Vinstronics

RF Probe Selection Guide

Precision RF Probes for Wafer & PCB Testing | DC–145 GHz

GS / SG · GSG · GSSG · GSGSG · SS

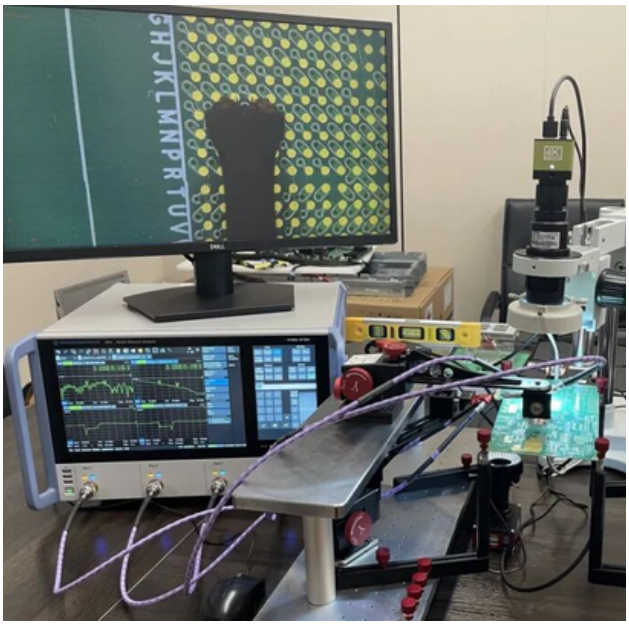


About Vinstronics

Precision RF/Microwave & High-Speed Test Interconnects

COMPANY OVERVIEW

Vinstronics develops precision RF/microwave and high-speed test interconnect solutions for semiconductor, communications and advanced electronic test applications.
Our portfolio includes RF probes, precision coaxial connectors and adapters, RF cable assemblies, attenuators and related test interconnect products, with RF probe platforms extending to 145 GHz.
We support customers from product selection and customization through precision manufacturing, electrical verification and application integration.



CORE PRODUCT PORTFOLIO

- RF & mmWave Probes
- Precision RF Connectors & Adapters
- RF Test Cable Assemblies
- Attenuators & Passive Components
- High-Speed Test Interconnects

ENGINEERING FOCUS

DC–145 GHz
RF / mmWave probe platforms

PCB & Wafer
Device and interconnect characterization

Precision Manufacturing
Standard and custom test interconnects

Electrical Verification
Product-level RF performance testing

Engineering support for product selection, customization and test-system integration.

Vinstronics focuses on practical, measurement-driven interconnect solutions for demanding RF, mmWave and high-speed test environments.

RF Probe Platform Overview

High-frequency probe solutions for PCB, wafer and differential characterization from DC to 145 GHz.

PLATFORM OVERVIEW

Frequency Range

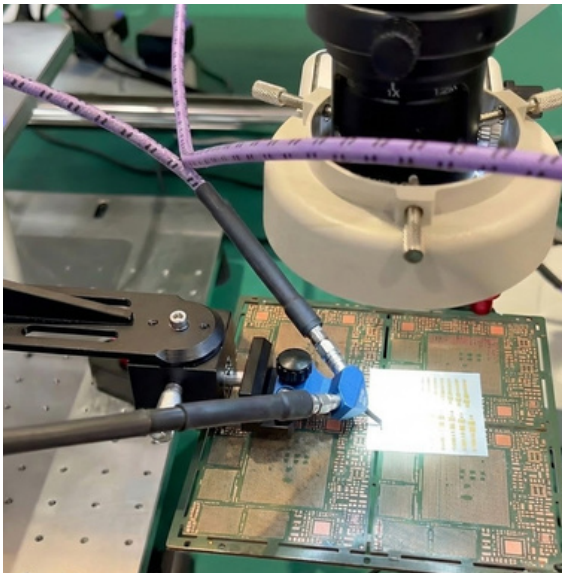
DC-145 GHz, with 40 / 67 / 110 / 145 GHz probe platforms.

Probe Configurations

GS / SG · GSG · GSSG · GSGSG · SS

145 GHz D-Band

GSG / GSSG / GSGSG with 0.8 mm female interfaces.



Representative RF probe setup for PCB and device characterization.

CONTACT & PITCH OPTIONS

Standard Pitch

100-1250 µm; custom pitch available for selected applications.

SS Differential

350-3000 um configurable pitch without dedicated ground tips.

Fine-Tip / Pad Options

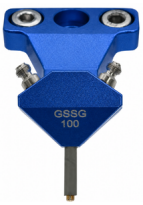
10 µm fine-tip options; Au / Al / Cu pad support; BeCu or tungsten tips depending on probe family.

145 GHz D-BAND PROBE CONFIGURATIONS

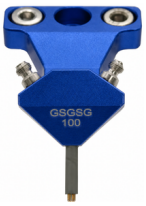
Common specifications: DC-145 GHz · 0.8 mm Female · 100-1250 µm Pitch



GSG



GSSG



GSGSG

RF PROBE SELECTION PATH

Start from the DUT contact geometry, then verify frequency, pitch and the required RF interface.

① **Probe Configuration**
GS / SG · GSG · GSSG · GSGSG · SS

② **Frequency Range**
40 / 67 / 110 / 145 GHz

③ **Pitch**
Match DUT pad spacing

④ **RF Interface**
2.92 / 1.85 / 1.0 / 0.8 mm

Technical Capabilities

Design, verification, manufacturing and application support for precision RF probing through 145 GHz.

RF & MMWAVE VERIFICATION

Measurement & Inspection

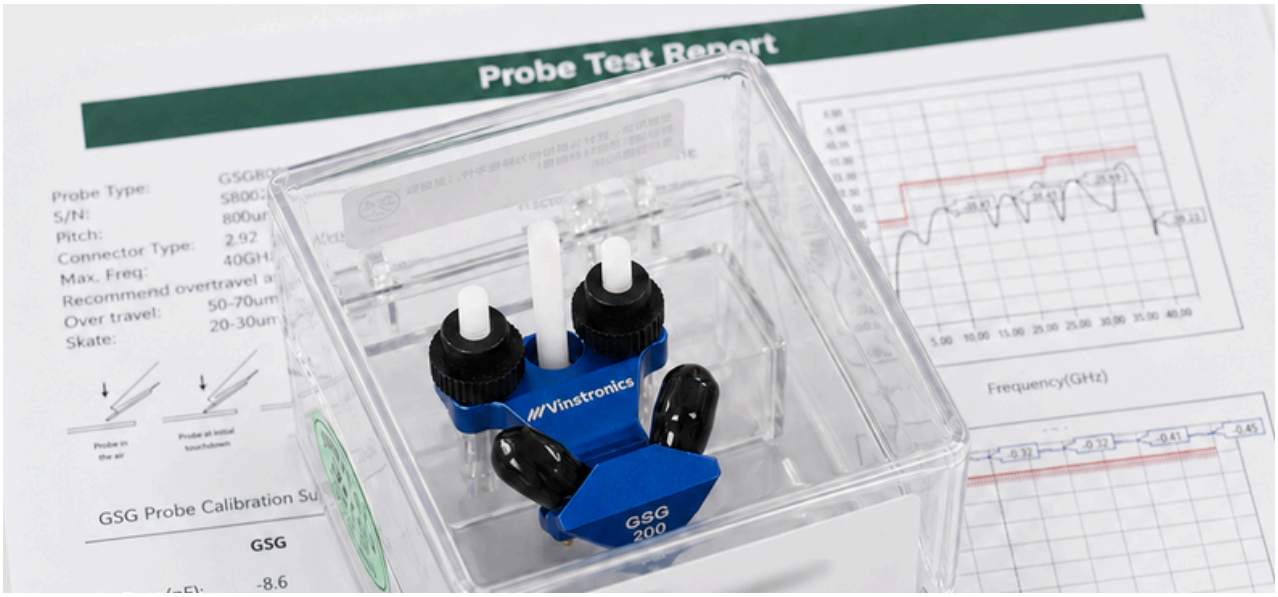
- VNA-based S-parameter characterization across supported RF and mmWave probe platforms.
- 3D optical inspection for probe-tip geometry, alignment and assembly verification.



EM DESIGN

Simulation & Structure

- HFSS / CST simulation for impedance control, transition optimization and probe-structure development.



PRECISION MANUFACTURING

Manufacturing & Final Verification

- Precision machining and controlled assembly for repeatable mechanical fit and probe contact.
- Each finished RF probe is electrically verified before delivery and supplied with an individual test report.

CALIBRATION & APPLICATION SUPPORT

Measurement & Integration Support

- Support for SOLT / LRM calibration and reference-plane establishment for probe-based measurements.
- Engineering review of DUT pad geometry, pitch selection and probe-station integration.

DC~40GHz SS Probe

Model:VST-D40G-SS-XXX（XXX=Pitch range:μm)

Typical Electrical Characteristics

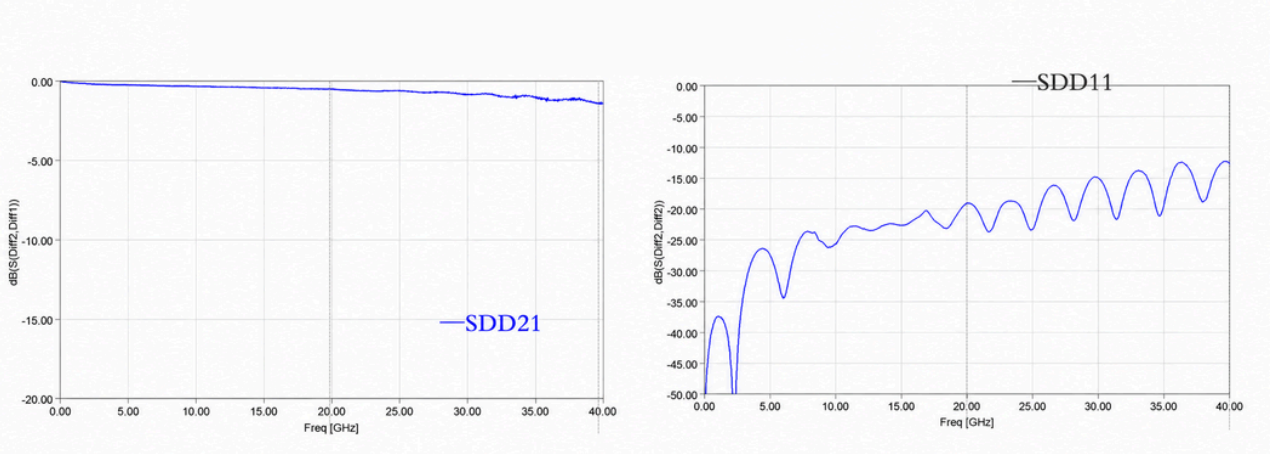
Frequency range	DC-40GHz
Insertion loss	Spec:<2.5dB
Return loss	Spec:>10dB
Impedance	100Ω
DC current	≤1A
DC voltage	≤100V
RF power	≤5w



Mechanical Characteristics

Connector	2.92mm Female
Tip configurations	SS
Connector angle	45-degree
Pitch range	350μm-3000μm
Standard pitch step	120μm
Tip size	
from 100 um to 250 um	120μm
Pressure	5g

Typical Electrical Characteristics: 40 GHz SS Probe 800 micron pitch



DC~67GHz SS Probe

Model:VST-D67G-SS-XXX（XXX=Pitch range:μm)

Typical Electrical Characteristics

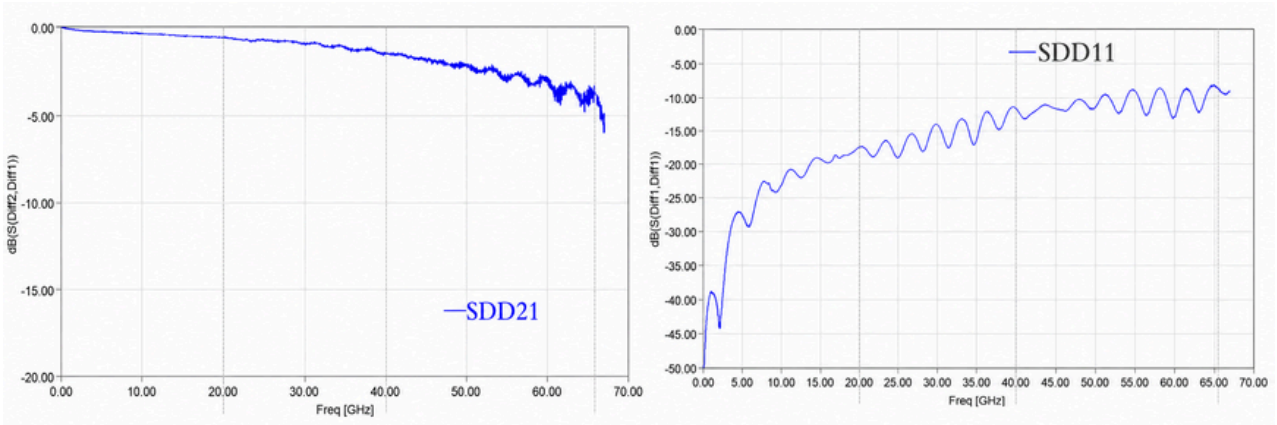
Frequency range	DC-67GHz
Insertion loss	Spec:<2.5dB
Return loss	Spec:>10dB
Impedance	100Ω
DC current	≤1A
DC voltage	≤100V
RF power	≤5w



Mechanical Characteristics

Connector	1.85mm Female
Tip configurations	SS
Connector angle	45-degree
Pitch range	350μm-3000μm
Standard pitch step	120μm
Tip size	
from 100 um to 250 um	120μm
Pressure	5g

Typical Electrical Characteristics: 67 GHz SS Probe 800 micron pitch



DC~40GHz GSG Probe

Model:VST-40G-GSG-XXX（XXX=Pitch range:um)

Typical Electrical Characteristics

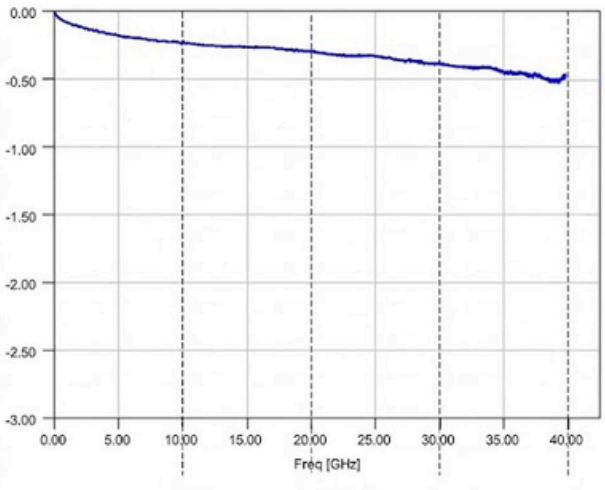
Frequency range	DC-40GHz
Insertion loss	Spec:<0.6dB
Return loss	Spec:>18dB
Impedance	50Ω
DC current	≤1A
DC voltage	≤100V
RF power	≤5w

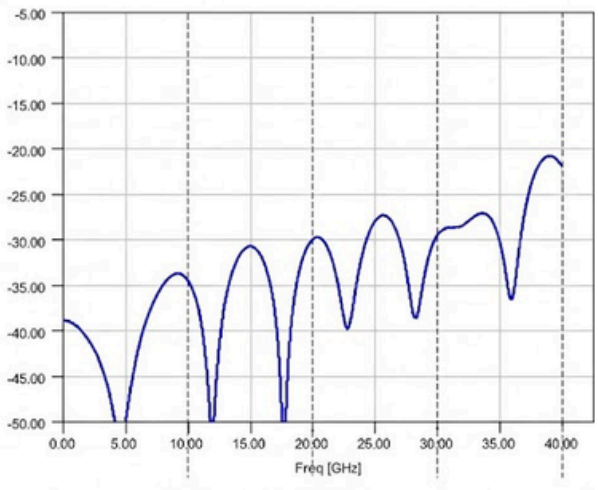


Mechanical Characteristics

Connector	2.92mm Female
Tip configurations	GSG
Connector angle	45-degree
Pitch range	100μm-1250μm or customized
Standard pitch step	50μm
Tip size	
from 100 um to 250 um	25μm
from 300 um to 1250 um	50μm

Typical Electrical Characteristics: DC~40 GHz GSG Probe 150 micron pitch





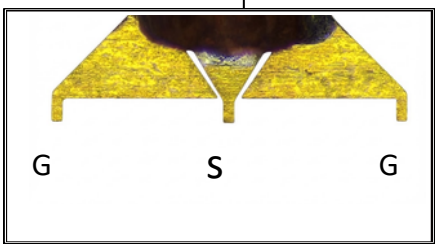
DC~40GHz GSG Probe

Model:VST-40G-GSG-XXX-LL （XXX=Pitch range:um)

Typical Electrical Characteristics

Frequency range	DC-40GHz
Insertion loss	Spec:<0.4dB
Return loss	Spec:>18dB
Impedance	50Ω
DC current	≤1A
DC voltage	≤100V
RF power	≤5w

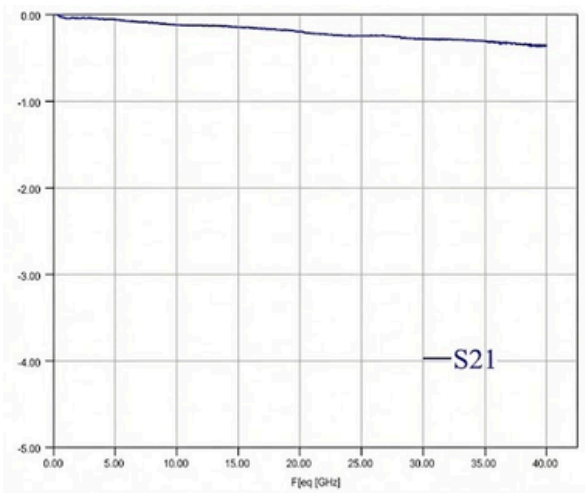


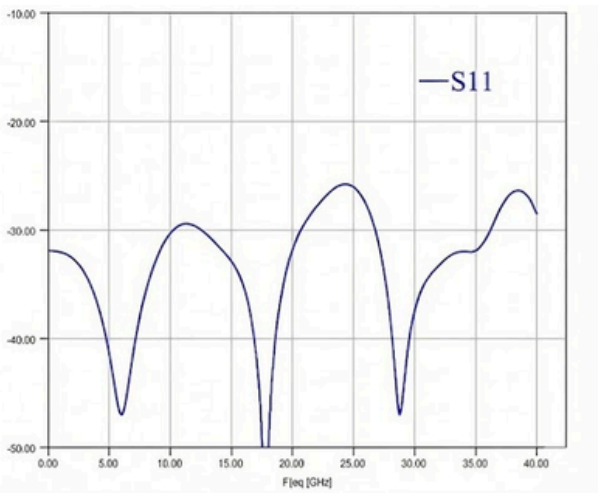


Mechanical Characteristics

Connector	2.92mm Female
Tip configurations	GSG
Connector angle	45-degree
Pitch range	100μm-1250μm or customized
Standard pitch step	50μm
Tip size	
from 100 um to 250 um	25μm
from 300 um to 1250 um	50μm

Typical Electrical Characteristics: DC~40 GHz GSG Probe 150 micron pitch



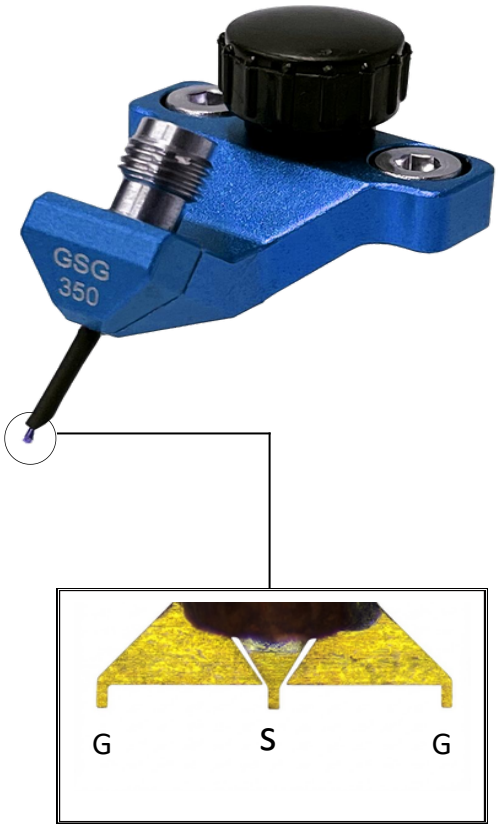


DC~67GHz GSG Probe

Model:VST-67G-GSG-XXX（XXX=Pitch range:um)

Typical Electrical Characteristics

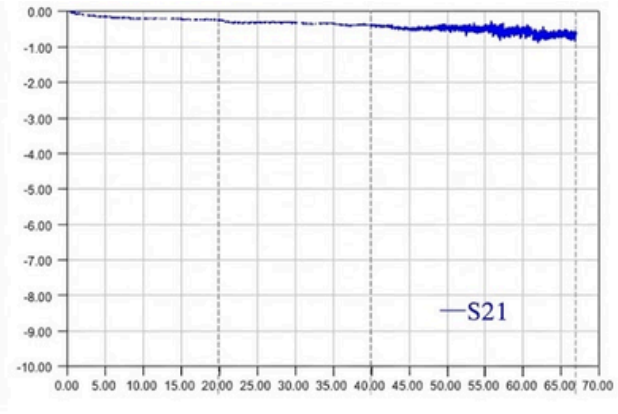
Frequency range	DC-67GHz
Insertion loss	Spec:<1.1dB
Return loss	Spec:>14dB
Impedance	50Ω
DC current	≤1A
DC voltage	≤100V
RF power	≤5w

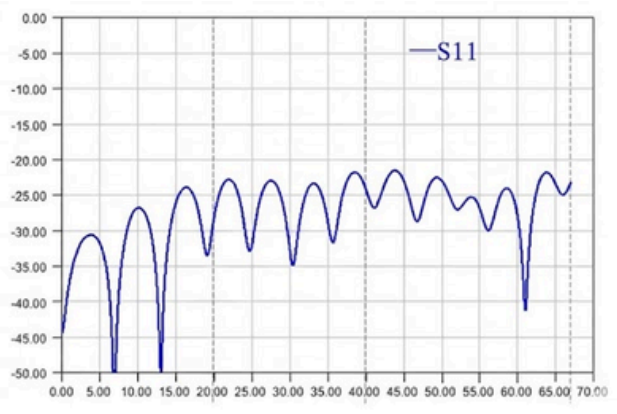


Mechanical Characteristics

Connector	1.85mm Female
Tip configurations	GSG
Connector angle	45-degree
Pitch range	100μm-1250μm or customized
Standard pitch step	50μm
Tip size	
from 100 um to 250 um	25μm
from 300 um to 1250 um	50μm

Typical Electrical Characteristics: DC~67 GHz GSG Probe 150 micron pitch





DC~110GHz GSG Probe

Model:VST-110G-GSG-XXX（XXX=Pitch range:um)

Typical Electrical Characteristics

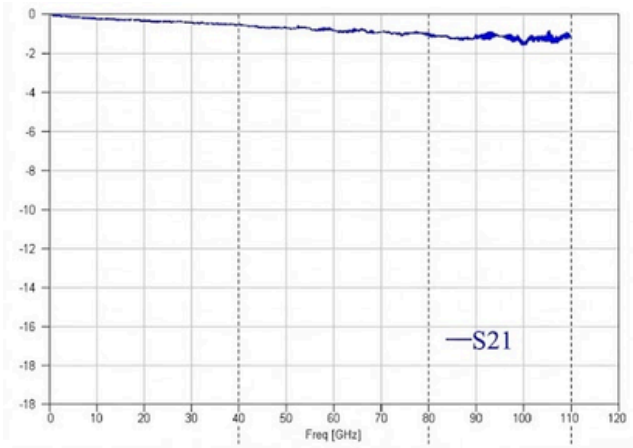
Frequency range	DC-110GHz
Insertion loss	Spec:<2.2dB
Return loss	Spec:>12dB
Impedance	50Ω
DC current	≤1A
DC voltage	≤100V
RF power	≤5w

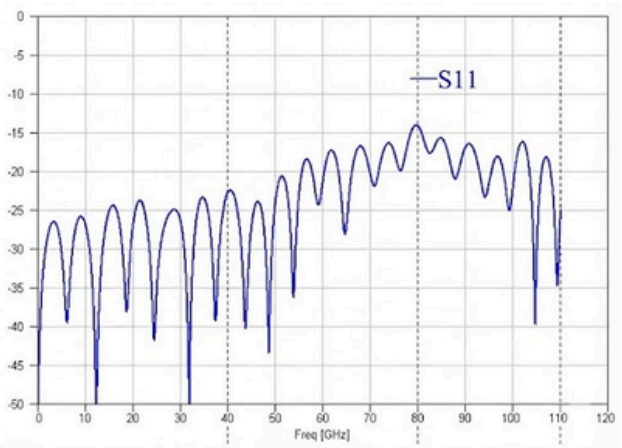


Mechanical Characteristics

Connector	1.00mm Female
Tip configurations	GSG
Connector angle	45-degree
Pitch range	100μm-1250μm or customized
Standard pitch step	50μm
Tip size	
from 100 um to 250 um	25μm
from 300 um to 1250 um	50μm

Typical Electrical Characteristics: DC~110 GHz GSG Probe 150 micron pitch





DC~145GHz GSG Probe

Model:VST-145G-GSG-XXX（XXX=Pitch range:um)

Typical Electrical Characteristics

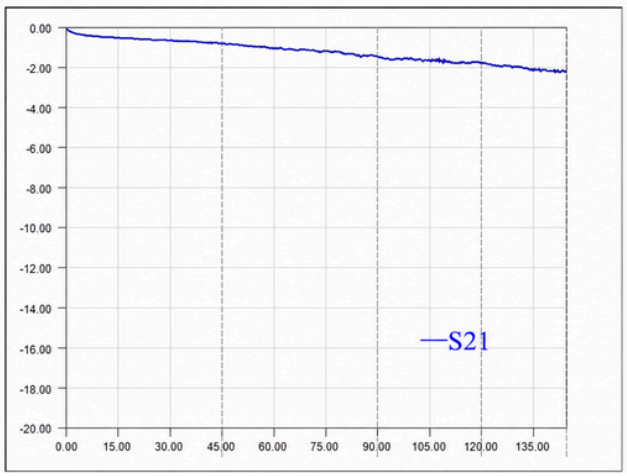
Frequency Range	DC–145 GHz
Insertion Loss	< 3.5 dB
Return Loss	> 10 dB
Impedance	50 ± 1 Ω
DC Current	≤ 1 A
DC Voltage	≤ 100 V
RF Power	≤ 5 W

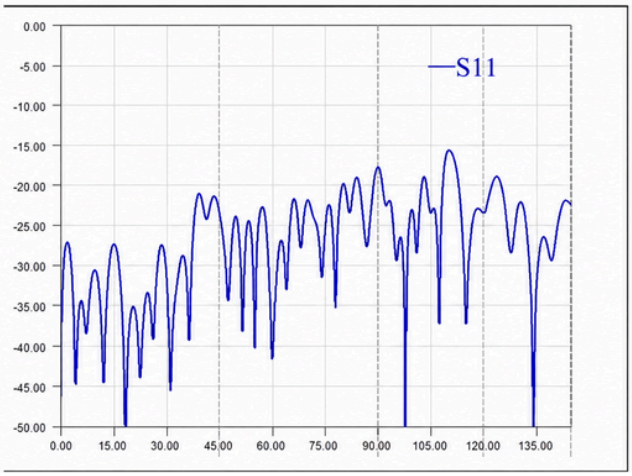


Mechanical Characteristics

Connector	0.8 mm Female
Tip Configuration	GSG
Connector Angle	45°
Pitch Range	100–1250 µm
Standard Pitch Step	50 µm
Pitch Step, 100–250 µm Range	25 µm
Pitch Step, 300–1250 µm Range	50 µm

Typical Electrical Characteristics: DC~145 GHz GSG Probe 100 µm Pitch





DC~40GHz GS Probe

Model:VST-40G-GS-XXX（XXX=Pitch range:um)

Typical Electrical Characteristics

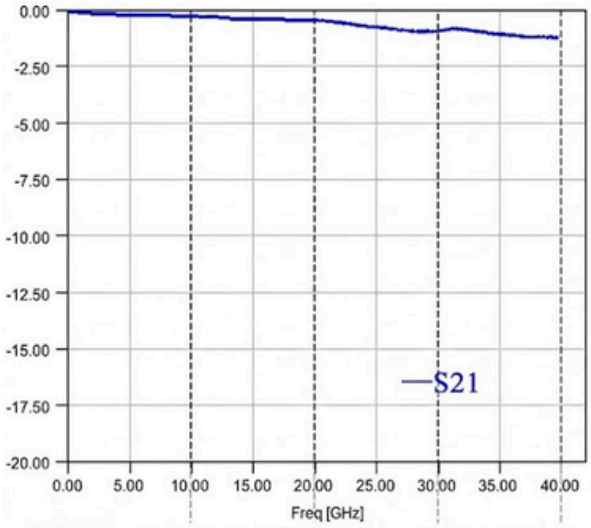
Frequency range	DC-40GHz
Insertion loss	Spec:<2.0dB
Return loss	Spec:>12dB
Impedance	50Ω
DC current	≤1A
DC voltage	≤100V
RF power	≤5w

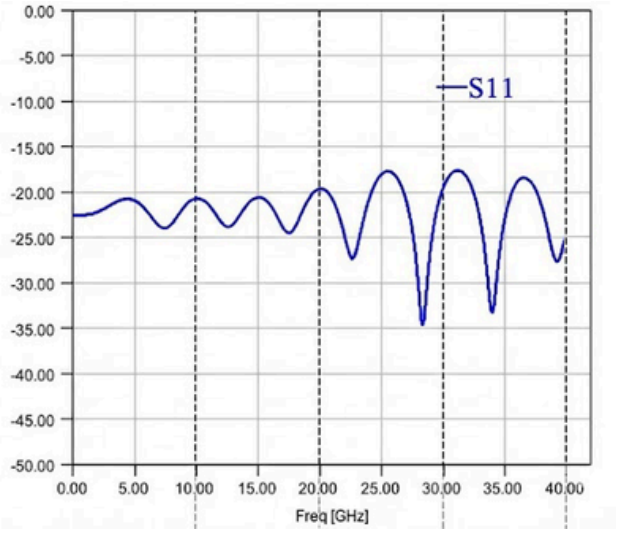


Mechanical Characteristics

Connector	2.92mm Female
Tip configurations	GS/SG
Connector angle	45-degree
Pitch range	100μm-1250μm or customized
Standard pitch step	50μm
Tip size	
from 100 um to 250 um	25μm
from 300 um to 1250 um	50μm

Typical Electrical Characteristics: DC~40 GHz GS Probe 150 micron pitch





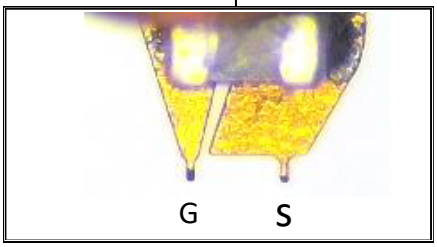
DC~67GHz GS Probe

Model:VST-67G-GS-XXX （XXX=Pitch range:um)

Typical Electrical Characteristics

Frequency range	DC-67GHz
Insertion loss	Spec:<3.0dB
Return loss	Spec:>12dB
Impedance	50Ω
DC current	≤1A
DC voltage	≤100V
RF power	≤5w

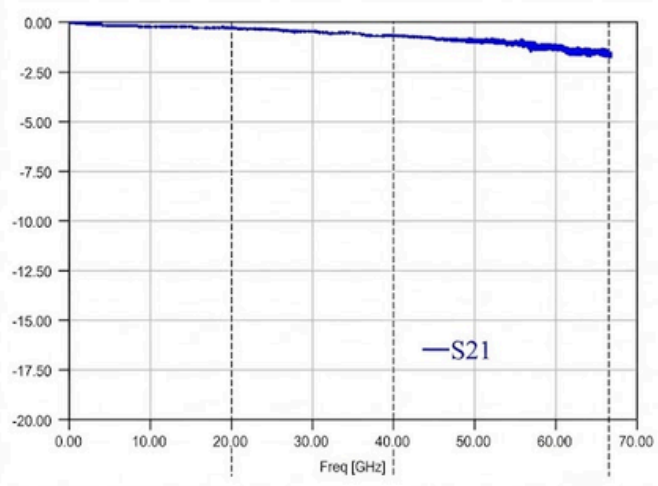


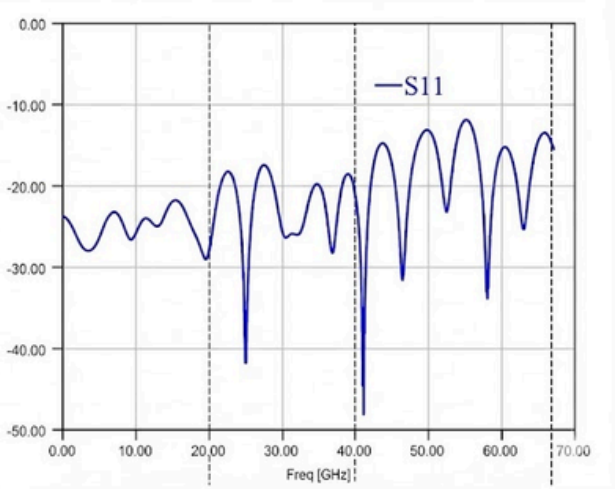


Mechanical Characteristics

Connector	1.85mm Female
Tip configurations	GS/SG
Connector angle	45-degree
Pitch range	100μm-1250μm or customized
Standard pitch step	50μm
Tip size	
from 100 um to 250 um	25μm
from 300 um to 1250 um	50μm

Typical Electrical Characteristics: DC~67 GHz GS Probe 150 micron pitch





DC~110GHz GS Probe

Model:VST-110G-GS-XXX（XXX=Pitch range:um)

Typical Electrical Characteristics

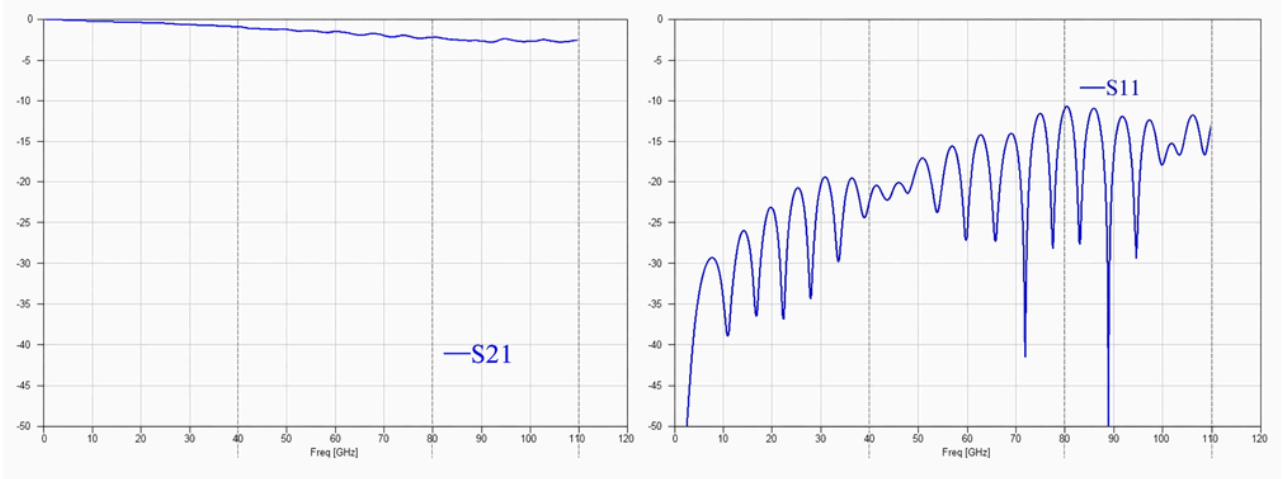
Frequency range	DC-110GHz
Insertion loss	Spec:<3.0dB
Return loss	Spec:>12dB
Impedance	50Ω
DC current	≤1A
DC voltage	≤100V
RF power	≤5w



Mechanical Characteristics

Connector	1.00mm Female
Tip configurations	GS/SG
Connector angle	45-degree
Pitch range	100μm-1250μm or customized
Standard pitch step	50μm
Tip size	
from 100 um to 250 um	25μm
from 300 um to 1250 um	50μm

Typical Electrical Characteristics: DC~110 GHz GS Probe 150 micron pitch

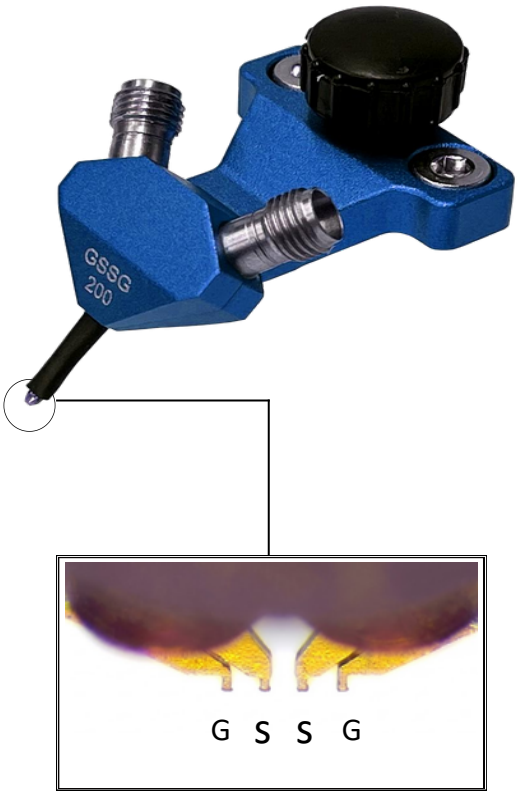


DC~40GHz GSSG Probe

Model:VST-40G-GSSG-XXX（XXX=Pitch range:um)

Typical Electrical Characteristics

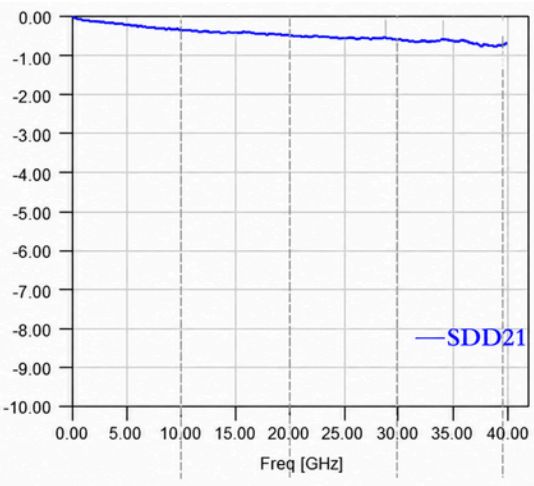
Frequency range	DC-40GHz
Insertion loss	Spec:<2.0dB
Return loss	Spec:>12dB
Impedance	100Ω
DC current	≤1A
DC voltage	≤100V
RF power	≤5w

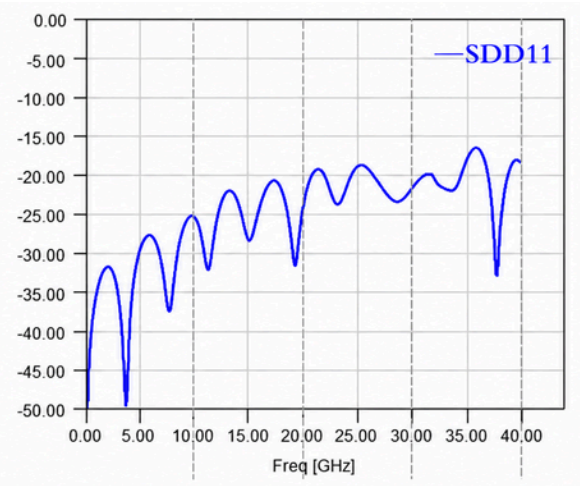


Mechanical Characteristics

Connector	2.92mm Female
Tip configurations	GSSG
Connector angle	45-degree
Pitch range	100μm-1250μm or customized
Standard pitch step	50μm
Tip size	
from 100 um to 250 um	25μm
from 300 um to 1250 um	50μm

Typical Electrical Characteristics: DC~40 GHz GSSG Probe 150 micron pitch



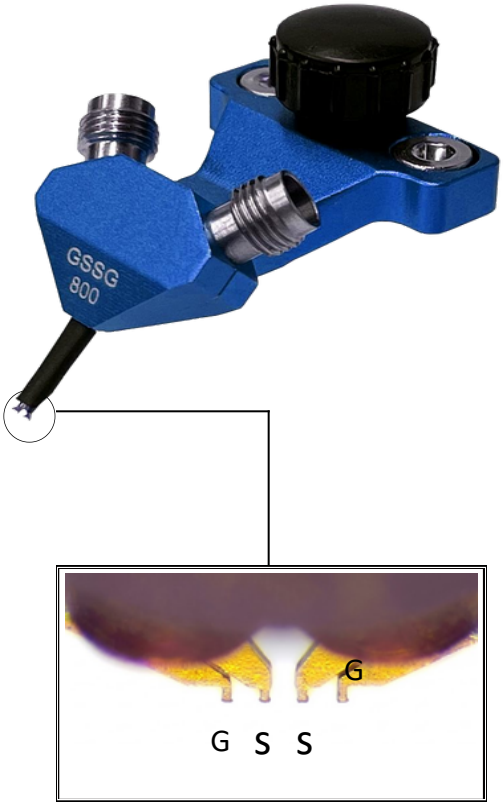


DC~67GHz GSSG Probe

Model:VST-67G-GSSG-XXX（XXX=Pitch range:um)

Typical Electrical Characteristics

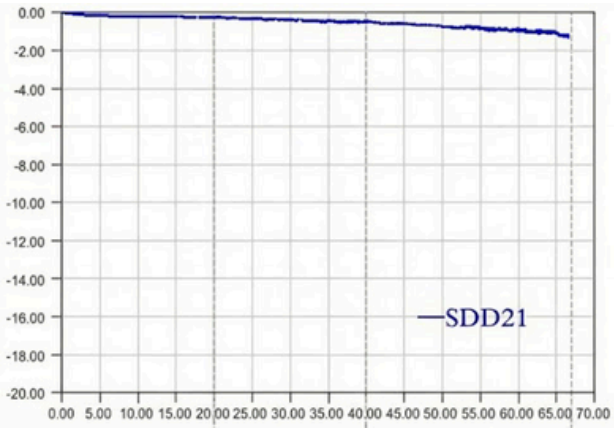
Frequency range	DC-67GHz
Insertion loss	Spec:<2.0dB
Return loss	Spec:>12dB
Impedance	100Ω
DC current	≤1A
DC voltage	≤100V
RF power	≤5w

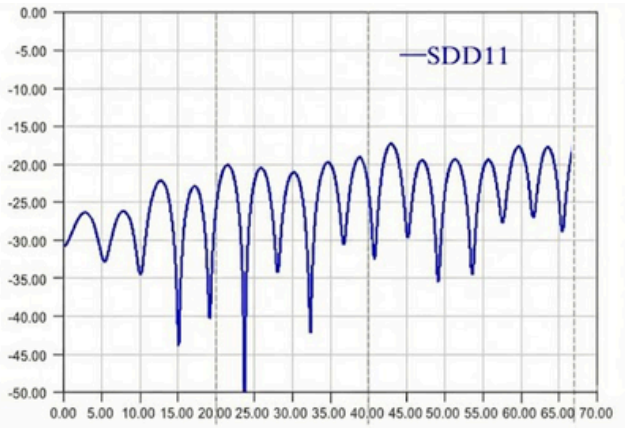


Mechanical Characteristics

Connector	1.85mm Female
Tip configurations	GSSG
Connector angle	45-degree
Pitch range	100μm-1250μm or customized
Standard pitch step	50μm
Tip size	
from 100 um to 250 um	25μm
from 300 um to 1250 um	50μm

Typical Electrical Characteristics: DC~67 GHz GSSG Probe 150 micron pitch



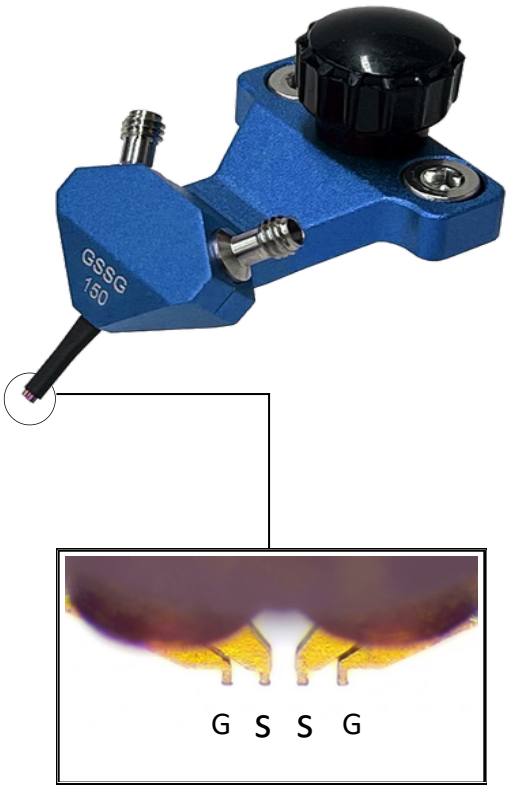


DC~110GHz GSSG Probe

Model:VST-110G-GSSG-XXX（XXX=Pitch range:um)

Typical Electrical Characteristics

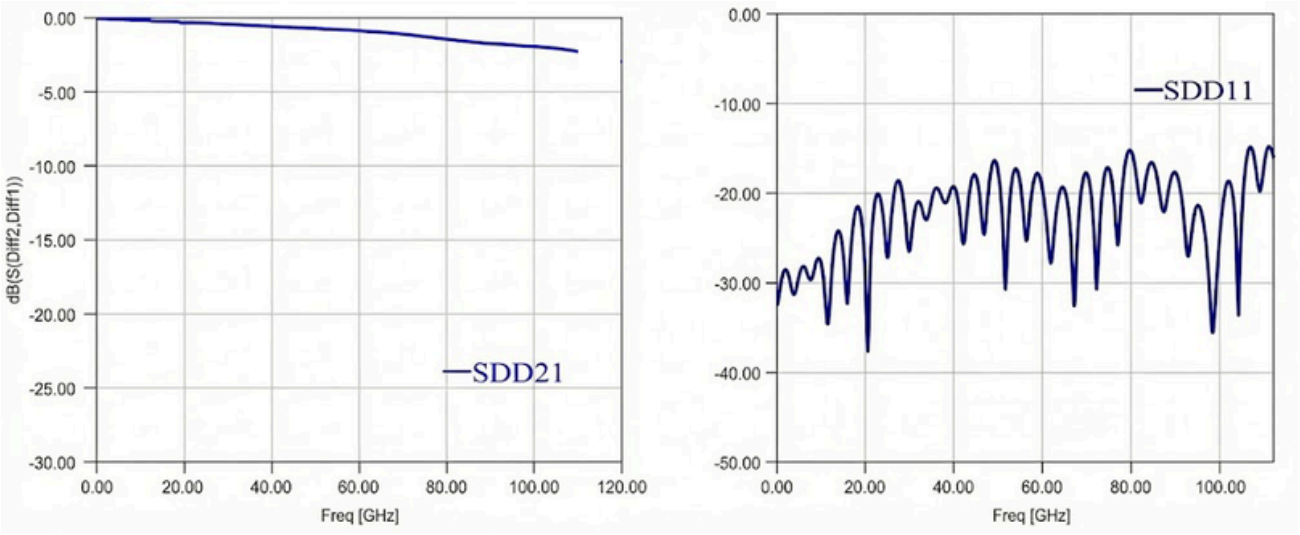
Frequency range	DC-110GHz
Insertion loss	Spec:<3.5dB
Return loss	Spec:>10dB
Impedance	100Ω
DC current	≤1A
DC voltage	≤100V
RF power	≤5w



Mechanical Characteristics

Connector	1.00mm Female
Tip configurations	GSSG
Connector angle	45-degree
Pitch range	100μm-1250μm or customized
Standard pitch step	50μm
Tip size	
from 100 um to 250 um	25μm
from 300 um to 1250 um	50μm

Typical Electrical Characteristics: DC~110 GHz GSSG Probe 150 micron pitch

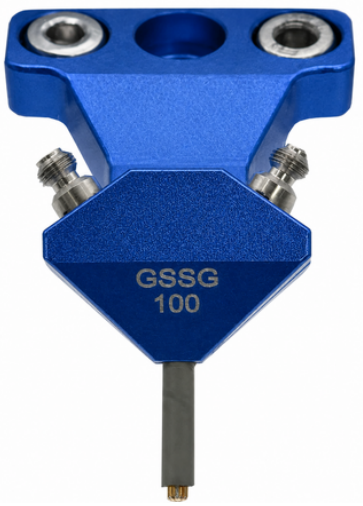


DC~145GHz GSSG Probe

Model:VST-145G-GSSG-XXX（XXX=Pitch range:um)

Typical Electrical Characteristics

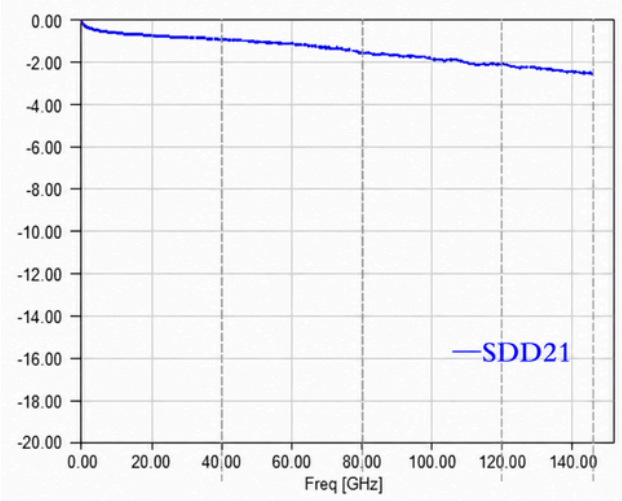
Frequency Range	DC–145 GHz
Insertion Loss	< 3.5 dB
Return Loss	> 10 dB
Impedance	100 ± 2 Ω
DC Current	≤ 1 A
DC Voltage	≤ 100 V
RF Power	≤ 5 W

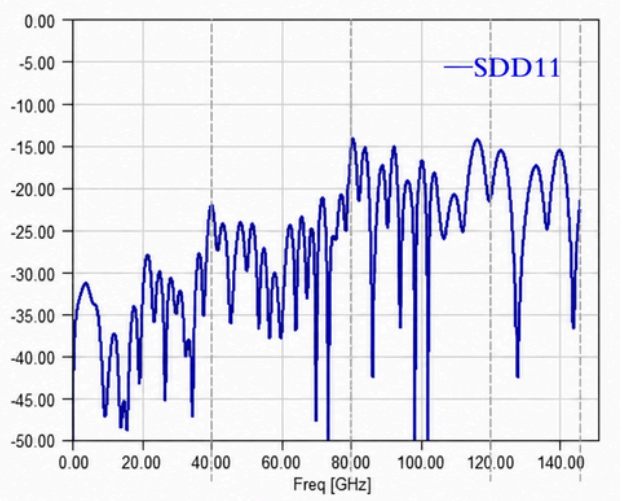


Mechanical Characteristics

Connector	0.8 mm Female
Tip Configuration	GSSG
Connector Angle	45°
Pitch Range	100–1250 µm
Standard Pitch Step	50 µm
Pitch Step, 100–250 µm Range	25 µm
Pitch Step, 300–1250 µm Range	50 µm

Typical Electrical Characteristics: DC~145 GHz GSSG Probe, 100 µm Pitch





DC~40GHz GSGSG Probe

Model:VST-40G-GSGSG-XXX（XXX=Pitch range:um)

Typical Electrical Characteristics

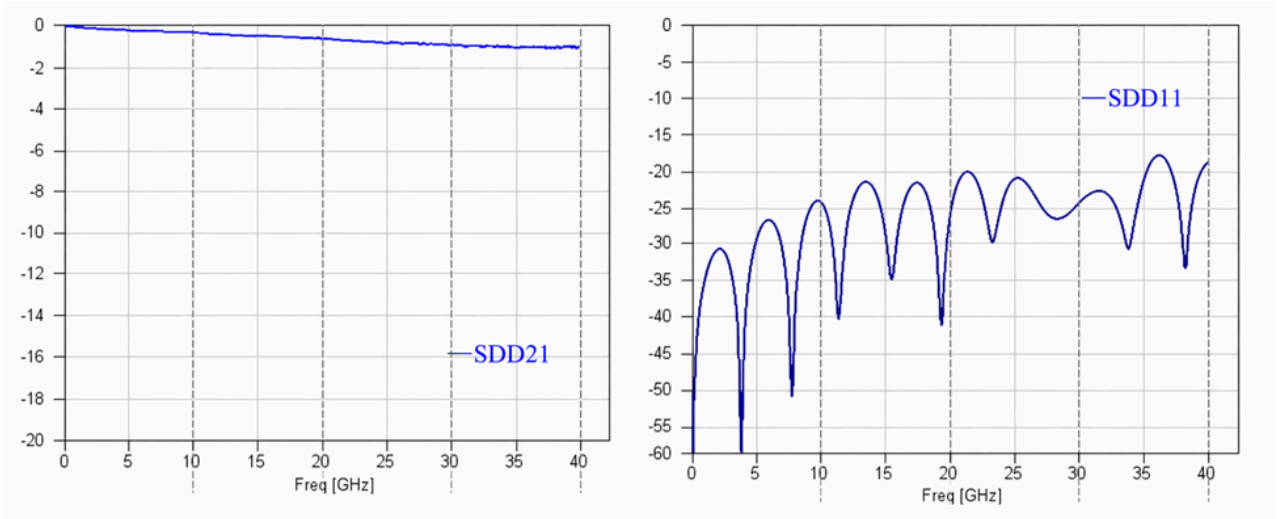
Frequency range	DC-40 GHz
Insertion loss	Spec:<2.0 dB
Return loss	Spec:>12 dB
Impedance	100 Ω
DC current	≤1 A
DC voltage	≤100 V
RF power	≤5 W



Mechanical Characteristics

Connector	2.92 mm Female
Tip configurations	GSGSG
Connector angle	45-degree
Pitch range	100μm-1250μm or customized
Standard pitch step	50μm
Tip size	
from 100 um to 250 um	25μm
from 300 um to 1250 um	50μm

Typical Electrical Characteristics: DC~40 GHz GSGSG Probe



DC~67GHz GSGSG Probe

Model:VST-67G-GSGSG-XXX（XXX=Pitch range:um)

Typical Electrical Characteristics

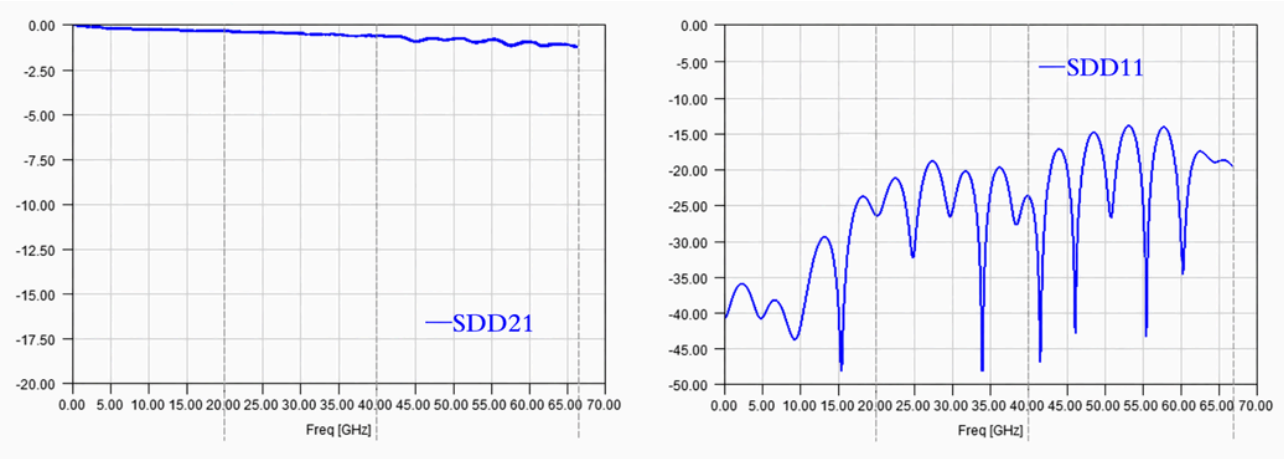
Frequency range	DC-67 GHz
Insertion loss	Spec:<2.0 dB
Return loss	Spec:>12 dB
Impedance	100 Ω
DC current	≤1 A
DC voltage	≤100 V
RF power	≤5 W



Mechanical Characteristics

Connector	1.85 mm Female
Tip configurations	GSGSG
Connector angle	45-degree
Pitch range	100µm-1250µm or customized
Standard pitch step	50µm
Tip size	
from 100 um to 250 um	25µm
from 300 um to 1250 um	50µm

Typical Electrical Characteristics: DC~67 GHz GSGSG Probe



DC~110GHz GSGSG Probe

Model:VST-110G-GSGSG-XXX（XXX=Pitch range:um)

Typical Electrical Characteristics

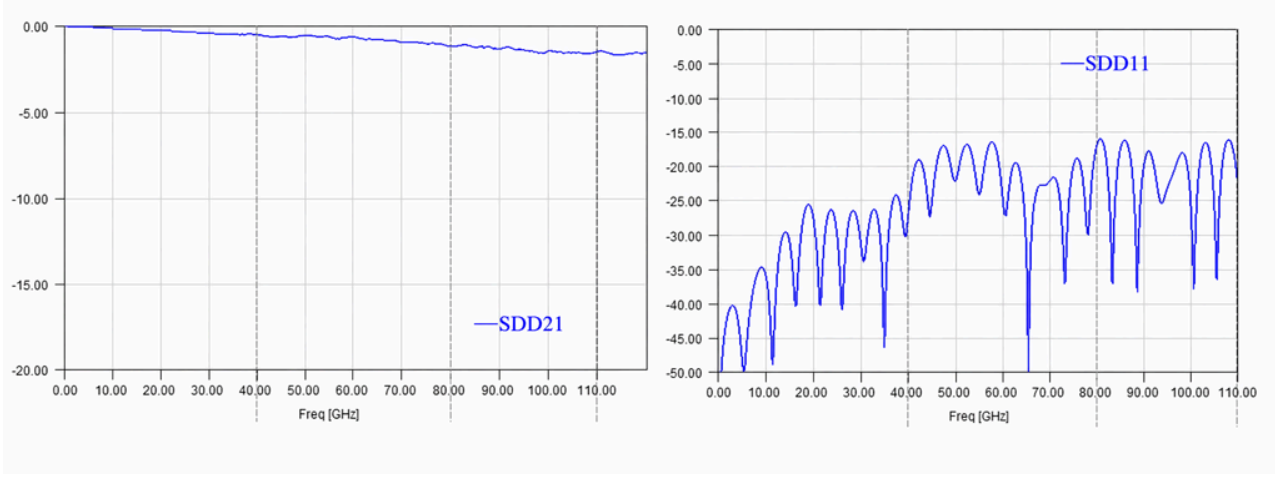
Frequency range	DC-110 GHz
Insertion loss	Spec:<3.5 dB
Return loss	Spec:>10 dB
Impedance	100 Ω
DC current	≤1 A
DC voltage	≤100 V
RF power	≤5 W



Mechanical Characteristics

Connector	1.00 mm Female
Tip configurations	GSGSG
Connector angle	45-degree
Pitch range	100μm-1250μm or customized
Standard pitch step	50μm
Tip size	
from 100 um to 250 um	25μm
from 300 um to 1250 um	50μm

Typical Electrical Characteristics: DC~110 GHz GSGSG Probe



DC~145GHz GSGSG Probe

Model:VST-145G-GSGSG-XXX（XXX=Pitch range:um)

Typical Electrical Characteristics

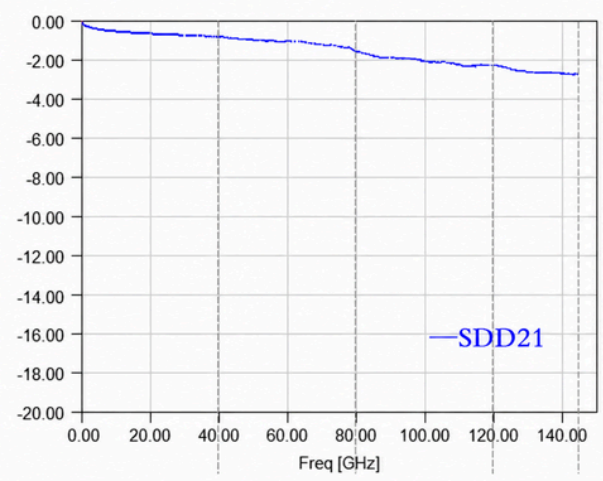
Frequency Range	DC–145 GHz
Insertion Loss	< 3.5 dB
Return Loss	> 10 dB
Impedance	100 ± 2 Ω
DC Current	≤ 1 A
DC Voltage	≤ 100 V
RF Power	≤ 5 W

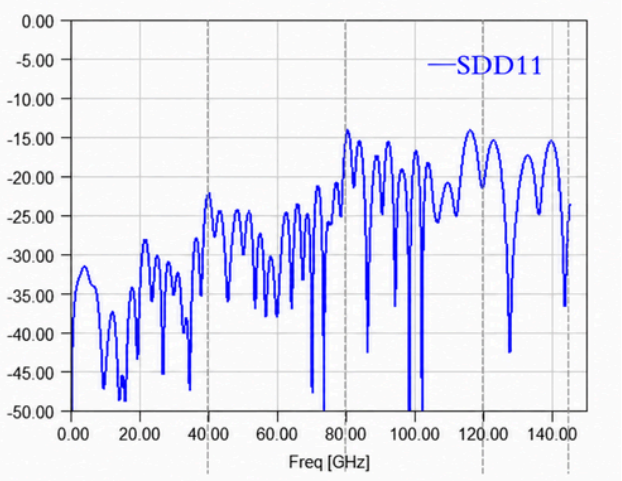


Mechanical Characteristics

Connector	0.8 mm Female
Tip Configuration	GSGSG
Connector Angle	45°
Pitch Range	100–1250 µm
Standard Pitch Step	50 µm
Pitch Step, 100–250 µm Range	25 µm
Pitch Step, 300–1250 µm Range	50 µm

Typical Electrical Characteristics: DC~145 GHz GSGSG Probe, 100 µm Pitch



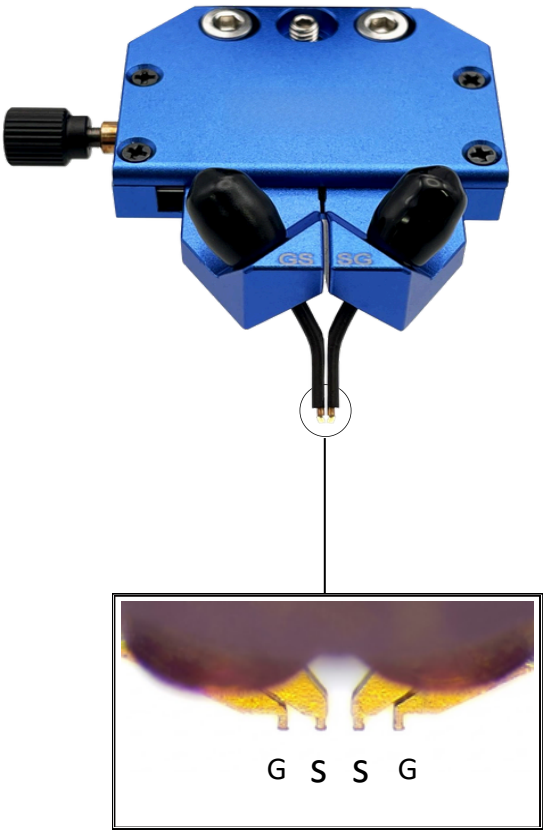


DC~40GHz GSSG Probe

Model:VST-40G-GSSG-XXX-AJ （XXX=Pitch range:um)

Typical Electrical Characteristics

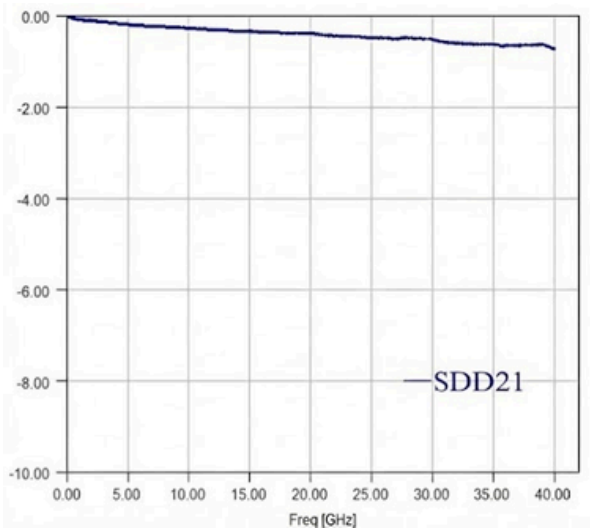
Frequency range	DC-40GHz
Insertion loss	Spec:<2.0dB
Return loss	Spec:>12dB
Impedance	100Ω
DC current	≤1A
DC voltage	≤100V
RF power	≤5w

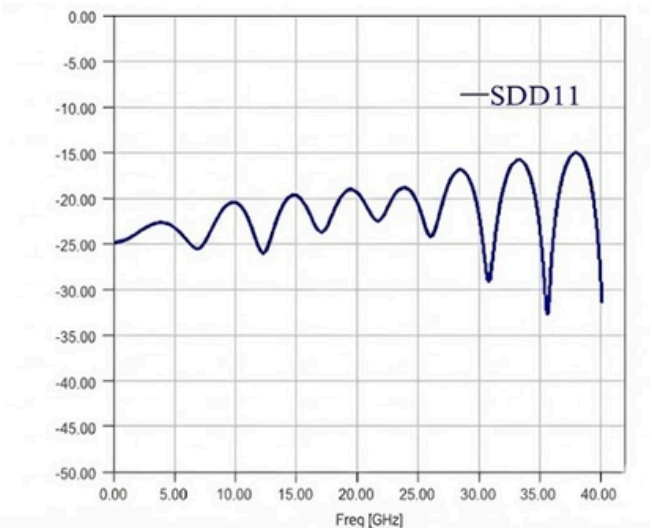


Mechanical Characteristics

Connector	2.92mm Female
Tip configurations	GSSG-AJ
Connector angle	45-degree
Pitch range	100μm-1250μm or customized
Standard pitch step	50μm
Tip size	
from 100 um to 250 um	25μm
from 300 um to 1250 um	50μm

Typical Electrical Characteristics: DC~40 GHz GSSG Probe-AJ



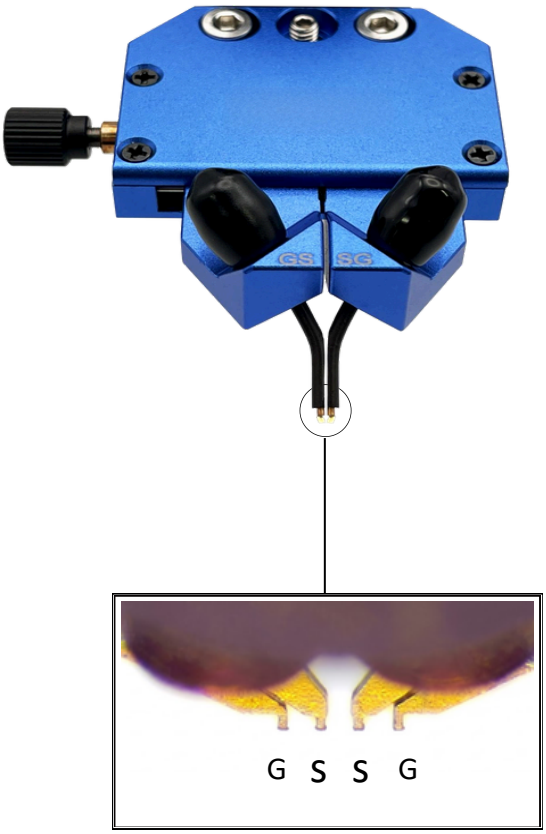


DC~67GHz GSSG Probe

Model:VST-67G-GSSG-XXX-AJ （XXX=Pitch range:um)

Typical Electrical Characteristics

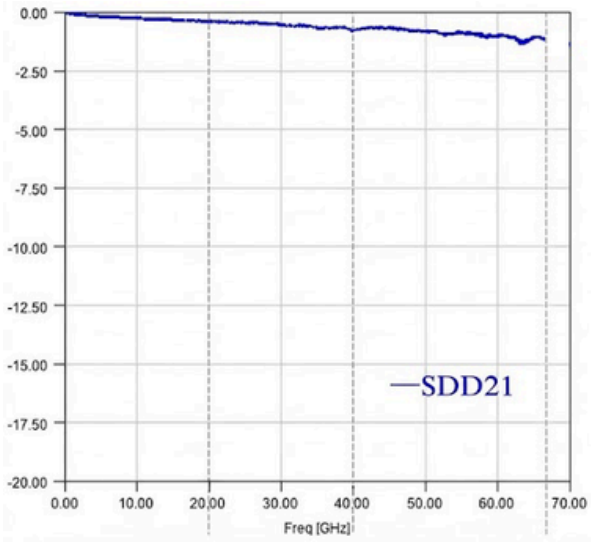
Frequency range	DC-67GHz
Insertion loss	Spec:<2.0dB
Return loss	Spec:>12dB
Impedance	100Ω
DC current	≤1A
DC voltage	≤100V
RF power	≤5w

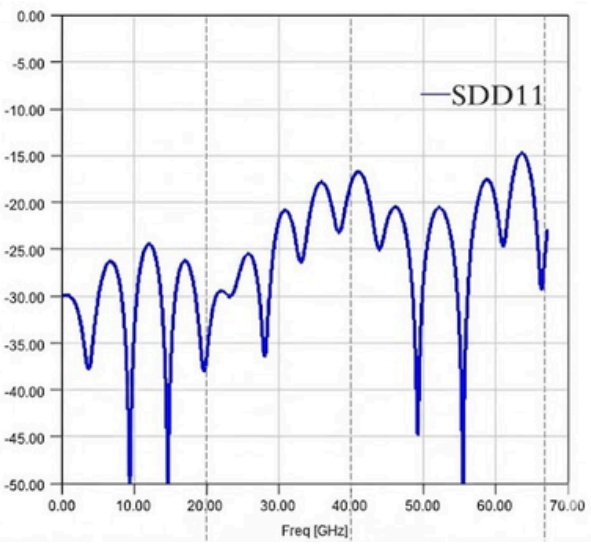


Mechanical Characteristics

Connector	1.85mm Female
Tip configurations	GSSG-AJ
Connector angle	45-degree
Pitch range	100μm-1250μm or customized
Standard pitch step	50μm
Tip size	
from 100 um to 250 um	25μm
from 300 um to 1250 um	50μm

Typical Electrical Characteristics: DC~67 GHz GSSG Probe-AJ



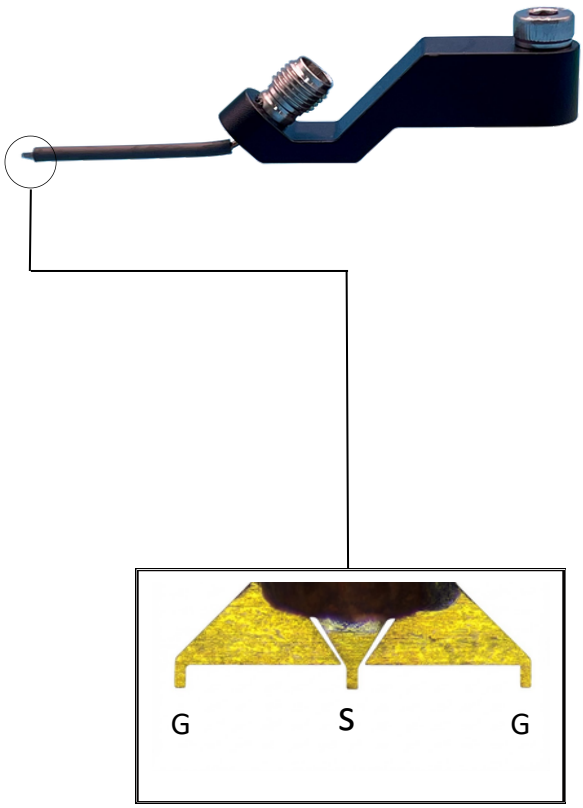


DC~40GHz GSG Probe

Model:VST-40G-GSG-XXX-SH （XXX=Pitch range:um)

Typical Electrical Characteristics

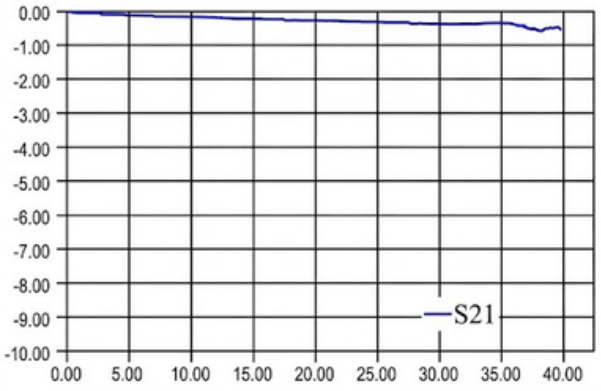
Frequency range	DC-40GHz
Insertion loss	Spec:<0.6dB
Return loss	Spec:>18dB
Impedance	50Ω
DC current	≤1A
DC voltage	≤100V
RF power	≤5w

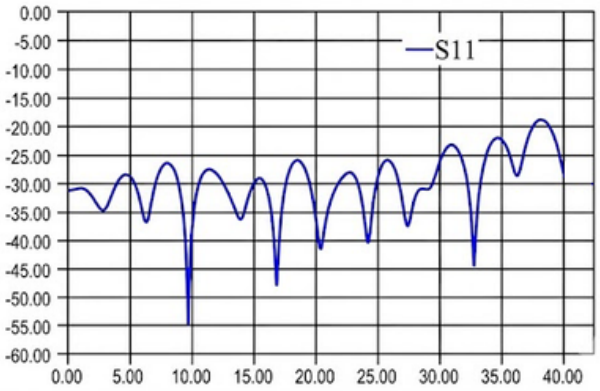


Mechanical Characteristics

Connector	2.92mm Female
Tip configurations	GSG
Connector angle	45-degree
Pitch range	100μm-1250μm or customized
Standard pitch step	50μm
Tip size	
from 100 um to 250 um	25μm
from 300 um to 1250 um	50μm

Typical Electrical Characteristics: DC~40 GHz GSG Probe



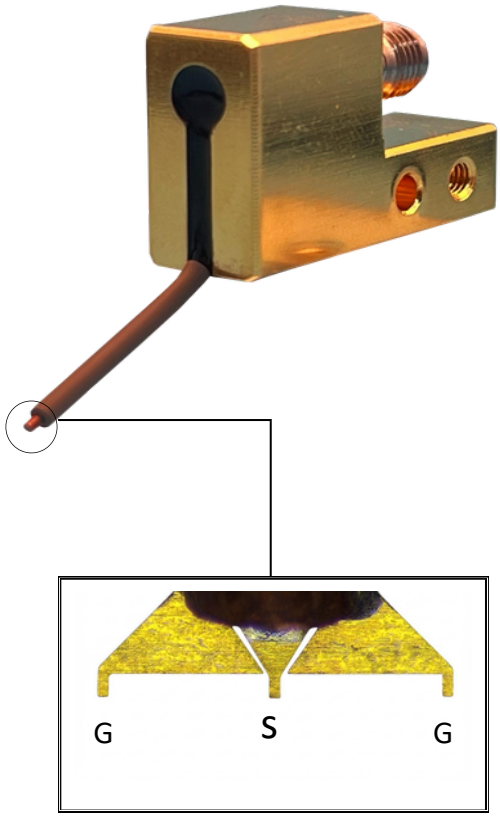


DC~40GHz GSG Probe

Model:VST-40G-GSG-XXX-MW/TU2 （XXX=Pitch range:um)

Typical Electrical Characteristics

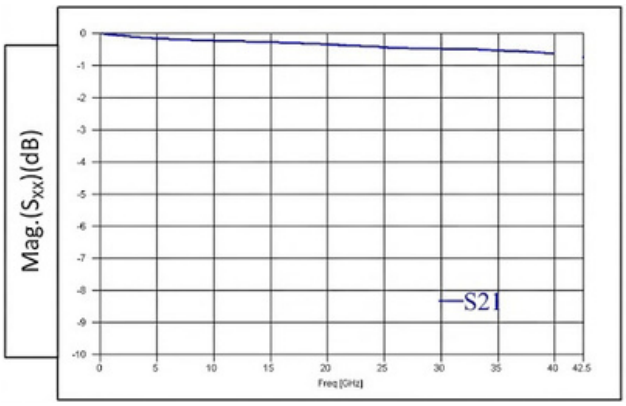
Frequency range	DC-40GHz
Insertion loss	Spec:<0.6dB
Return loss	Spec:>18dB
Impedance	50Ω
DC current	≤1A
DC voltage	≤100V
RF power	≤5w

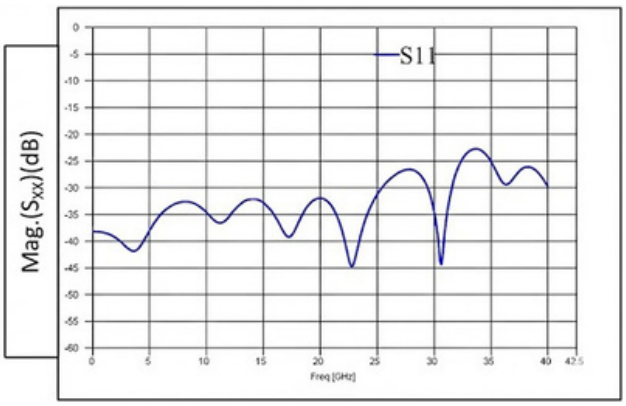


Mechanical Characteristics

Connector	2.92mm Female
Tip configurations	GSG-DC
Connector angle	45-degree
Pitch range	100μm-1250μm or customized
Standard pitch step	50μm
Tip size	
from 100 um to 250 um	25μm
from 300 um to 1250 um	50μm

Typical Electrical Characteristics: DC~40 GHz GSG Probe



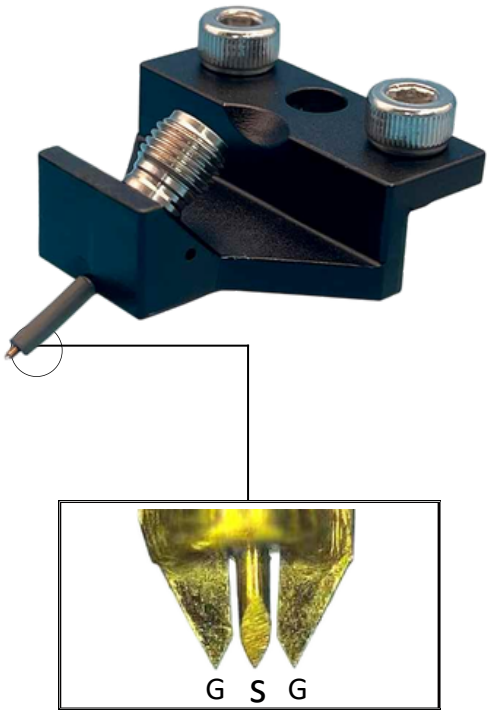


DC~40GHz GSG Probe

Model:VST-40G-GSG-XXX-LF （XXX=Pitch range:um)

Typical Electrical Characteristics

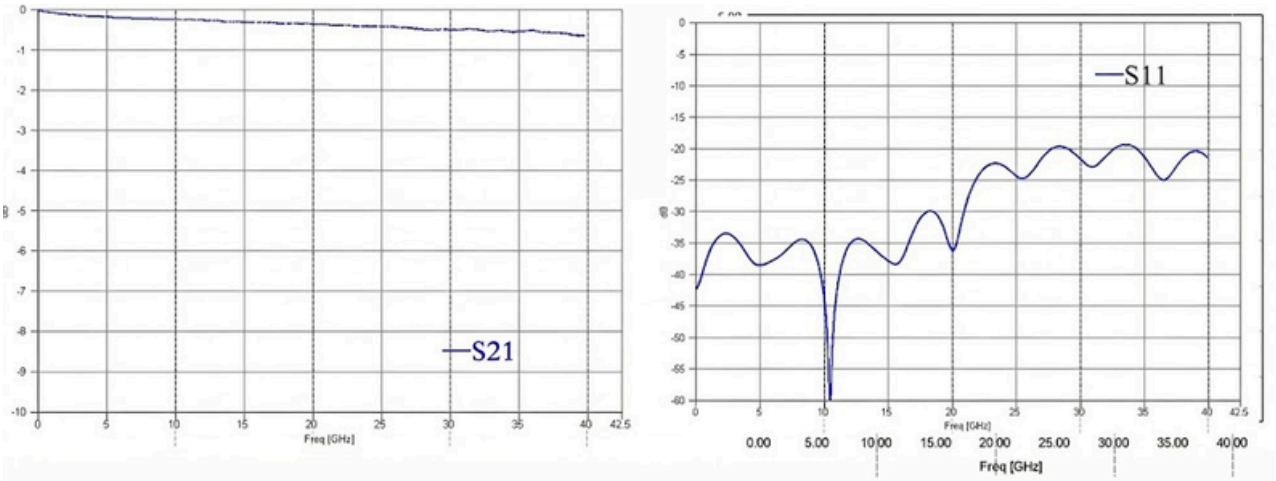
Frequency range	DC-40GHz
Insertion loss	Spec:<0.6dB
Return loss	Spec:>18dB
Impedance	50Ω
DC current	≤1A
DC voltage	≤100V
RF power	≤5w



Mechanical Characteristics

Connector	2.92mm Female
Tip configurations	GSG
Connector angle	45-degree
Pitch range	100μm-1250μm or customized
Standard pitch step	25μm
Tip size	
from 100 um to 250 um	10μm
from 300 um to 1250 um	10μm

Typical Electrical Characteristics: DC~40 GHz GSG Probe

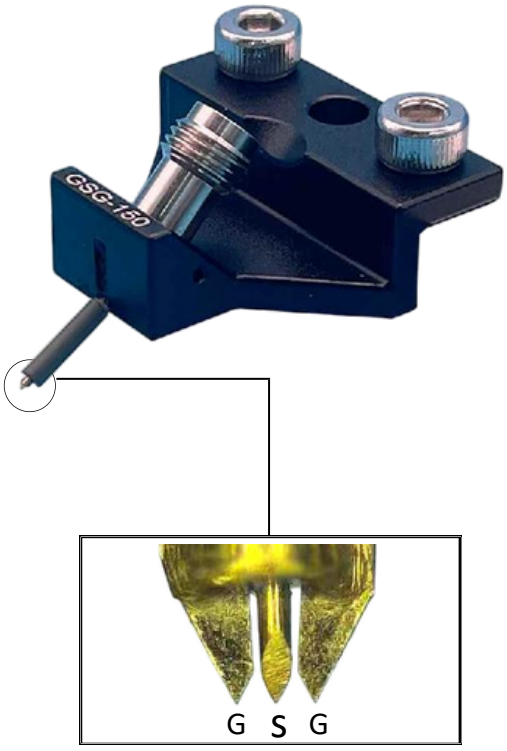


DC~67GHz GSG Probe

Model:VST-67G-GSG-XXX-LF （XXX=Pitch range:um)

Typical Electrical Characteristics

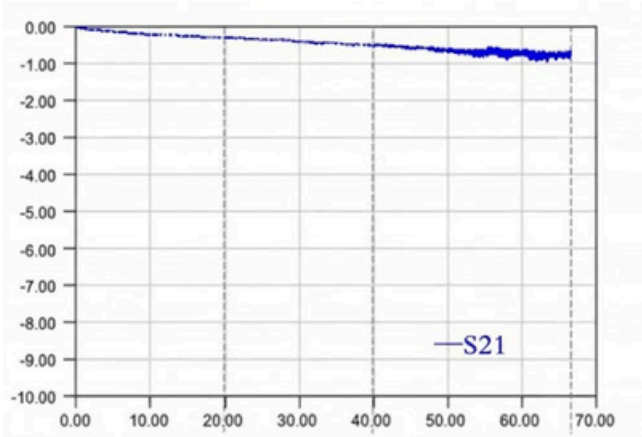
Frequency range	DC-67GHz
Insertion loss	Spec:<1.1dB
Return loss	Spec:>14dB
Impedance	50Ω
DC current	≤1A
DC voltage	≤100V
RF power	≤5w

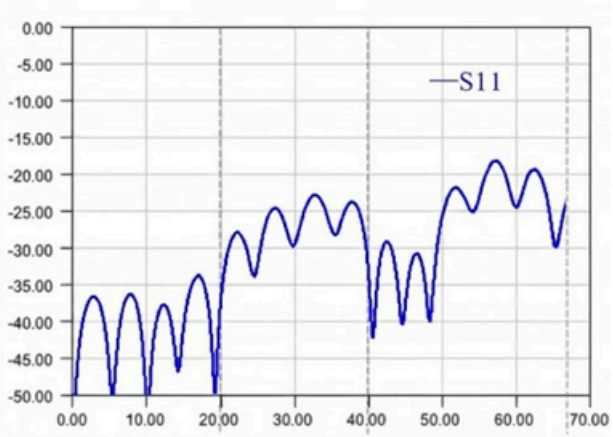


Mechanical Characteristics

Connector	1.85mm Female
Tip configurations	GSG
Connector angle	45-degree
Pitch range	100μm-1250μm or customized
Standard pitch step	25μm
Tip size	
from 100 um to 250 um	10μm
from 300 um to 1250 um	10μm

Typical Electrical Characteristics: DC~67 GHz GSG Probe



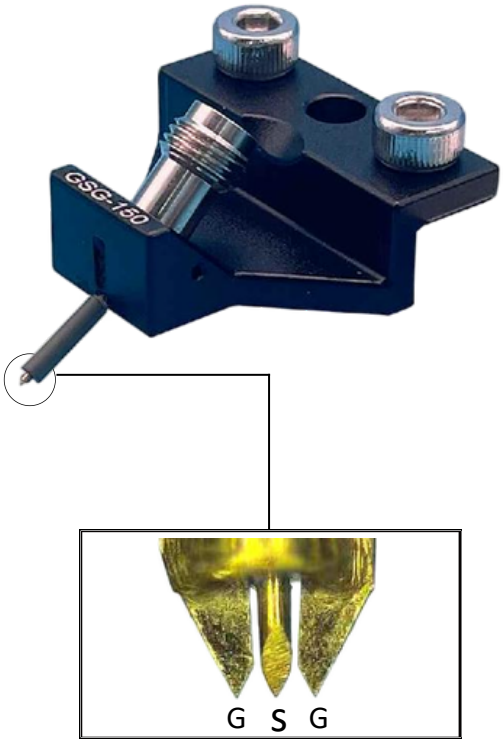


DC~110GHz GSG Probe

Model:VST-110G-GSG-XXX-LF （XXX=Pitch range:um)

Typical Electrical Characteristics

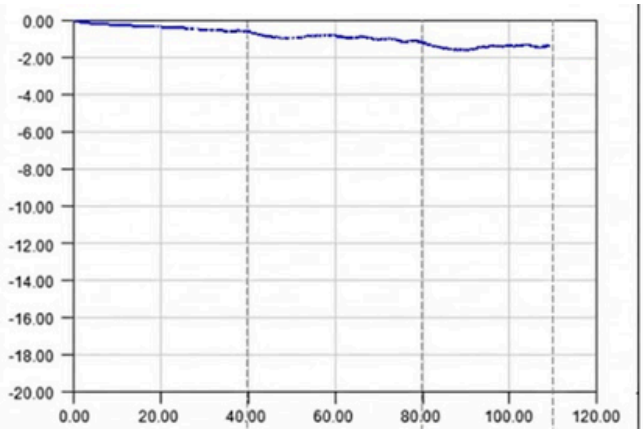
Frequency range	DC-110GHz
Insertion loss	Spec:<2.2dB
Return loss	Spec:>12dB
Impedance	50Ω
DC current	≤1A
DC voltage	≤100V
RF power	≤5w

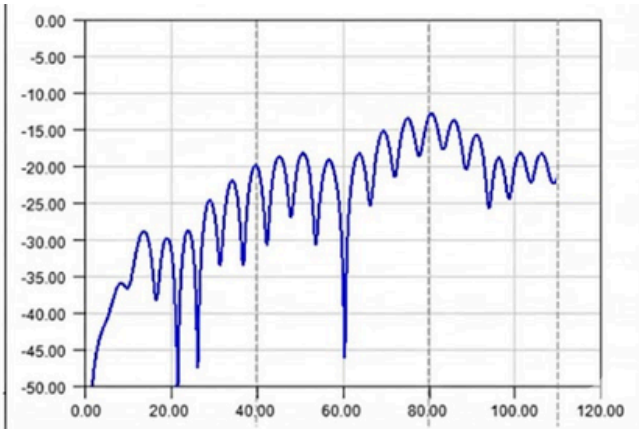


Mechanical Characteristics

Connector	1.00mm Female
Tip configurations	GSG
Connector angle	45-degree
Pitch range	100μm-1250μm or customized
Standard pitch step	25μm
Tip size	
from 100 um to 250 um	10μm
from 300 um to 1250 um	10μm

Typical Electrical Characteristics: DC~110 GHz GSG Probe



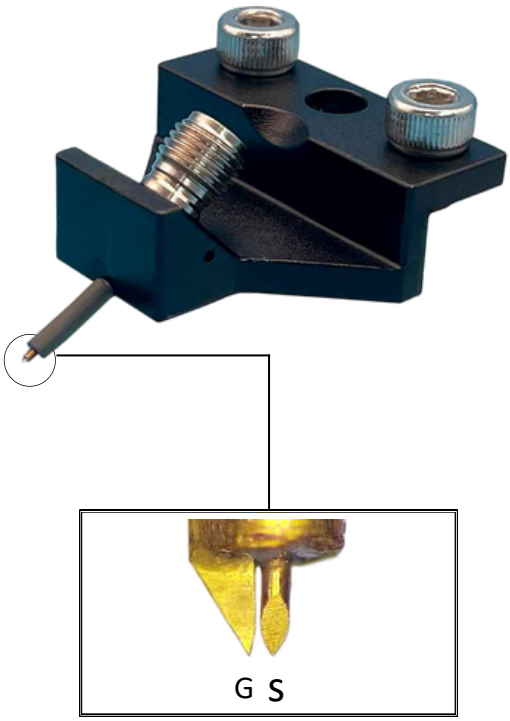


DC~40GHz GS Probe

Model:VST-40G-GS-XXX-LF （XXX=Pitch range:um)

Typical Electrical Characteristics

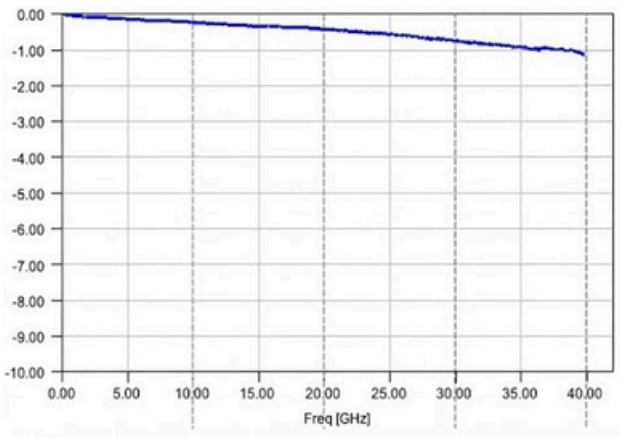
Frequency range	DC-40GHz
Insertion loss	Spec:<2.0dB
Return loss	Spec:>12dB
Impedance	50Ω
DC current	≤1A
DC voltage	≤100V
RF power	≤5w

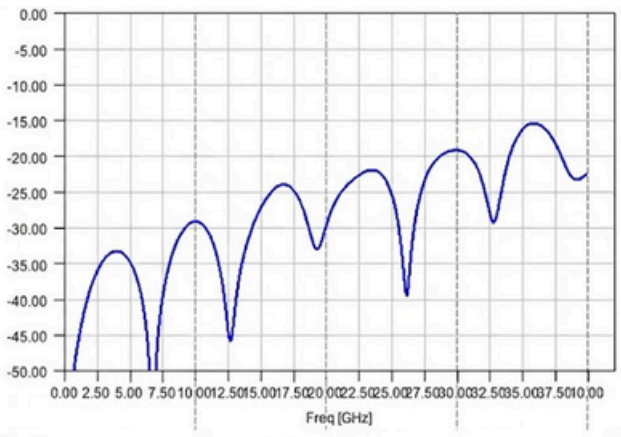


Mechanical Characteristics

Connector	2.92mm Female
Tip configurations	GS/SG
Connector angle	45-degree
Pitch range	100μm-1250μm or customized
Standard pitch step	25μm
Tip size	
from 100 um to 250 um	10μm
from 300 um to 1250 um	10μm

Typical Electrical Characteristics: DC~40 GHz GS Probe



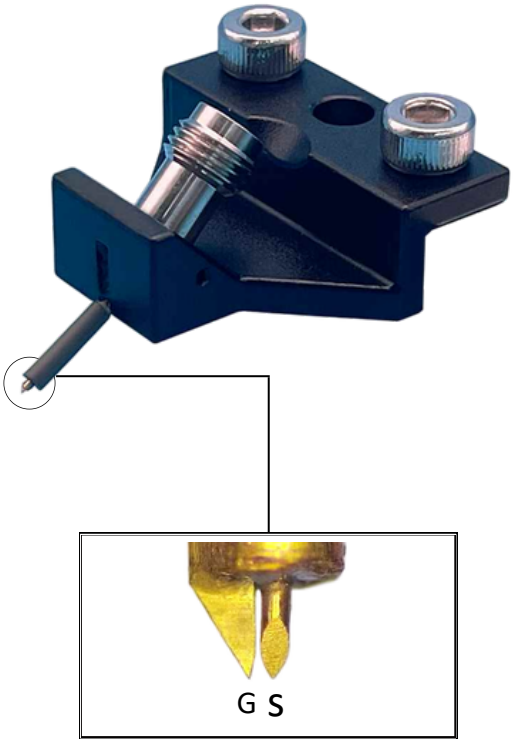


DC~67GHz GS Probe

Model:VST-67G-GS-XXX-LF （XXX=Pitch range:um)

Typical Electrical Characteristics

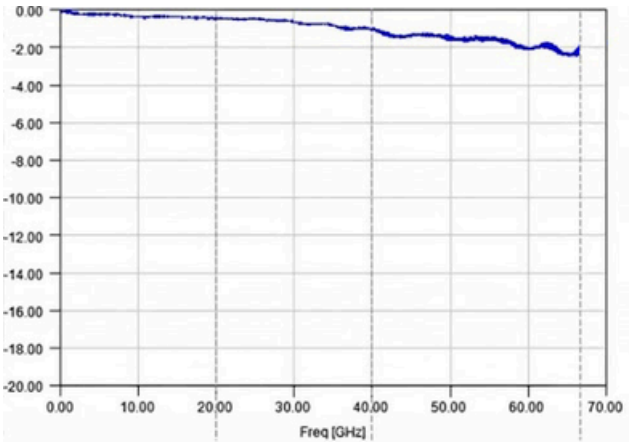
Frequency range	DC-67GHz
Insertion loss	Spec:<3.0dB
Return loss	Spec:>12dB
Impedance	50Ω
DC current	≤1A
DC voltage	≤100V
RF power	≤5w

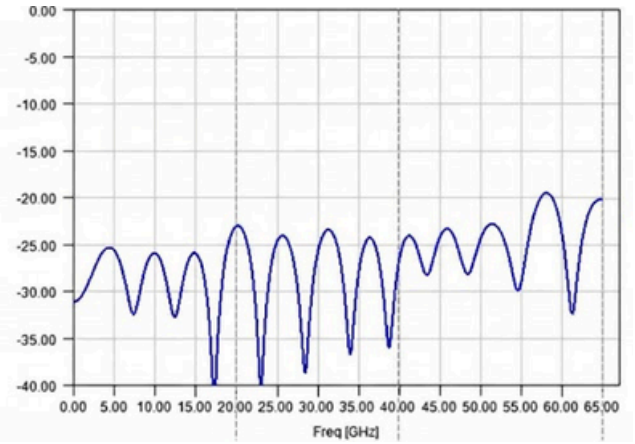


Mechanical Characteristics

Connector	1.85mm Female
Tip configurations	GS/SG
Connector angle	45-degree
Pitch range	100μm-1250μm or customized
Standard pitch step	25μm
Tip size	
from 100 um to 250 um	10μm
from 300 um to 1250 um	10μm

Typical Electrical Characteristics: DC~67 GHz GS Probe



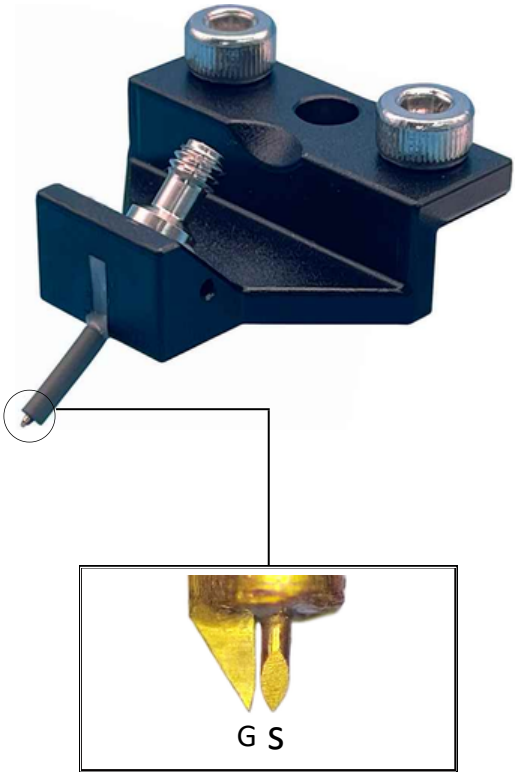


DC~110GHz GS Probe

Model:VST-110G-GS-XXX-LF （XXX=Pitch range:um)

Typical Electrical Characteristics

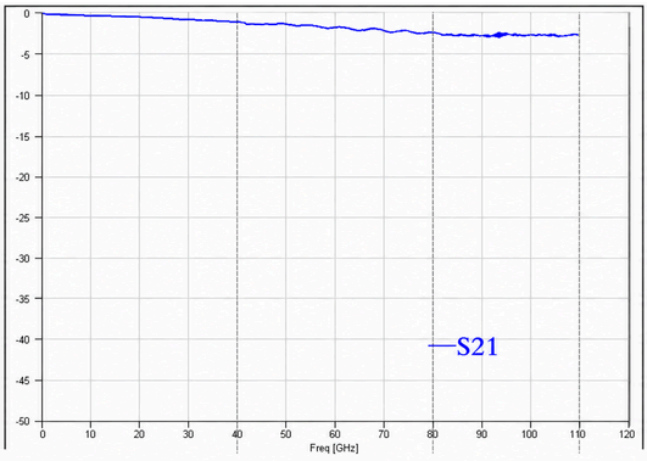
Frequency range	DC–110GHz
Insertion loss	Spec:<4.0dB
Return loss	Spec:>12dB
Impedance	50Ω
DC current	≤1A
DC voltage	≤100V
RF power	≤5W

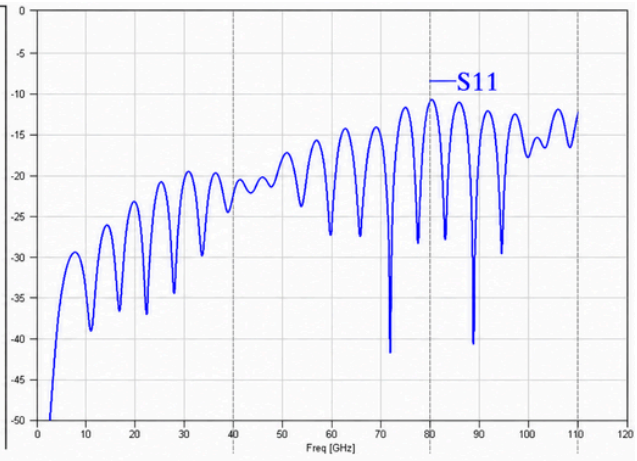


Mechanical Characteristics

Connector	1.00mm Female
Tip configurations	GS/SG
Connector angle	45-degree
Pitch range	40μm–1250μm
Standard pitch step	25μm
Tip size	
from 100 μm to 250 μm	10μm
from 300 μm to 1250 μm	10μm

Typical Electrical Characteristics: DC~67 GHz GS Probe





DC~40GHz GSSG Probe

Model:VST-40G-GSSG-XXX-LF （XXX=Pitch range:um)

Typical Electrical Characteristics

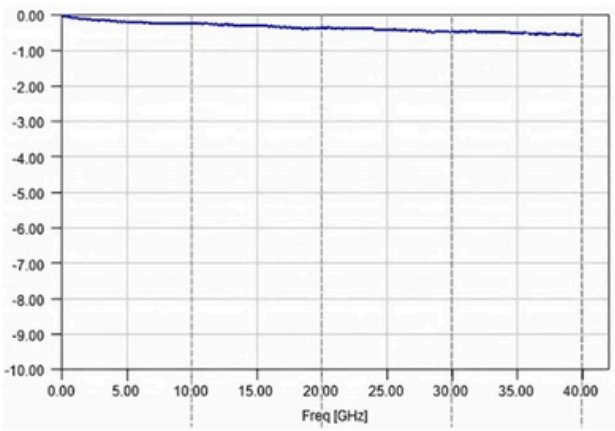
Frequency range	DC-40GHz
Insertion loss	Spec:<2.0dB
Return loss	Spec:>12dB
Impedance	100Ω
DC current	≤1A
DC voltage	≤100V
RF power	≤5w

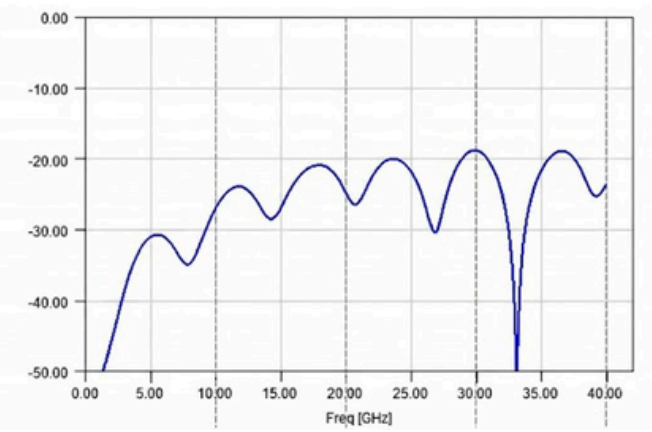


Mechanical Characteristics

Connector	2.92mm Female
Tip configurations	GSSG
Connector angle	45-degree
Pitch range	100μm-1250μm or customized
Standard pitch step	25μm
Tip size	
from 100 um to 250 um	10μm
from 300 um to 1250 um	10μm

Typical Electrical Characteristics: DC~40 GHz GSSG Probe





DC~40GHz GSGSG Probe

Model:VST-40G-GSGSG-XXX-LF （XXX=Pitch range:um)

Typical Electrical Characteristics

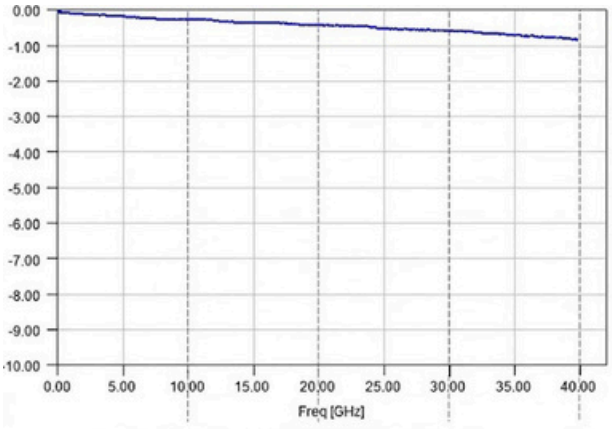
Frequency range	DC-40GHz
Insertion loss	Spec:<2.0dB
Return loss	Spec:>12dB
Impedance	100Ω
DC current	≤1A
DC voltage	≤100V
RF power	≤5w

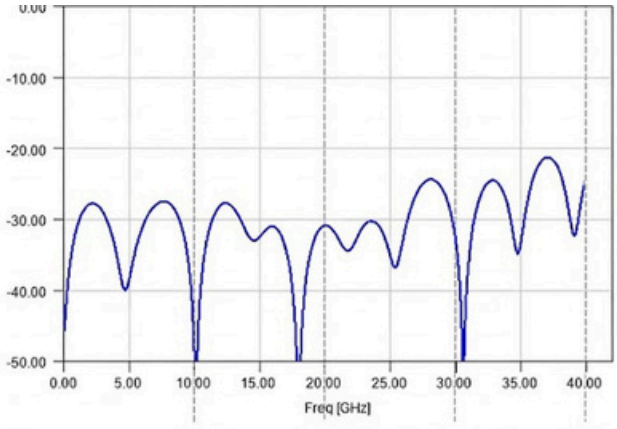


Mechanical Characteristics

Connector	2.92mm Female
Tip configurations	GSGSG
Connector angle	45-degree
Pitch range	100μm-1250μm or customized
Standard pitch step	25μm
Tip size	
from 100 um to 250 um	10μm
from 300 um to 1250 um	10μm

Typical Electrical Characteristics: DC~40 GHz GSGSG Probe





DC~67GHz GSSG Probe

Model:VST-67G-GSSG-XXX-LF （XXX=Pitch range:um)

Typical Electrical Characteristics

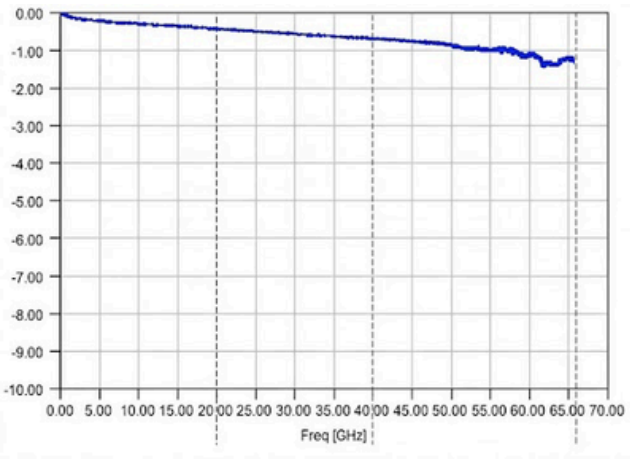
Frequency range	DC-67GHz
Insertion loss	Spec:<2.0dB
Return loss	Spec:>12dB
Impedance	100Ω
DC current	≤1A
DC voltage	≤100V
RF power	≤5w

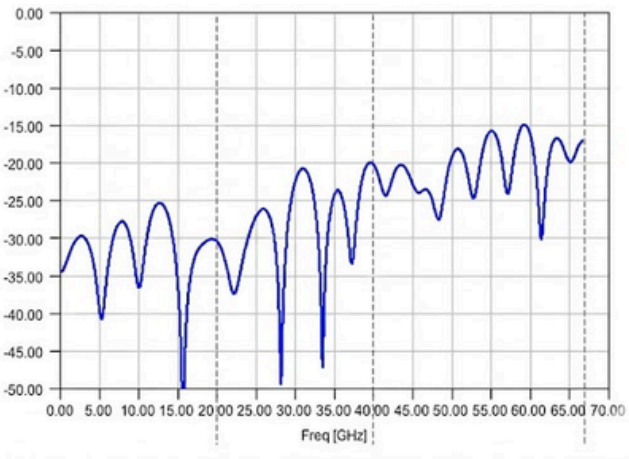


Mechanical Characteristics

Connector	1.85mm Female
Tip configurations	GSSG
Connector angle	45-degree
Pitch range	100μm-1250μm or customized
Standard pitch step	25μm
Tip size	
from 100 um to 250 um	10μm
from 300 um to 1250 um	10μm

Typical Electrical Characteristics: DC~67 GHz GSSG Probe





DC~67GHz GSGSG Probe

Model:VST-67G-GSGSG-XXX-LF （XXX=Pitch range:um)

Typical Electrical Characteristics

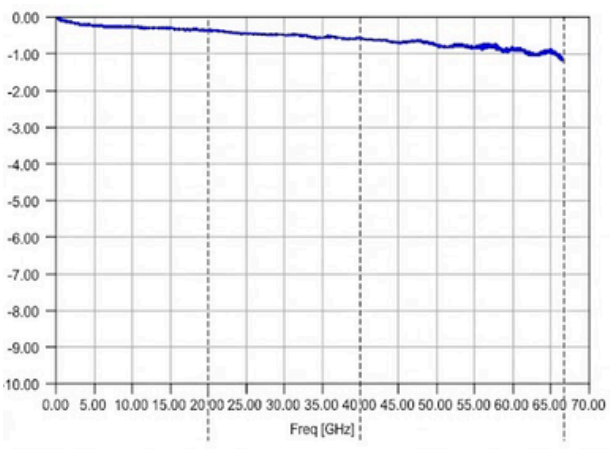
Frequency range	DC-67GHz
Insertion loss	Spec:<2.0dB
Return loss	Spec:>12dB
Impedance	100Ω
DC current	≤1A
DC voltage	≤100V
RF power	≤5w

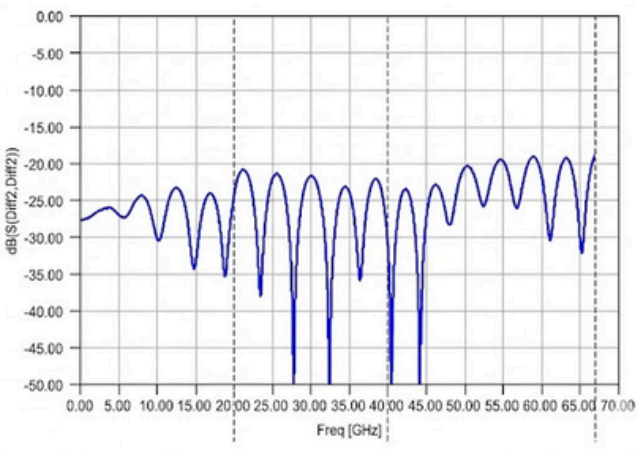


Mechanical Characteristics

Connector	1.85mm Female
Tip configurations	GSGSG
Connector angle	45-degree
Pitch range	100μm-1250μm or customized
Standard pitch step	25μm
Tip size	
from 100 um to 250 um	10μm
from 300 um to 1250 um	10μm

Typical Electrical Characteristics: DC~67 GHz GSGSG Probe





DC~110GHz GSSG Probe

Model:VST-110G-GSSG-XXX-LF （XXX=Pitch range:um)

Typical Electrical Characteristics

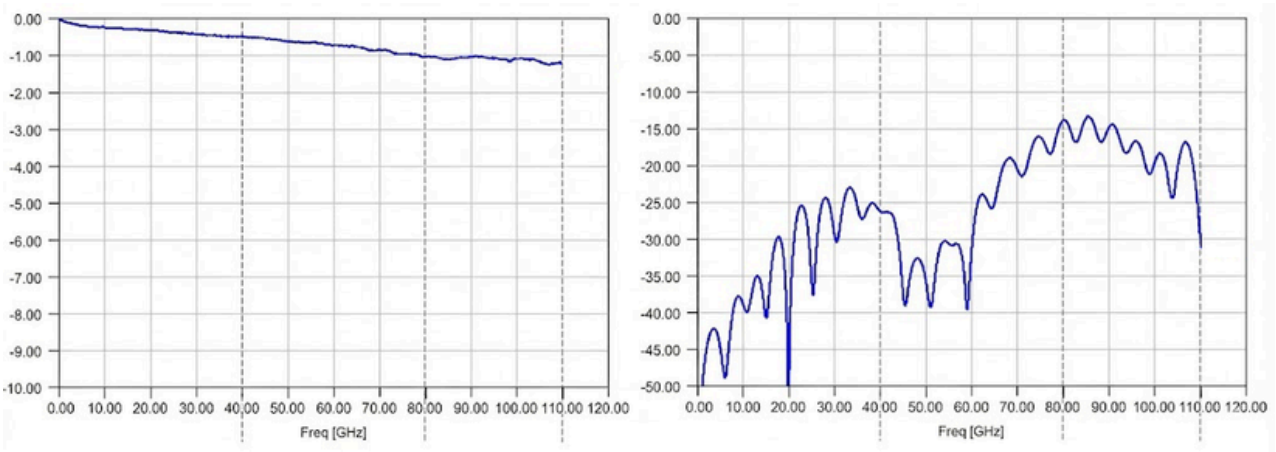
Frequency range	DC-110GHz
Insertion loss	Spec:<3.5dB
Return loss	Spec:>10dB
Impedance	100Ω
DC current	≤1A
DC voltage	≤100V
RF power	≤5w



Mechanical Characteristics

Connector	1.00mm Female
Tip configurations	GSSG
Connector angle	45-degree
Pitch range	100μm-1250μm or customized
Standard pitch step	25μm
Tip size	
from 100 um to 250 um	10μm
from 300 um to 1250 um	10μm

Typical Electrical Characteristics: DC~110 GHz GSSG Probe

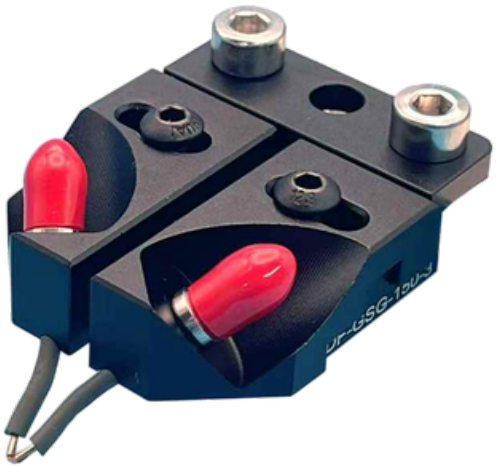


DC~110GHz GSGSG Probe

Model:VST-110G-GSGSG-XXX-LF （XXX=Pitch range:um)

Typical Electrical Characteristics

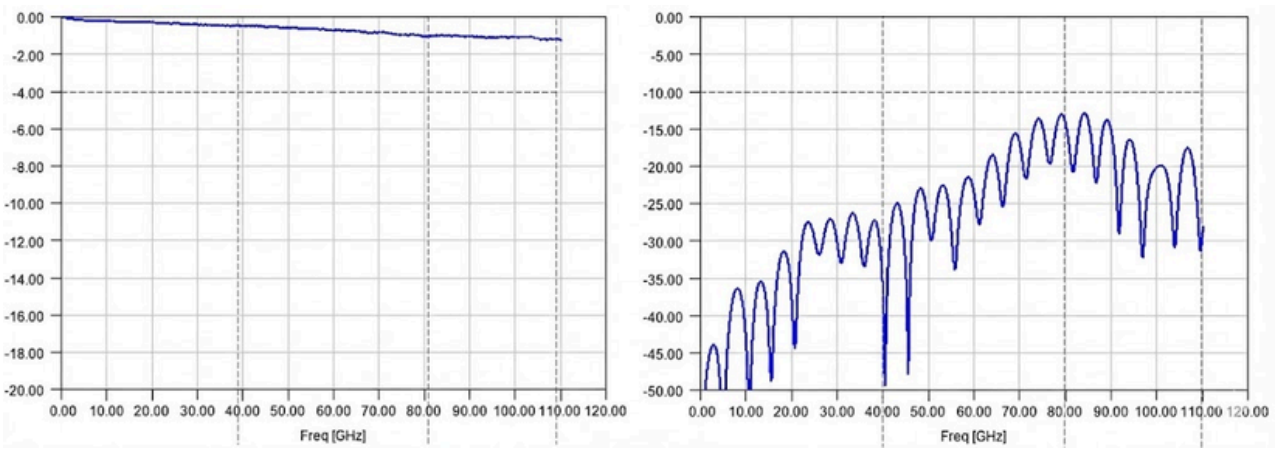
Frequency range	DC-110GHz
Insertion loss	Spec:<3.5dB
Return loss	Spec:>10dB
Impedance	100Ω
DC current	≤1A
DC voltage	≤100V
RF power	≤5w



Mechanical Characteristics

Connector	1.00mm Female
Tip configurations	GSGSG
Connector angle	45-degree
Pitch range	100μm-1250μm or customized
Standard pitch step	25μm
Tip size	
from 100 um to 250 um	10μm
from 300 um to 1250 um	10μm

Typical Electrical Characteristics: DC~110 GHz GSGSG Probe



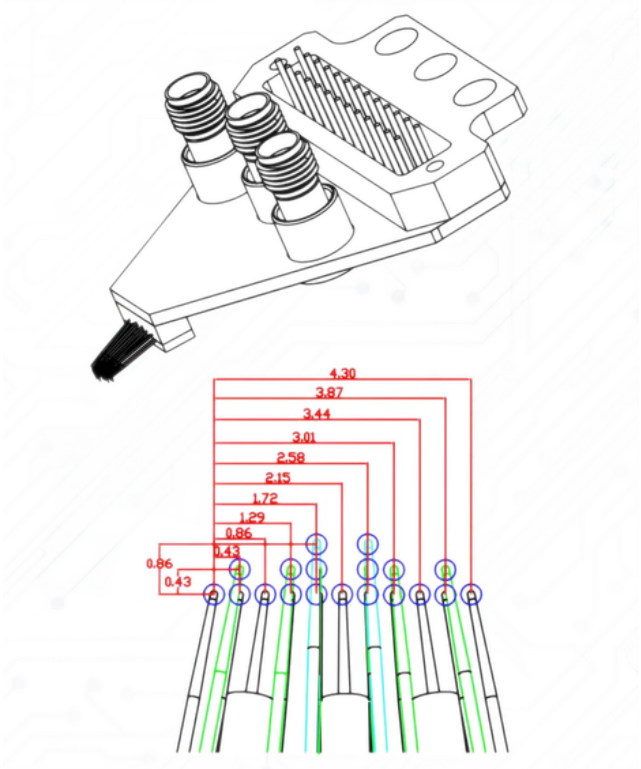
DC/RF Hybrid Probe Card

Model:VST-3-19P-S3-430

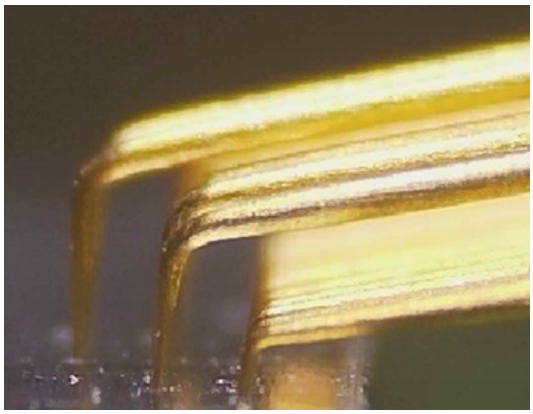


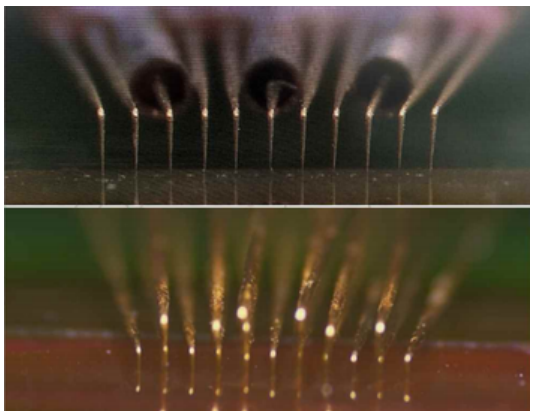
Performance Specifications

Probe Count	19 (11 + 6 + 2)
Probe Diameter	0.2 mm
Tip Size	25 µm
Tip Coplanarity	± 5 µm



Probe Tip Close-up



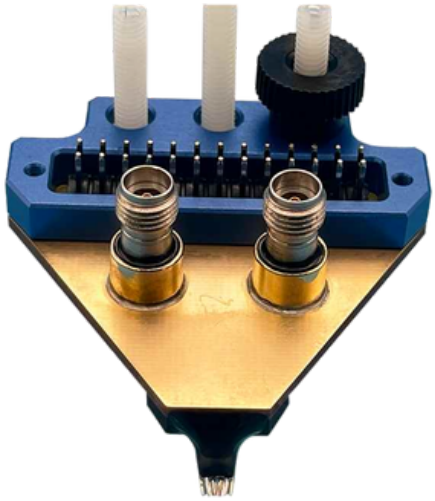


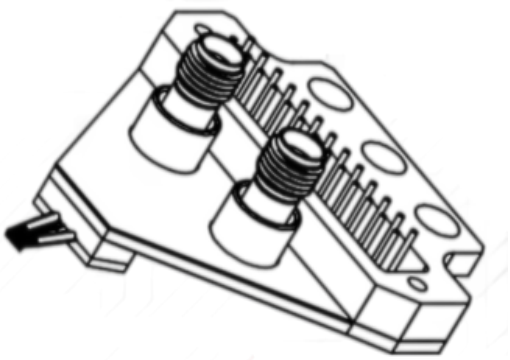
DC/RF Hybrid Probe Card

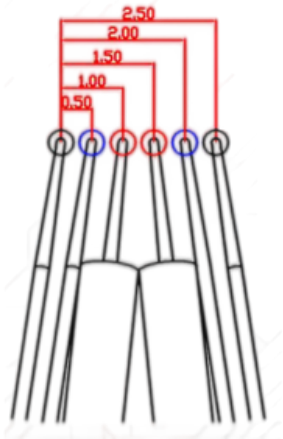
Model:VST-1-6P-D1-500

Performance Specifications

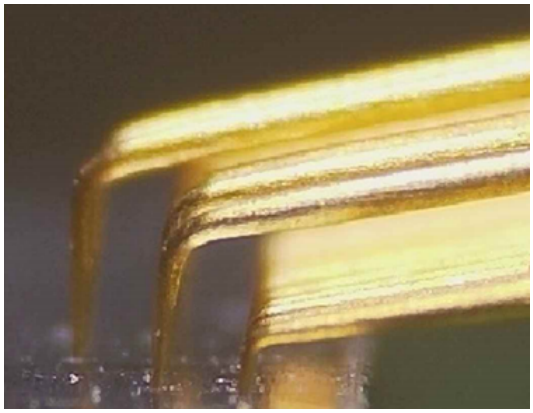
Probe Count	6
Probe Diameter	0.2 mm
Tip Size	25 µm
Tip Coplanarity	± 5 µm

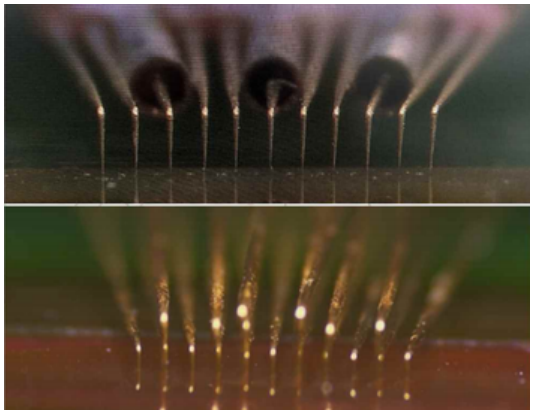






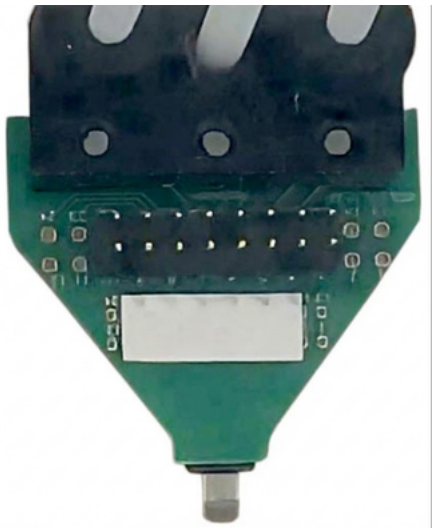
Probe Tip Close-up





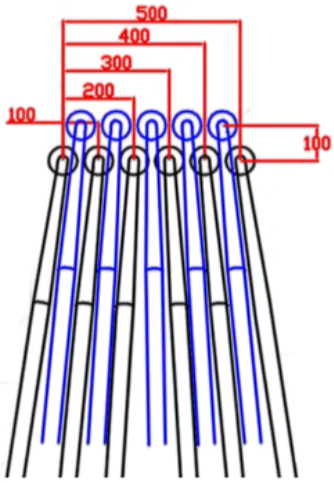
DC/RF Hybrid Probe Card

Model:VST-2-11P-100

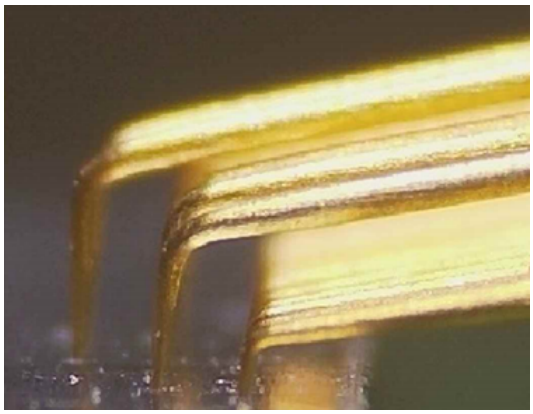


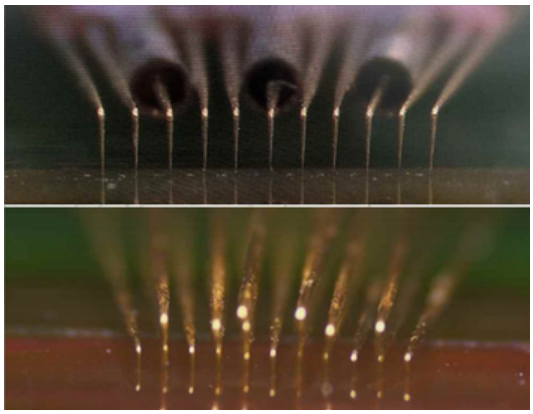
Performance Specifications

Probe Count	11（6+5）
Probe Diameter	0.2 mm
Tip Size	25 µm
Tip Coplanarity	± 5 µm



Probe Tip Close-up



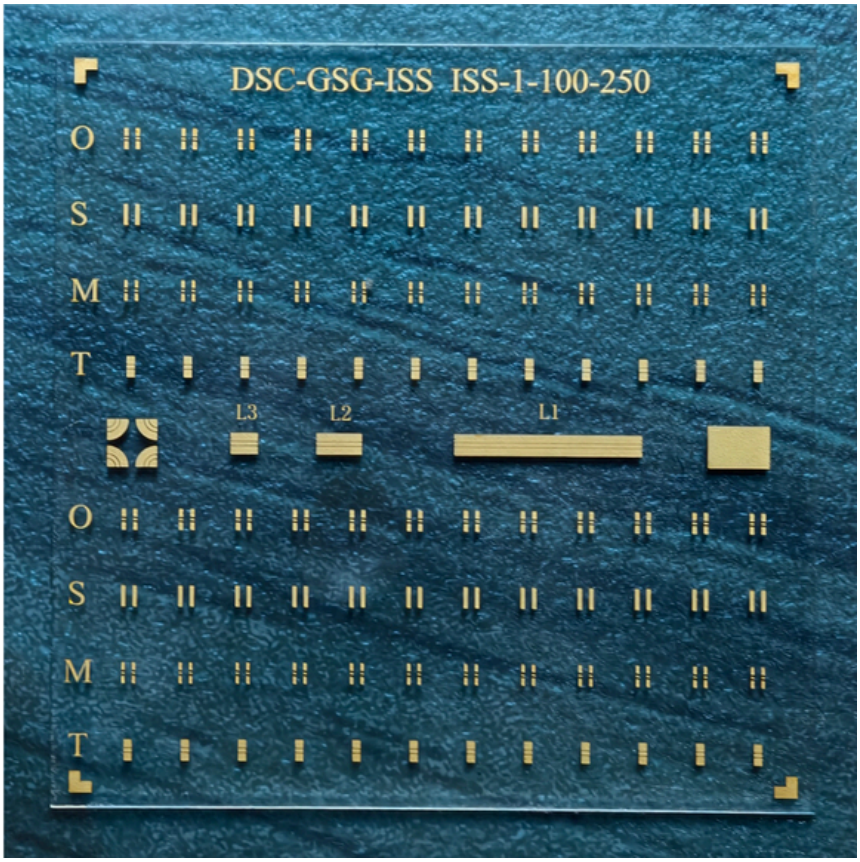


GSG-Probe Calibration Substrate(100-250um)

Model:VST-ISS-GSG-100-250

Typical Electrical Characteristics

Material	Quartz Glass
Elements design	Coplanar
Supported calibration methods	SOLT/TRL
Thickness	500 µm
Size	20 × 20 mm
Nominal line characteristic impedance	50 Ω
Nominal resistance of the load	50 Ω
Typical load trimming accuracy error	± 0.3 %
Open standard	Open In Air
Calibration verification elements	Yes
Probe Configuration	GSG
Supported probe pitch	100–250 µm
Number of SOLT standard groups from 100 µm to 250 µm	24

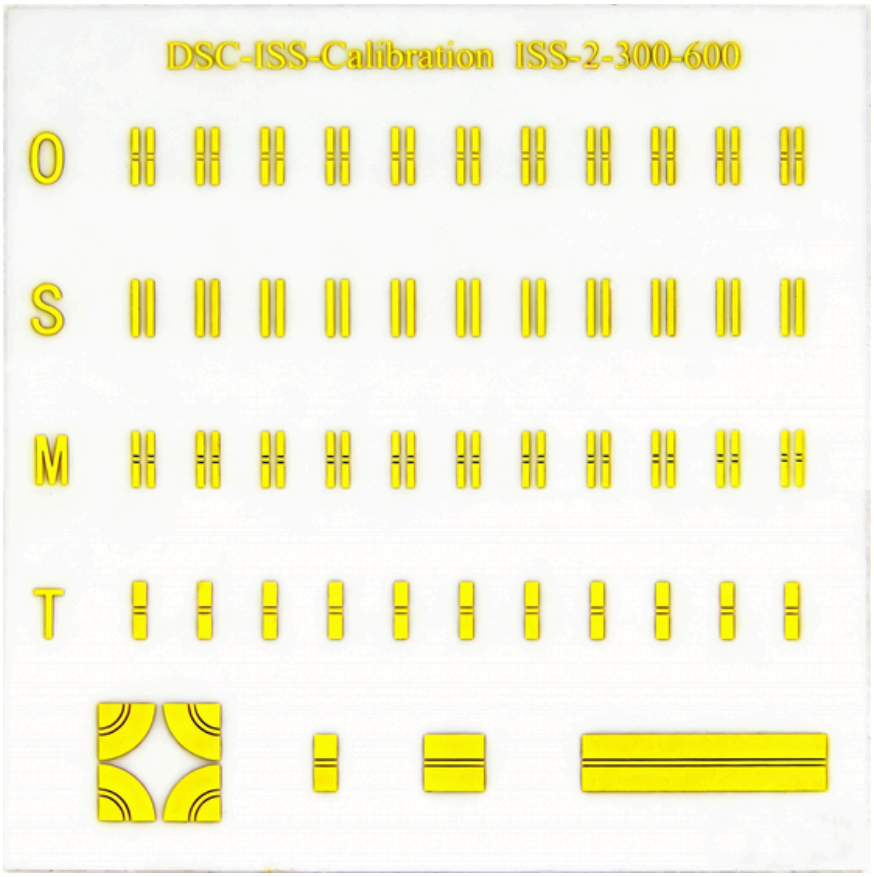


GSG-Probe Calibration Substrate(300-600um)

Model: VST-ISS-GSG-300-600

Typical Electrical Characteristics

Material	Alumina
Elements design	Coplanar
Supported calibration methods	SOLT/TRL
Thickness	635 µm
Size	20 × 20 mm
Nominal line characteristic impedance	50 Ω
Nominal resistance of the load	50 Ω
Typical load trimming accuracy error	± 0.3 %
Open standard	Au pads on substrate
Calibration verification elements	Yes
Probe Configuration	GSG
Supported probe pitch	300–600 µm
Number of SOLT standard groups from 300 µm to 600 µm	11

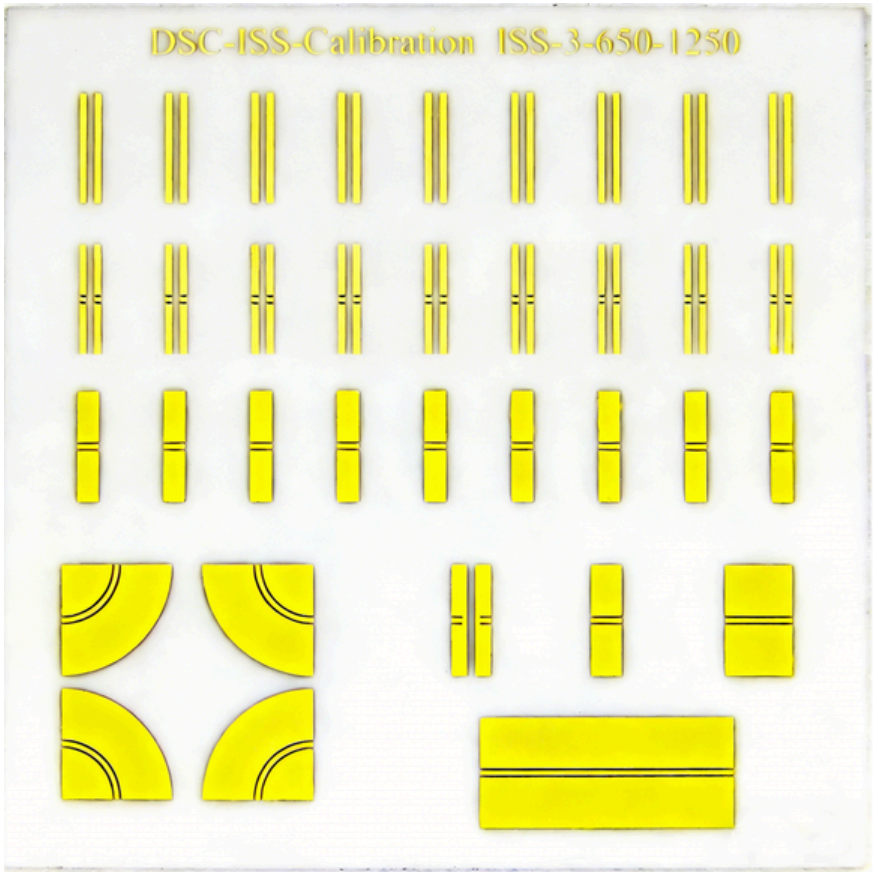


GSG-Probe Calibration Substrate(650-1250um)

Model: VST-ISS-GSG-650-1250

Typical Electrical Characteristics

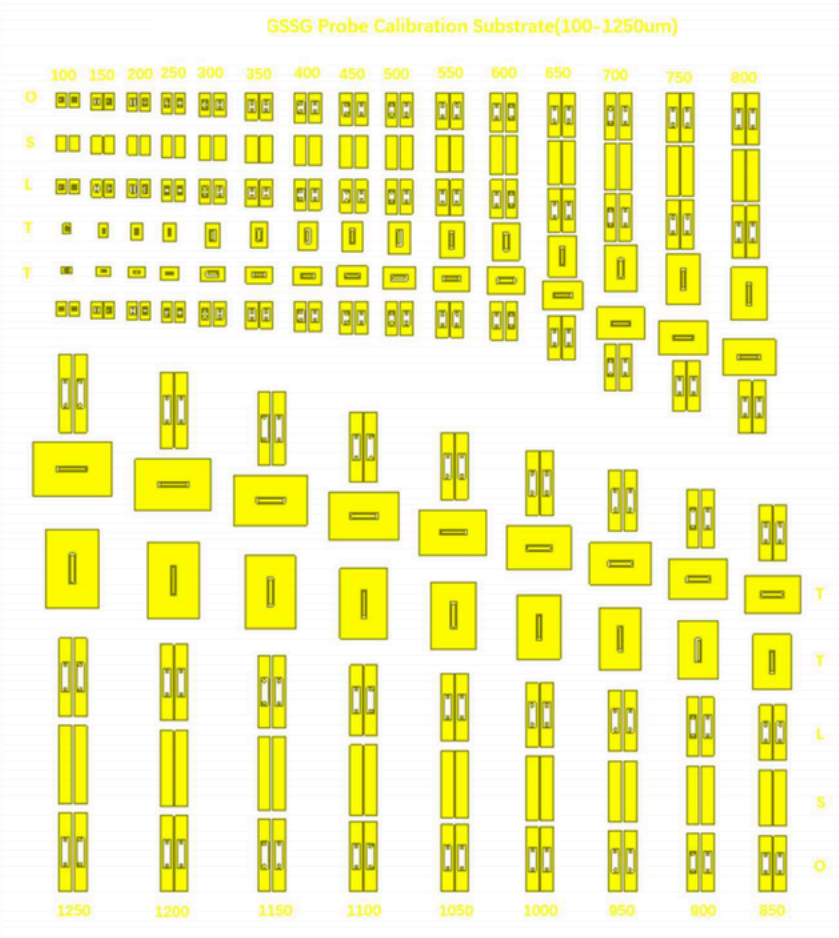
Material	Alumina
Elements design	Coplanar
Supported calibration methods	SOLT/TRL
Thickness	635 µm
Size	20 × 20 mm
Nominal line characteristic impedance	50 Ω
Nominal resistance of the load	50 Ω
Typical load trimming accuracy error	± 0.3 %
Open standard	Au pads on substrate
Calibration verification elements	Yes
Probe Configuration	GSG
Supported probe pitch	600–1250 µm
Number of SOLT standard groups from 600 µm to 1250 µm	9



GS/SG/GSSG-Probe Calibration Substrate(100-1250um)

Typical Electrical Characteristics

Material	Alumina
Elements design	Coplanar
Supported calibration methods	SOLT
Thickness	635 µm
Size	47x47mm
Nominal line characteristic impedance	50 Ω
Nominal resistance of the load	50 Ω
Typical load trimming accuracy error	± 0.3 %
Open standard	Au pads on substrate
Calibration verification elements	Yes
Probe Configuration	GS/SG/GSSG
Supported probe pitch	100-1250µm
Number of SOLT standard groups	2/pitch



Website

For more information refer to our website
https://vinstronics.com/rf-probe/

Shenzhen Weixintong Electronics Co., Ltd

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