



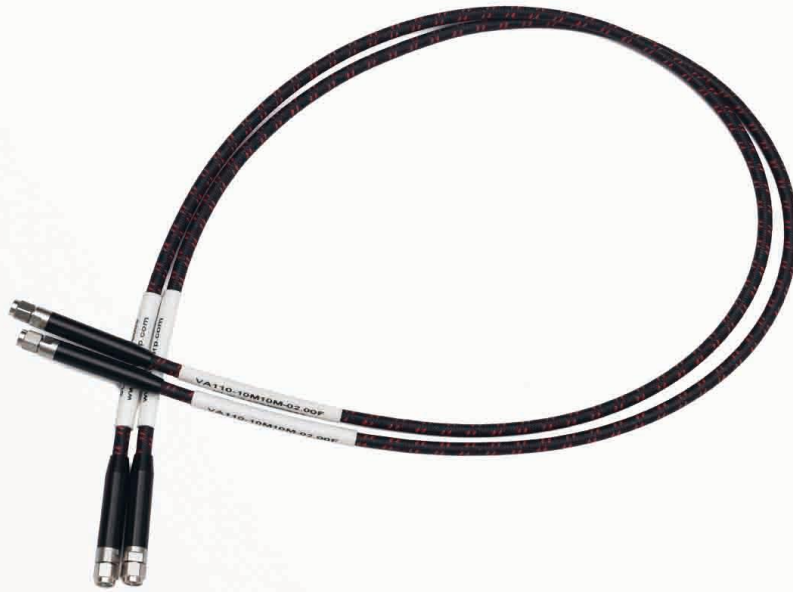
110GHz RF Test Product

SLK Technologies Inc.

———— Provide the most effective interconnection solutions worldwide ————

Product Introduction

110GHz SPC Test Cable



Product Feature

- ▶ Stainless steel body, beryllium copper gold-plated center needle, durable
- ▶ Armored cable, anti-pressure, anti-torsion
- ▶ Excellent amplitude and phase stabilization performance
- ▶ Bending times up to 50,000

Series	VA110
Max operating frequency(GHz)	110
Recommend interface	1.0mm
Aarmor diameter(mm)	4.0
Minimum bending radius, static(mm)	17.0
Minimum bending radius, repeated(mm)	25.0
VSWR(typical value)	1.30
VSWR(maximum value)	1.45
Insertion loss, typical value(dB/m)	13.8
Phase stability, typical value(°)	±8
Phase stability, maximum value(°)	±10
Amplitude stability,typical value(dB)	±0.08
Amplitude stability,typical value(dB)	±0.15
Bending times, typical value	50000

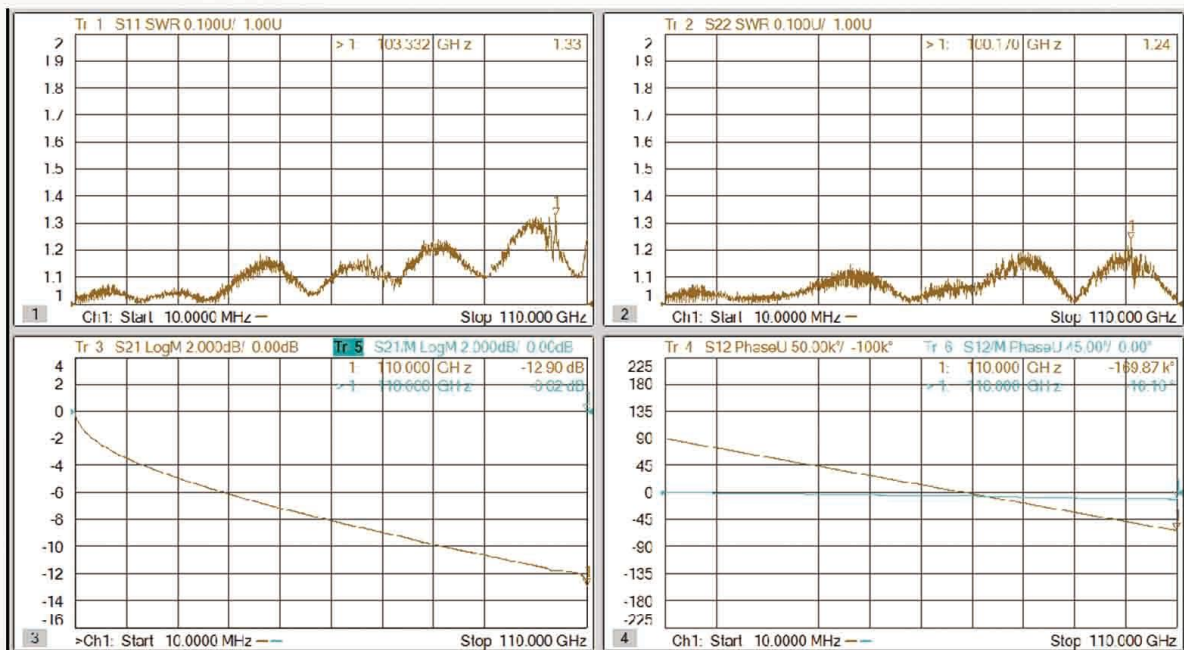
Note: When bending $\pm 90^\circ$, the bending radius is twice the minimum repeated bending radius, The test assembly still meets the reliability requirements through a specified number of bending cycles

110GHz SPC test cable selection table

Standard length				
Model	Description	Port interface	length	Frequency
VA110-10M10M-00.30M	1.0mm male armor test cable, 0.3m	1.0mm Male	0.3m	DC~110 GHz
VA110-10M10M-00.50M	1.0mm male armor test cable, 0.5m	1.0mm Male	0.5m	DC~110 GHz
VA110-10M10M-00.60M	1.0mm male armor test cable, 0.6m	1.0mm Male	0.6m	DC~110 GHz
VA110-10M10M-01.00M	1.0mm male armor test cable, 1.0m	1.0mm Male	1.0m	DC~110 GHz

Note: The rest of the length can be customized freely, SLK provides quick customization

110GHz SPC test cable test report



Comparison of competing products

Company	SLK	Domestic competitor	Overseas competitor	Internet
Max operating frequency(GHz)	110	110	110	110
Recommend interface	1.0mm	1.0mm	1.0mm	1.0mm
Armor diameter(mm)	4.0	4.0	4.2	6.86
Minimum bending radius, static(mm)	17.0	20.0	10.2	25.4
Minimum bending radius, repeated(mm)	25.0	40.0	/	/
VSWR(typical value)	1.30	1.40	1.34	1.20
VSWR(maximum value)	1.4	1.45	/	1.50
Insertion loss, typical value(dB/m)	13.8	15.8	13.4	18.44
Phase stability, typical value(°)	±5	±8	±1	/
Phase stability, maximum value(°)	±10	±12	/	/
Amplitude stability, typical value(dB)	±0.08	±0.10	±0.05	/
Amplitude stability, typical value(dB)	±0.15	±0.20	/	//
Bending times, typical value	50000	unpublished	/	

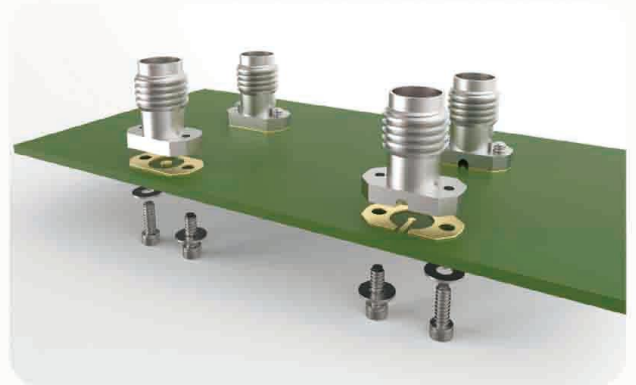
Note: The data of competing products comes from the public information of the website, and does not represent the measured results. The open data of SLK 110GHz SPC test line comes from the laboratory measurement.

Product Introduction

PCB Connector

Product Application:

1. Optical module test
2. High speed digital signal SI test
3. Strip line, microstrip line, coplanar waveguide line signal test



Product Feature

- ▶ Frequency up to 110GHz, low VSWR, small insertion loss;
- ▶ Complete model, support signal rate 56Gpbs/112Gpbs/224Gpbs;
- ▶ Solderless or SMD patch type optional, simple installation, high efficiency test;
- ▶ HFSS simulation optimization can provide customers with simulation model and optimal layout size
- ▶ Low voltage standing wave ratio, stable batch consistency;
- ▶ Typical VSWR parameters
- ▶ Typical insert loss parameters

DC to 40 GHz	1.25	DC to 40GHz	0.4 dB
DC to 67 GHz	1.35	DC to 67GHz	0.5 dB
DC to 110 GHz	1.40	DC to 110 GHz	0.8 dB

Model	Description	Type	Pictorial graph	Frequency
5MAF27S-P01	SMA female vertical installation	Microstrip line, coplanar line		DC-27GHz
5MAF87S-H21-001	SMA female vertical installation	Strip line		DC-27GHz
5MAF28S-P21-004	SMA female edge installation	Microstrip line, coplanar line		DC-27GHz
5P9F87S-H21	2.92 female vertical installation	Microstrip line, coplanar line		DC-40GHz
5P9F84S-H21	2.92 female vertical installation	Strip line		DC-40GHz
T-5P9F80S-H41-002	2.92 female edge installation	Microstrip line, coplanar line		DC-40GHz
5P4F87S-H21-001	2.4 female vertical installation	Microstrip line, coplanar line		DC-50GHz
5P4F85S-H21	2.4 female vertical installation	Strip line		DC-50GHz
T-5P4F80S-H41	2.4 female edge installation	Microstrip line, coplanar line		DC-50GHz
5P1F87S-H21-004	1.85 female vertical installation	Microstrip line, coplanar line		DC-67GHz
5P1F87S-H21	1.85 female vertical installation	Strip line		DC-67GHz
T-5P1F80S-H41-002	1.85 female edge installation	Microstrip line, coplanar line		DC-67GHz
5T2F80S-H21	1.35 female vertical installation	Strip line		DC-90GHz
T-5T2F80S-H41	1.0 female edge installation	Microstrip line, coplanar line		DC-90GHz
T-5T1F80S-H41	1.0 female edge installation	Microstrip line, coplanar line		DC-110GHz
T-5T1F84S-H21-001	1.0 female Two-hole flange with Φ0.23 probe at the tail	Cavity and waveguide coaxial conversion	DC-110GHz	

Product Introduction

Precision Adapter

Product Application:

1. Instrument equipment high precision port life protection
2. Test port conversion
3. Through calibration test



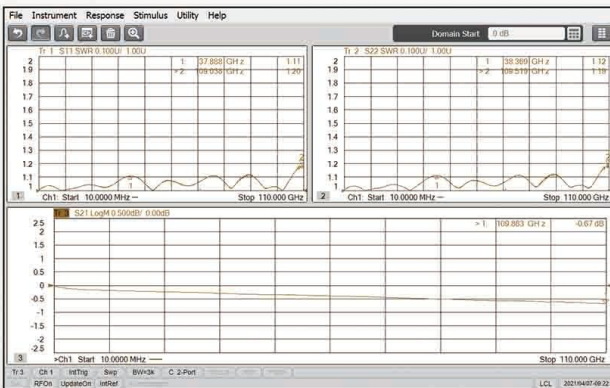
Product Feature

- ▶ Durable, life times up to 3000 or more
- ▶ Full range of models, including the same series and inter-series conversion
- ▶ Low voltage standing wave ratio and stable batch consistency
- ▶ Typical VSWR parameters
- ▶ Typical insert loss parameters

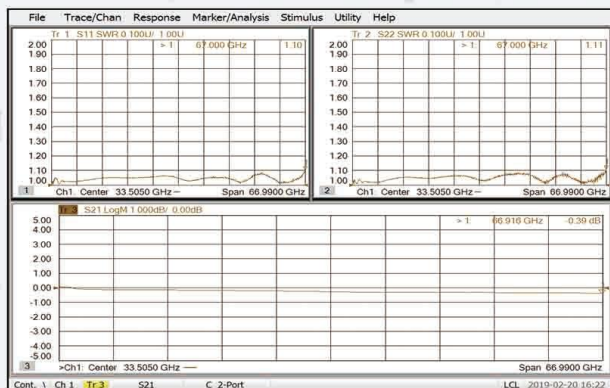
DC to 67 GHz 1.20
67 to 110 GHz 1.30

DC to 67 GHz 0.4 dB
67 to 110 GHz 0.7 dB

Test report



Typical S parameters of 1.0mm adapter



Typical S parameters of 1.85 to 1.0mm adapter

Selection table

Model	Description	Frequency
1.0mm adapter series		
T-5T1F06S-T1F-001	1.0 female to 1.0 female	DC~110Ghz
T-5T1F06S-T1M	1.0 female to 1.0 male	DC~110Ghz
T-5T1M06S-T1M	1.0 male to 1.0 male	DC~110Ghz
1.85mm to 1.0mm adapter series		
T-5P1F06S-T1F	1.85 female to 1.0 female	DC~67Ghz
T-5P1F06S-T1M	1.85 female to 1.0 male	DC~67Ghz
T-5P1M06S-T1F	1.85 male to 1.0 female	DC~67Ghz
T-5P1M06S-T1M	1.85 male to 1.0 male	DC~67Ghz

Note: SLK can provide quick customization based on customer's special requirements of appearance and installation size



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