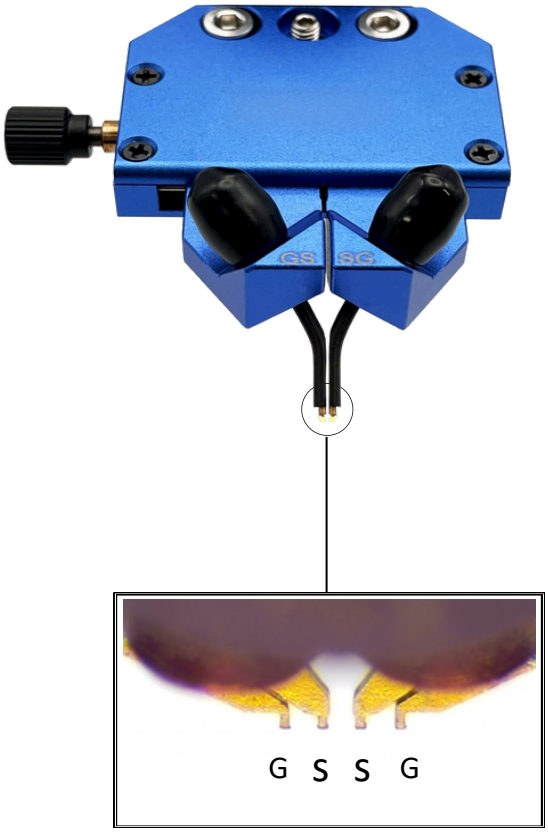
DC~67GHz GSSG Probe

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

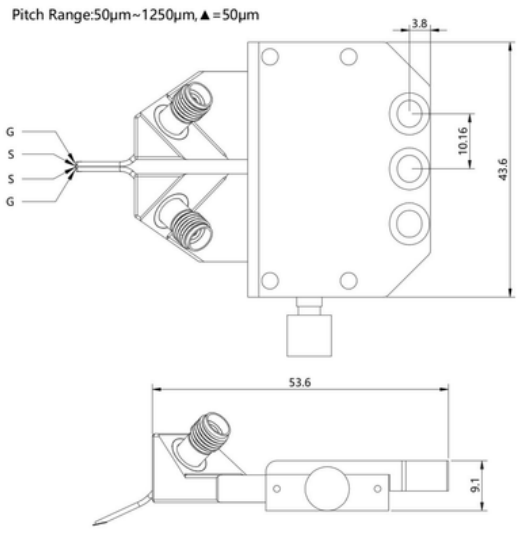
Product Overview

The Vinstronics VST-67G-GSSG-AJ is a high-performance mmWave differential probe engineered for ultra-accurate measurements up to 67 GHz. Optimized for 112G SerDes, PAM4 signaling, and 5G/6G research, its adjustable GSSG configuration provides exceptional phase symmetry and minimal mode conversion. The robust adjustable mechanism ensures superior contact repeatability, making it indispensable for high-speed digital interconnect evaluation and advanced semiconductor characterization.



Key Features

- mmWave Excellence: Advanced performance tailored for high-frequency differential probing up to 67 GHz.
- Superior Mode Control: Optimized tip geometry to minimize differential-to-common mode conversion.
- Ultra-Low Loss: Enhanced design for superior insertion loss (SDD21) and excellent return loss (SDD11).
- Flexible Pitch Adjustment: Precision pitch options from 100 μm to 1250 μm with fine-tuning capability.
- Stable Contact Technology: Specialized tips ensuring low and stable contact resistance even at mmWave scales.



Typical Applications

- 12G SerDes and PAM4 signal integrity testing.
- 5G/6G mmWave differential component characterization.
- Advanced broadband differential measurements in R&D environments.
- High-density wafer-level probing for high-speed transceivers and logic.

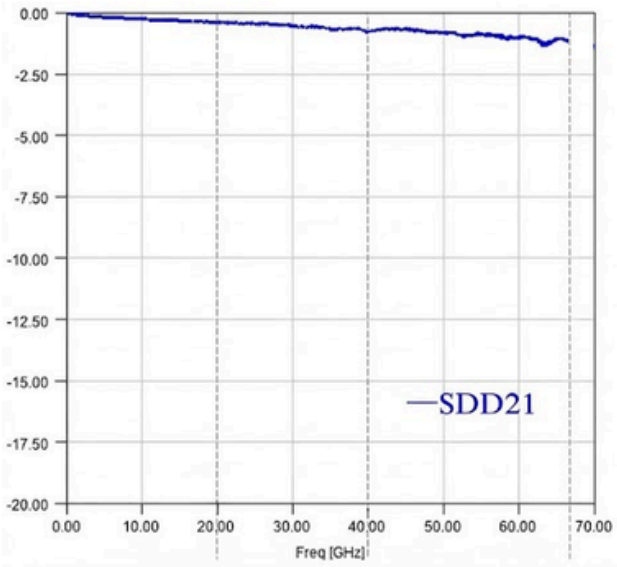
Typical Electrical Characteristics

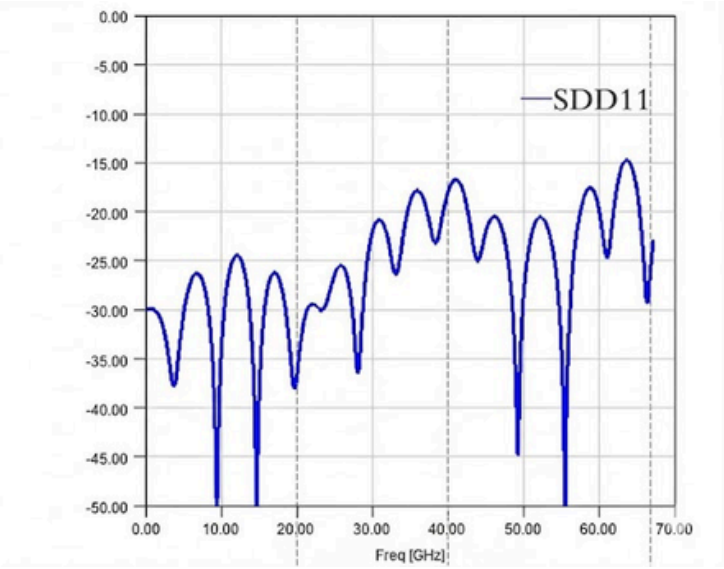
Frequency range	DC-67GHz
Insertion loss	Spec:<2.0dB
Return loss	Spec:>12dB
Impedance	100Ω
DC current	≤1A
DC voltage	≤100V
RF power	≤5w

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





Technical Support:Pitch Adjustment Procedure

To maintain measurement accuracy and extend probe tip life, please follow these professional adjustment protocols:

- Visual Monitoring: Conduct all adjustments under a high-resolution microscope (min. 100x magnification) to prevent mechanical over-travel.
- Precision Control: Utilize the integrated micro-screw mechanism. A standard hex driver is required for fine-tuning.
- Adjustment Logic:
  - Expand Pitch: Rotate the adjustment screw Clockwise to increase the distance between signal pins.
  - Narrow Pitch: Rotate the adjustment screw Counter-clockwise to decrease the distance.
- Calibration Requirement: After each adjustment, verify the pitch using a NIST-traceable pitch ruler or a Calibration Substrate (ISS) before performing VNA calibration.
- Mechanical Safety: Do not force the screw beyond its specified range (100 µm – 1250 µm) to avoid internal spring fatigue or tip misalignment.

Ordering Information

Model format
VST-67G-GSSG-XXX-AJ
Where:

- 67G = frequency range (DC–67 GHz)
- GSSG = tip configuration (Ground-Signal-Signal-Ground)
- XXX = pad pitch in microns
- AJ = Adjustable Pitch (indicates the probe is equipped with a precision mechanical adjustment mechanism)

Example:VST-67G-GSSG-150-AJ (67 GHz GSSG probe with 150 µm base pitch, mechanically adjustable)
Custom versions are available upon request (special pitch range, angle, or connector).

Recommended Accessories

- Calibration substrates (SOLT / LRM compatible)
- RF cables and adapters
- Probe positioners and probe stations
- Cleaning kits and spare tips

Handling & Usage Notes

- Always perform calibration at the probe tip for best accuracy
- Avoid excessive force to preserve tip alignment
- Keep contact surfaces clean to maintain low contact resistance
- Store probes in protective cases when not in use

Contact & Support

For quotations, technical support, or customization requests:
Vinstronics
Email: sales@vinstronics.com
Website: www.vinstronics.com/rf-probe/