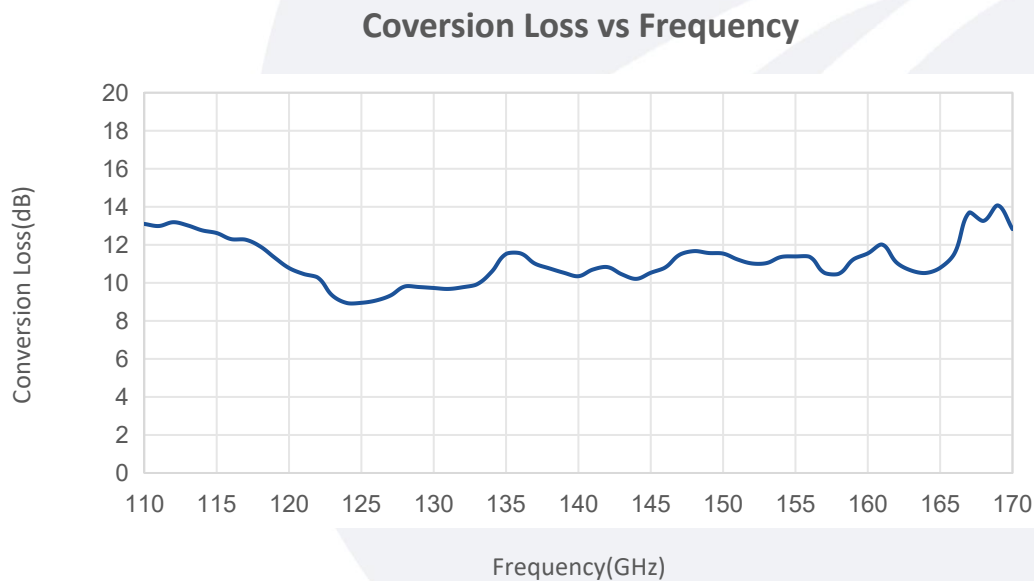
订货信息 Ordering Information:

标准型号 Part Number	描述 Description	版本号 Revision
TLSM-110170-12-06	D-Band Spectrum Frequency Extension Systems X12,110-170GHz, Conversion Loss SSB: 12dB typ.	Rev.1.2

随货配件 Components Included:

标准型号 Part Number	描述 Description	数量 Quantity
TLACTDC-22012	AC-to-DC Power Adapter	1 PCS

典型曲线 Typical Performance Data:



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