泰莱微波
Talent Microwave

Suzhou Talent Microwave,Inc
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W–Band VNA Frequency Extender

67-110GHz /WR-10

Model: TLVE-67110-10-A/TLVE-67110-10

TLVE-67110-10 frequency extenders are a dedicated Test & Measurement solution for extending the range of your Vector Network Analyzer (VNA) to 67-110 GHz.

Features:

- Frequency range: 67-110 GHz
- Port Output Power (No Attenuation): 10 dBm Typ
- Dynamic Range @ 10 Hz BW: 110dB Typ
- Unconditional stability

Applications:

- VNA 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	67		110	GHz
测试端口输出功率 Test Port Output Power		10		dBm
测试端口输入功率 Test Port Input Power (Damage)			20	dBm
输出功率衰减 Output Power Attenuation (Option:Variable attenuators)	0		30	dB
动态范围 Dynamic Range @ 10Hz BW	100	110		dB
射频输入频率 RF Input Frequency	11.16		18.33	GHz
射频输入功率 RF Input Power	0	1	3	dBm
RF倍频次数 RF Multiplication Factor		6		
本振输入频率 LO Input Frequency	11.16		18.33	GHz
本振输入功率 LO Input Power	0	1	3	dBm
LO倍频次数 LO Multiplication Factor		6		
中频频率范围 IF Frequency Range	1		1000	MHz
有效方向性 Effective Directionality@10Hz BW	35	40		dB
有效负载匹配 Payload Matching@10Hz BW	45	60		dB
反射追踪 ReflectionTracking@10Hz BW		±0.03	±0.1	dB
传输追踪 Transmission Tracking@10Hz BW		±0.03	±0.1	dB
幅度稳定度 Amplitude stability @300 Hz BW		±0.1		dB
相位稳定度 Phase Stability @300 Hz BW		±1	±1.5	°

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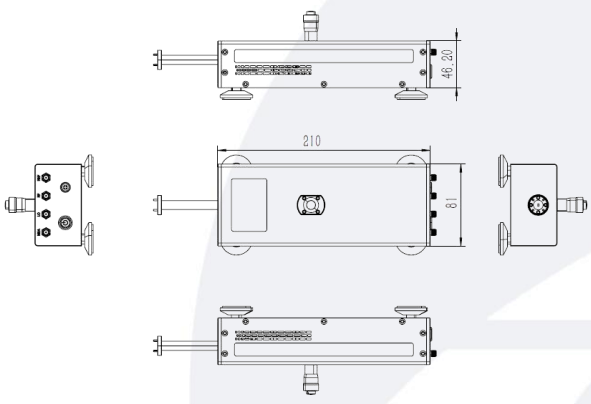
机械特性 Mechanical Specifications:

参数 Parameter	指标 Value
RF/LO输入接口 RF/LO Input Connector	SMA Female
MEA/REF IF输出接口 MEA/REF IF Output Connector	SMA Female
测试端口 Test Port Connector	WR-10/UG-387/U
供电 Power Supply Pin	FGG 0B 4 Core
尺寸 Size	210*81*46.2mm

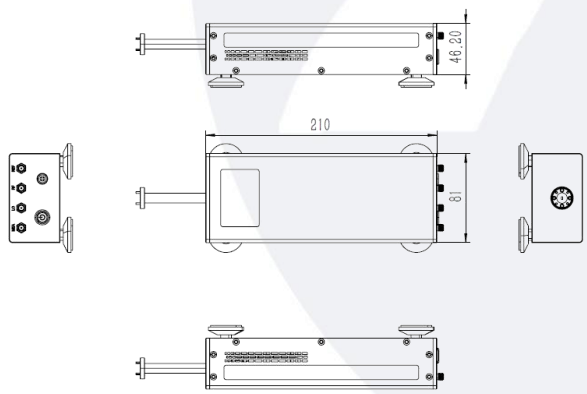
绝对最大值 Absolute Maximum Ratings :

描述 Description	参数 Parameter	单位 Units
测试端输入功率 Test Port Input Power	+20	dBm
RF/LO端损坏等级 RF/LO Port Damage Level	+10	dBm
供电偏置 Supply Bias Voltage	+240 V AC	
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V	

外形图 Outline Drawing: Unit:mm



TLVE-67110-10-A



TLVE-67110-10

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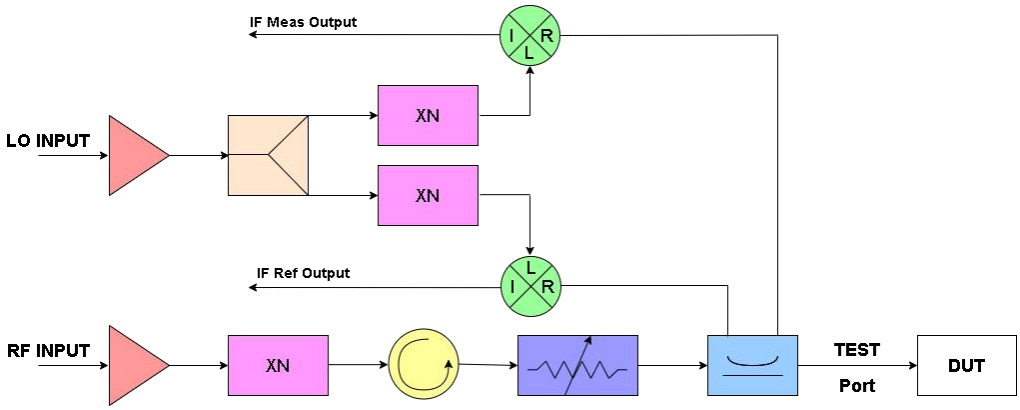
原理框图 Block Diagrams:



环境和物理特性 Envrionmental And Physical

描述 Description	参数 Parameter	单位 Units
操作温度 Operating Temerature	0 To +45	℃
存储温度 Storage Temerature	-55 to +125	℃
材质 Material	Al	
表面处理 Finish	Gray spray paint	

订货信息 Ordering Information:

标准型号 Part Number	描述 Description	版本号 Revision
TLVE-67110-10	W-band VNA Frequency Extender, 67-110 GHz, Output Power:10 dBm typ., Dynamic Range:110 dB typ.,Magnitude Stability @300Hz BW:±0.1dB,Phase Stability @300Hz BW:±1°	Rev.1.1
TLVE-67110-10-A	W-band VNA Frequency Extender, 67-110 GHz, Output Power:10 dBm typ., Dynamic Range:110 dB typ.,Magnitude Stability @300Hz BW:±0.1dB,Phase Stability @300Hz BW:±1°,with Micrometer driven variable attenuators	Rev.1.1

随货配件 Components Included:

标准型号 Part Number	描述 Desciption	数量 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.

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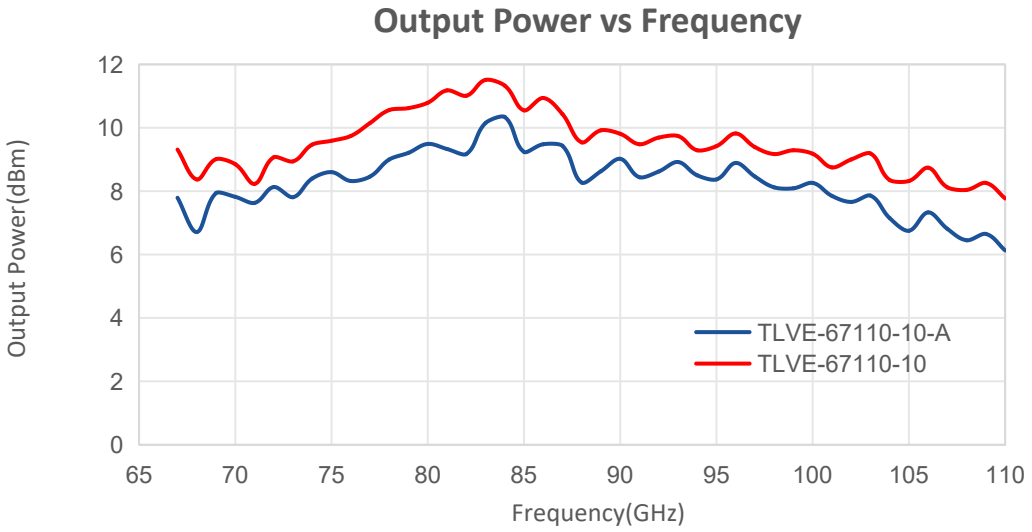
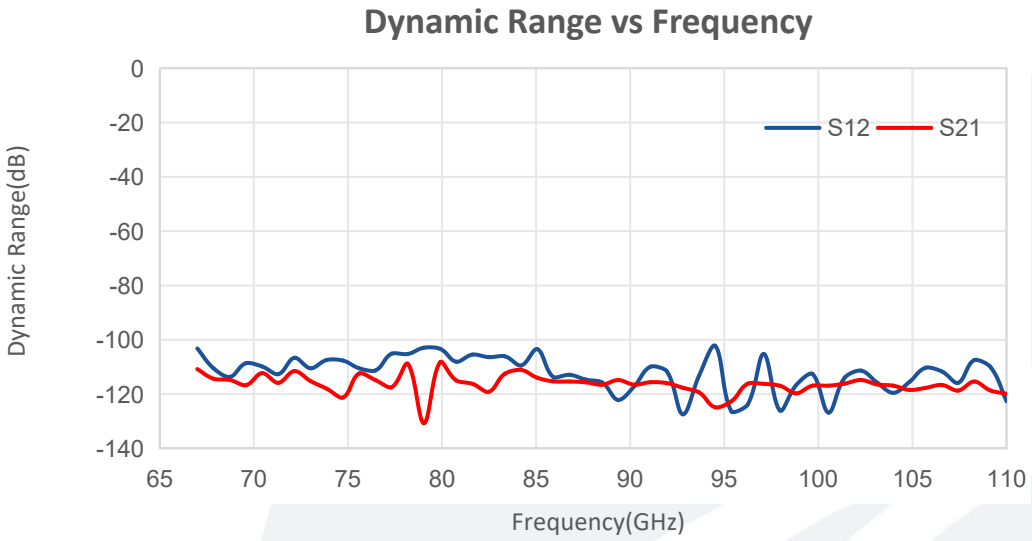
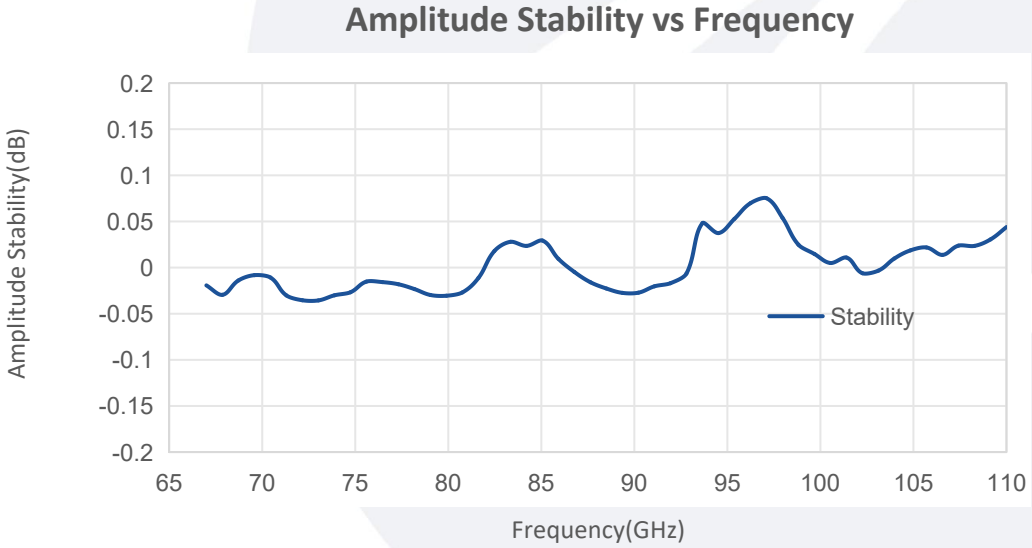
典型曲线 Typical Performance Data:







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.

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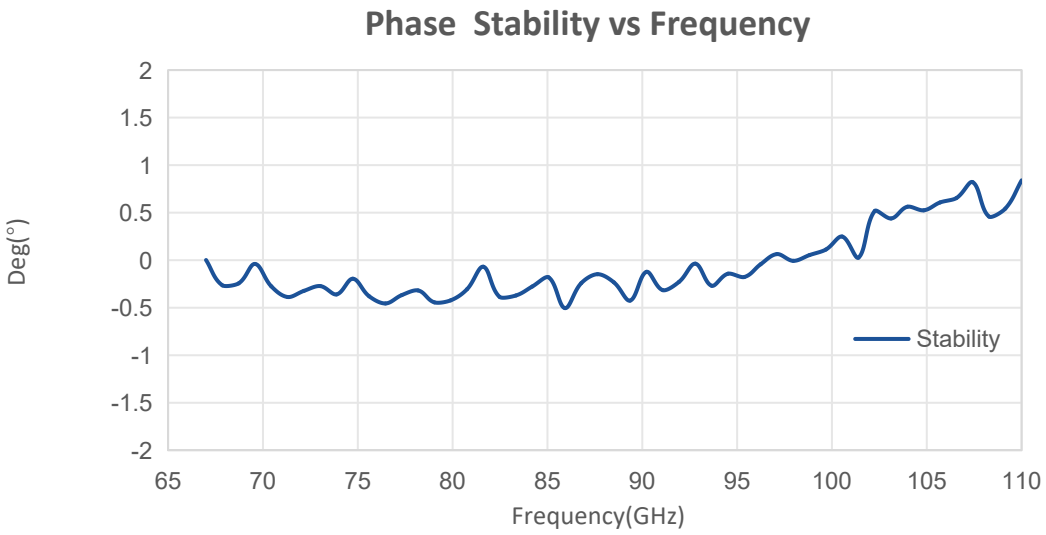

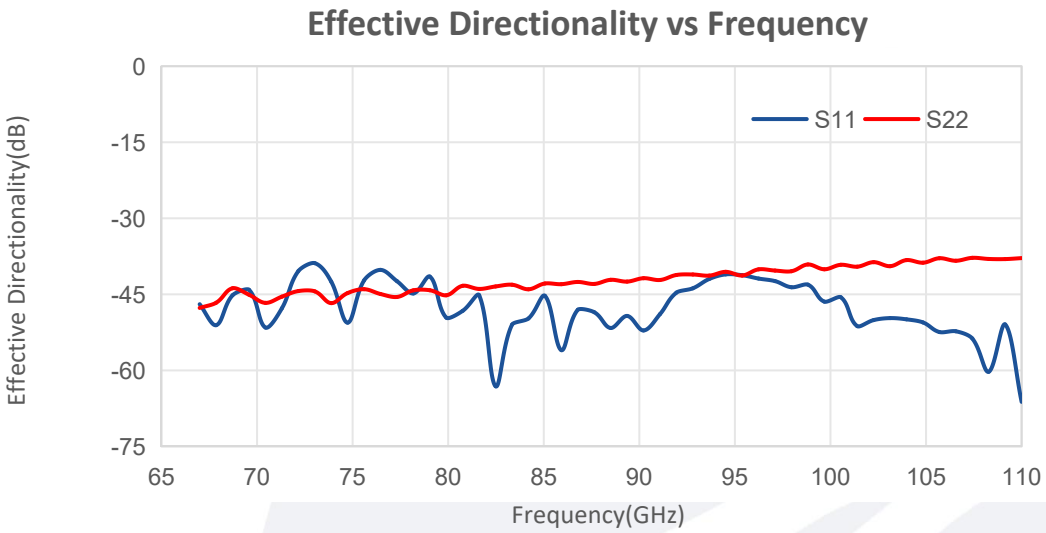

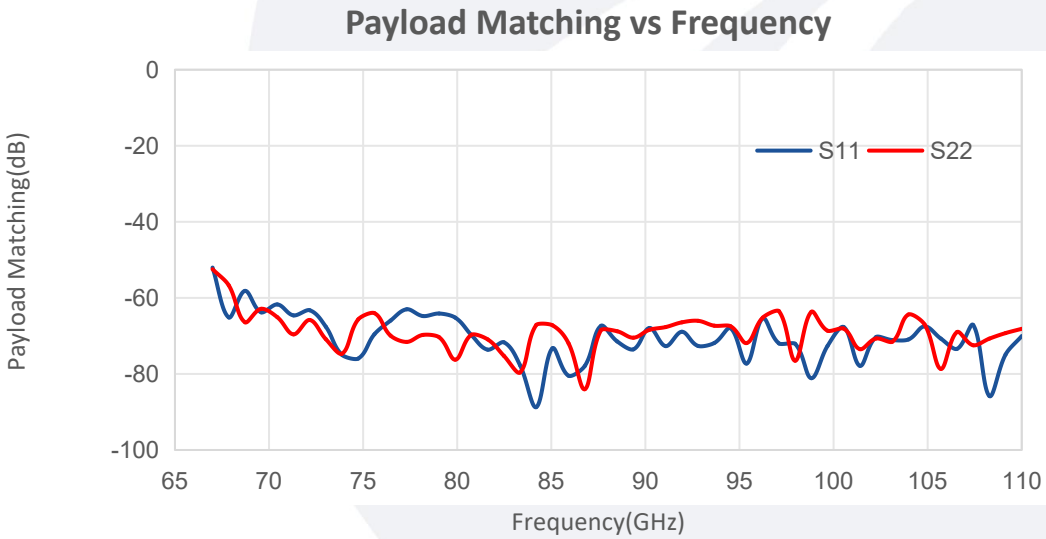

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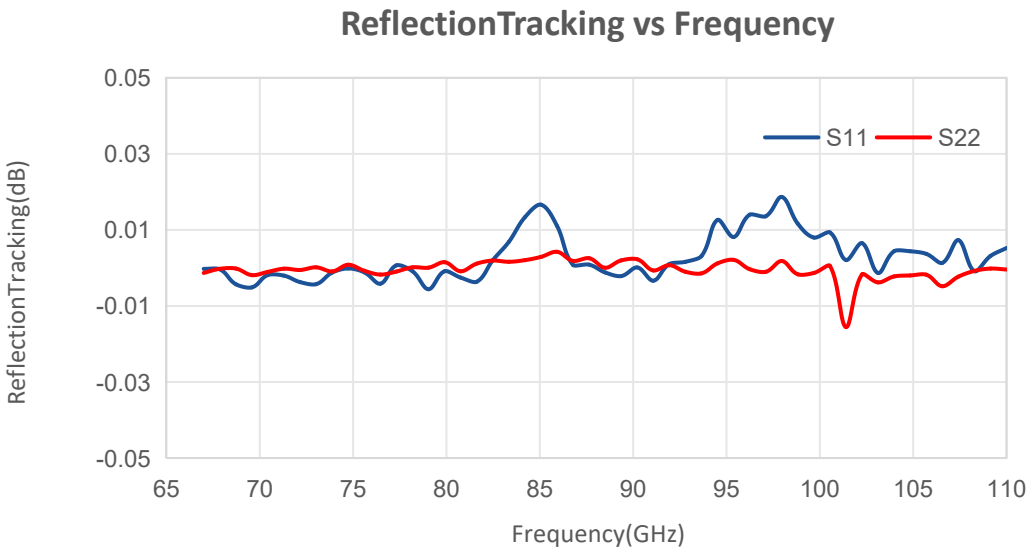

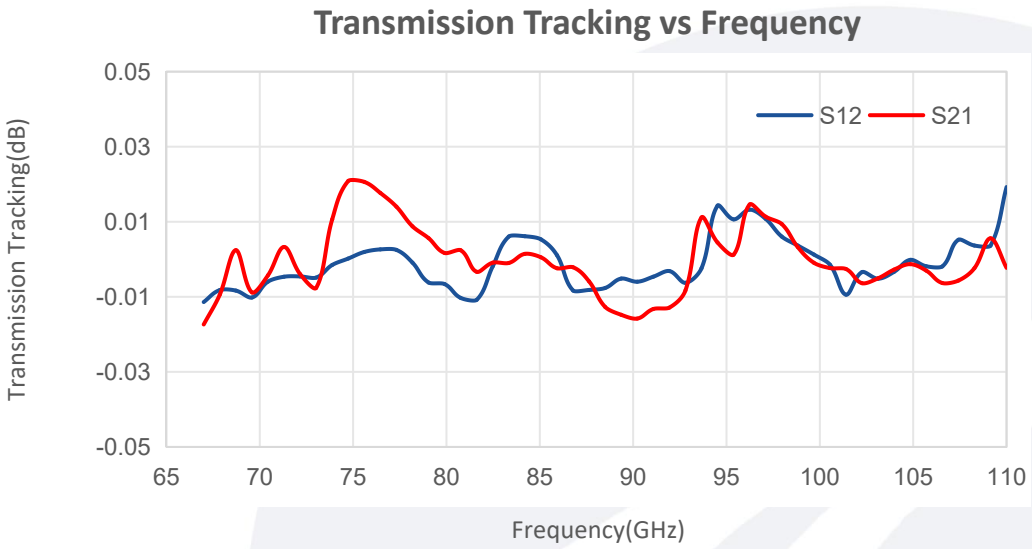

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