

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: 15dB Typ
- Low conversion loss

Applications:

- Frequency Extension
- Antenna measurements
- Material characterisation

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	110		170	GHz
IF Output Frequency	DC		5	GHz
LO Input Frequency	9.16		14.17	GHz
LO Input Power	13	15	20	dBm
Multiplication Factor		12		
RF Input Power		-10	0	dBm
Mixer Conversion Loss SSB		15		dB

Mechanical Specifications:

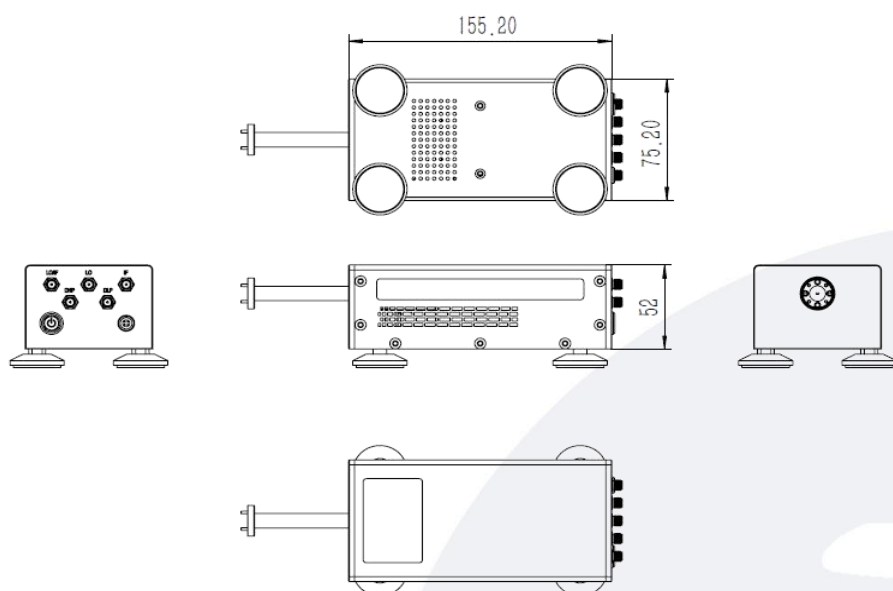
Description	Parameter	Units
RF Input Ports	WR-6.5/UG-387/U	
LO/IF Ports	SMA Female	
LO Input Ports	SMA Female	
IF Output Ports	SMA Female	
DHP Ports	SMA Female	
DLP Ports	SMA Female	
Power Supply Pin	FGG 0B 4 Core	
Size	155.2*75.2*52	mm

Absolute Maximum Ratings :

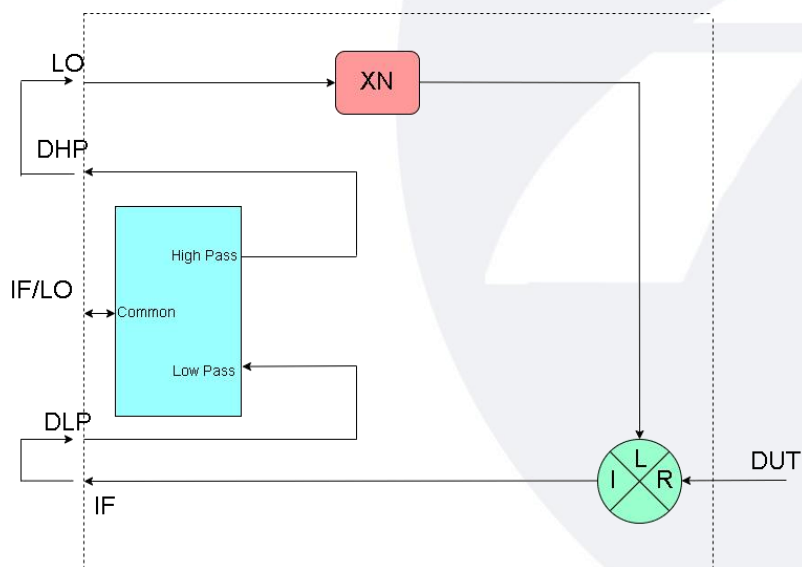
Parameter	Value
Supply Bias Voltage	+240 V AC
RF Input Power	0 dBm
ESD sensitivity (HBM)	Class 0, passed 150V

Outline Drawing:

Unit:mm; Tolerance:±0.1mm



Block Diagrams:



Envrionmental And Physical Characteristics:

Parameter	Min	Typ	Max	Units
Operating Temperature	-10		+65	°C
Non-operating Temperature	-45		+85	°C
Relative humidity		95		%
Altitude	10,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

Part Number	Description	Revision
TL5M-110170-12-06	D-Band Spectrum Frequency Extension Systems X12,110-170GHz, Conversion Loss SSB: 15dB typ.	Rev.1.2

Components Included:

Part Number	Description	Quantity
TLACTDC-22012	AC-to-DC Power Adapter	1 PCS