

## Model: TLVE-6090-13

## E-band VNA Frequency Extender 60-90 GHz, WR-12

### Feature:

- Ultra Wide Band: 60-90 GHz
- Port Output Power (No Attenuation): 9dBm Typ
- Dynamic Range @ 10 Hz BW: 120dB Typ
- Unconditional stability



### Electrical Specifications :

Parameter	Min.	Typ.	Max.	Units
Frequency range	60		90	GHz
Port Output Power		9		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	10		15	GHz
RF Input Power	5	8	10	dBm
LO Input Frequency	10		15	GHz
LO Input Power	5	8	10	dBm
IF Frequency Range	1		1000	MHz
Multiplication Factor		6		
Stability @ 300 Hz BW		±0.1		dB
Phase Stability @ 300 Hz BW		±2.5°		°

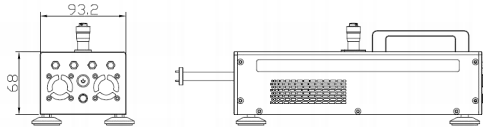
### Mechanical Specifications :

Parameter	Value
RF Input Connector	SMA Female
LO Input Connector	SMA Female
IF Input Connector	SMA Female
RF Output Connector	WR-12/UG-387
Power Supply Pin	FGG 0B 4 Core
Size	269.2*93.2*68mm

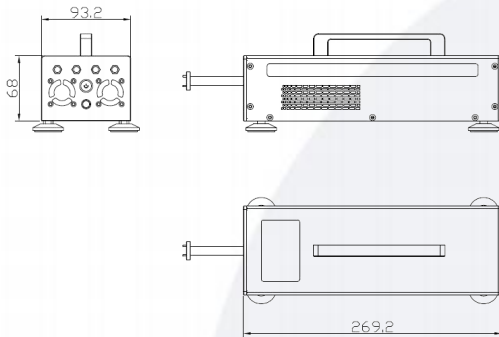
### Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	240V
Input Power	20dBm

### Outline Drawing:

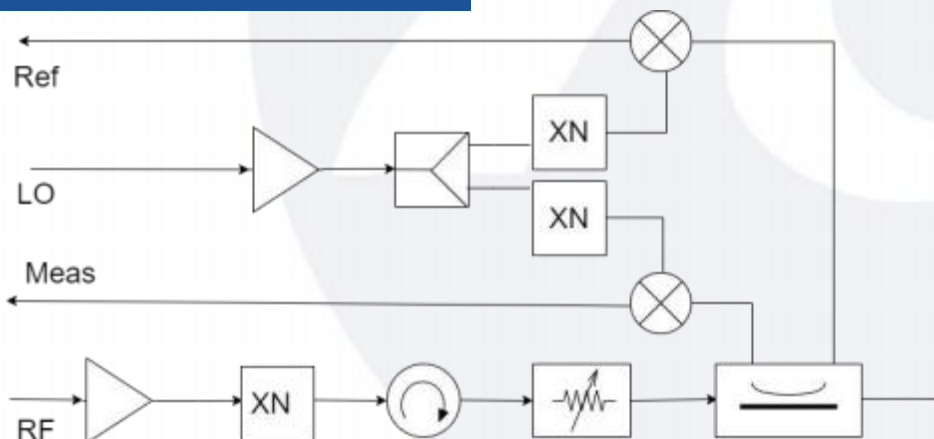


TLVE-6090-13-A



TLVE-6090-13

### 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)	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
TLVE-6090-13	E-band VNA Frequency Extender, 60-90 GHz, Output Power:9dBm typ., Dynamic Range:120 dB typ., Magnitude Stability @ 300 Hz BW:±0.1dB,Phase Stability @ 300 Hz BW:±2.5°	Rev.1.1
TLVE-6090-13-A	E-band VNA Frequency Extender, 60-90 GHz, Output Power:9dBm 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 :**

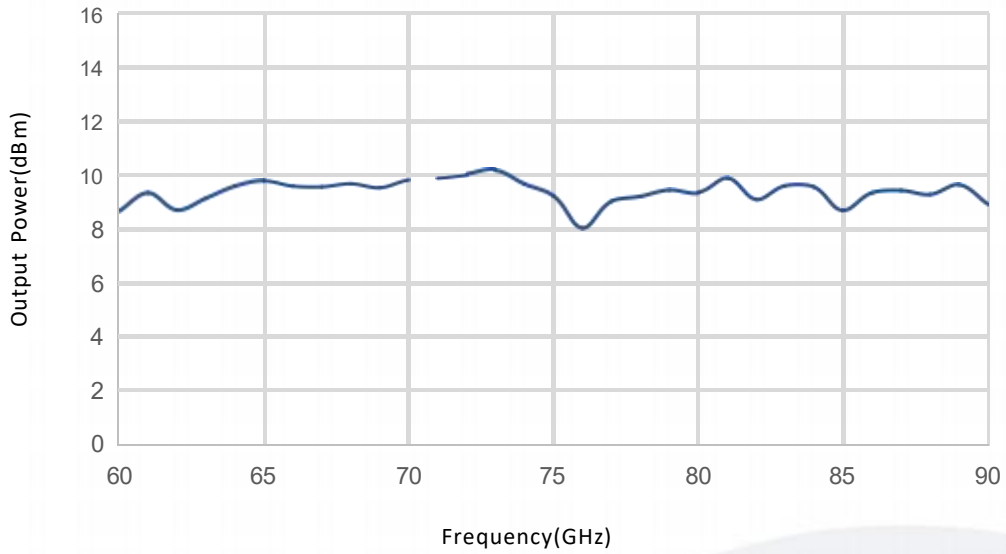
Part Number	Description	Quantity
S1-SMAMSMAM-1.2m	Coaxial Cable Assembly	4 PCS
TLACTDC-22012	AC-to-DC Power Adapter	1 PCS

**Notes:**

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

Typical Performance Data:

Output Power vs. Frequency



Dynamic Range vs. Frequency

