

Model: TLVE-5075-16

V-band VNA Frequency Extender 50-75 GHz, WR-15

Feature:

- Ultra Wide Band: 50-75 GHz
- Port Output Power (No Attenuation): 16dBm Typ
- Dynamic Range @ 10 Hz BW: 120dB Typ
- Unconditional stability



Electrical Specifications:

Parameter	Min	Typ	Max	Units
Frequency range	50-75			GHz
Port Output Power		13		dBm
Input Power (Damage)			20	dBm
Output Power Attenuation (Option: Variable attenuators)	0		30	dB
Dynamic Range @10 Hz BW		120		dB
Directivity		30		dB
RF Input Frequency	12.50		18.33	GHz
RF Input Power	0		6	dBm
LO Input Frequency	12.50		18.33	GHz
LO Input Power	0		6	dBm
IF Frequency Range	10		1000	MHz
Multiplication Factor		4		
Stability @ 300 Hz BW		± 0.1		dB
Phase Stability @ 300 Hz BW		$\pm 2.5^\circ$		

Mechanical Specifications:

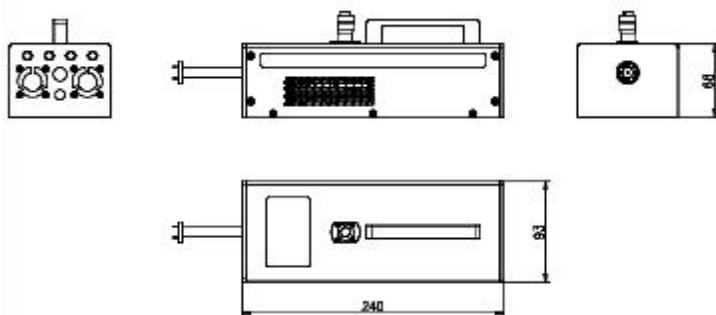
Parameter	Value
RF Input Connector	SMA Female
LO Input Connector	SMA Female
IF Input Connector	SMA Female
RF Output Connector	WR-15/UG-387
Power Supply Pin	FGG 0B 4 Core
Size	240*93*68mm

Absolute Maximum Ratings:

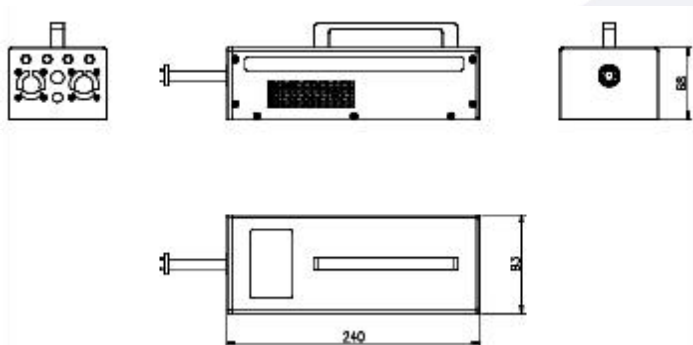
Parameter	Value
Supply Bias Voltage	240 V
RF Input Power	+20 dBm

Outline Drawing:

Unit: mm

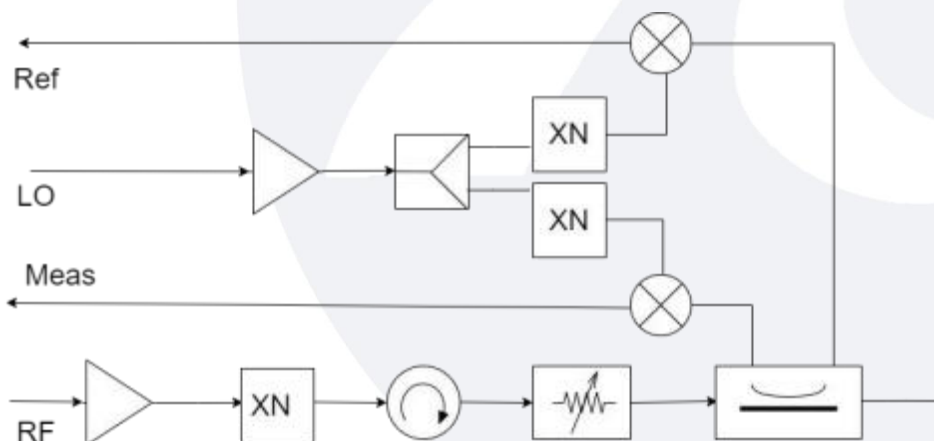


TLVE-5075-16-A



TLVE-5075-16

Block Diagrams:



Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature	0		+50	°C
Non-operating Temperature	-45		+125	°C
Relative humidity		95		%
Altitude	50,000			feet
Shock / Vibration(MIL-STD-810F)	20g,11ms,saw-tooth			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

Part Number	Description	Revision
TLVE-5075-16	V-band VNA Frequency Extender, 50-75 GHz, Output Power:16 dBm typ., Dynamic Range:120 dB typ., Magnitude Stability @ 300 Hz BW:±0.1dB,Phase Stability @ 300 Hz BW:±2.5°	Rev.1.1
TLVE-5075-16-A	V-band VNA Frequency Extender, 50-75 GHz, Output Power:16 dBm typ., Dynamic Range:120 dB typ., Magnitude Stability @ 300 Hz BW:±0.1dB,Phase Stability @ 300 Hz BW:±2.5°, with Micrometer driven variable attenuators	Rev.1.1

Components Included :

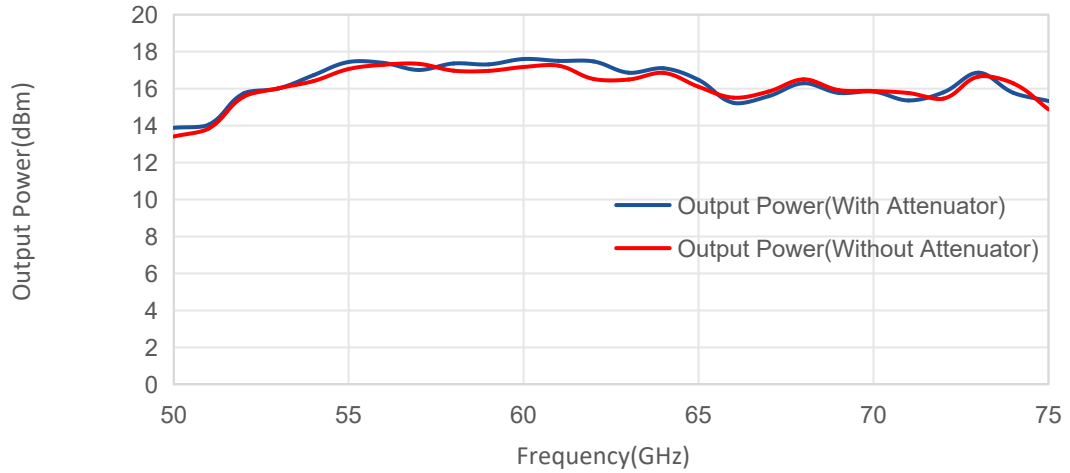
Part Number	Description	Quantity
S1-SMAMSMAM-1.2m	Coaxial Cable Assembly	4 PCS
TLACTDC-22012	AC-to-DC Power Adapter	1 PCS

Notes:

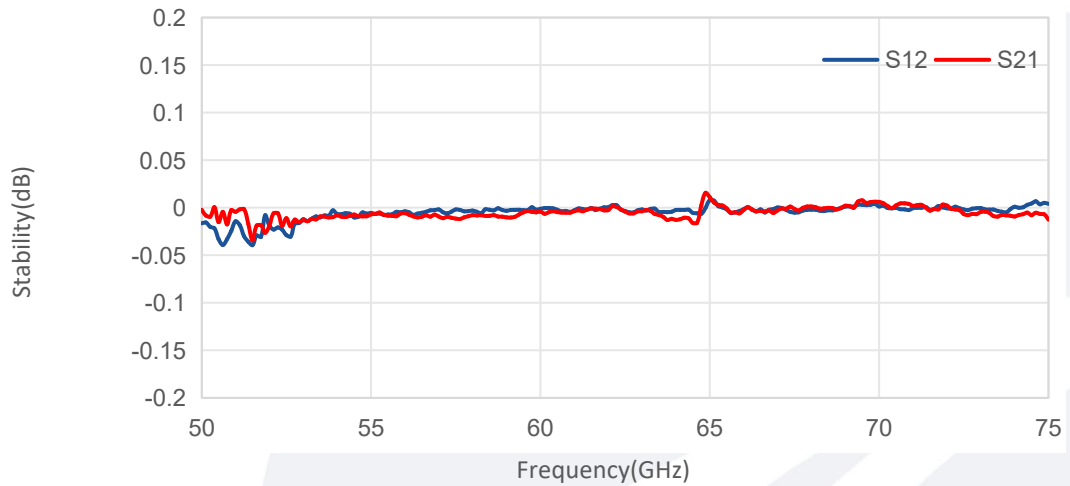
1. Dimensions and specifications may be changed without prior notice.
2. Standard Warranty:three years.

Typical Performance Data:

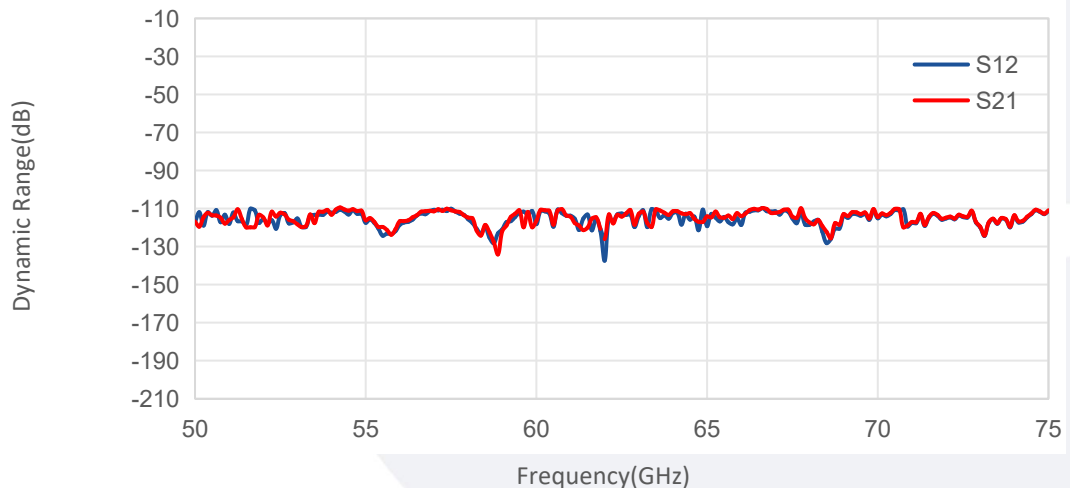
Output Power vs Frequency



Stability vs Frequency



Dynamic Range vs Frequency



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.