DC~40 GHz GSGSG Probe

Model: VST-40G-GSGSG-XXX（XXX=pitch in μm)

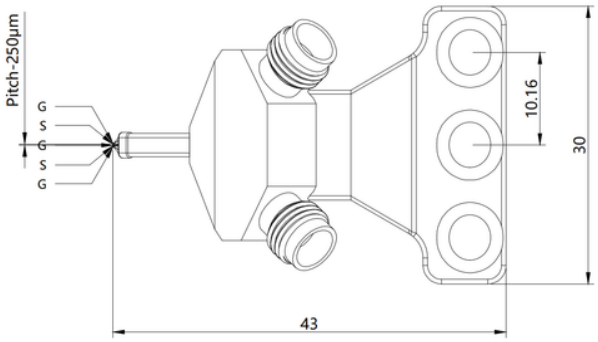
Product Overview

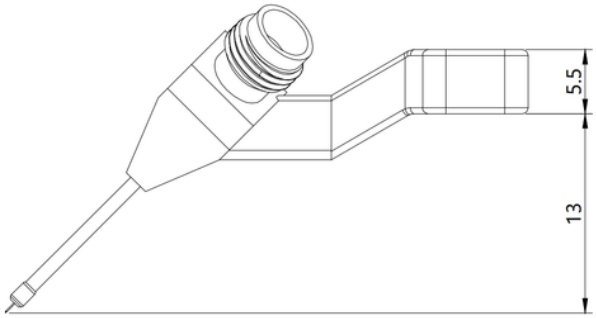
The Vinstronics VST-40G-GSGSG-XXX is a broadband differential RF probe designed for high-speed digital and RF characterization up to 40 GHz. Its GSGSG contact geometry places a dedicated ground between the two signal paths, helping improve isolation, control return currents, and reduce unwanted coupling for reliable differential measurements.



Key Features

- Interleaved Ground Architecture: Central ground separation between signal paths helps improve isolation and reduce crosstalk.
- Controlled Return Paths: Dedicated ground contacts support stable differential measurements across broadband test conditions.
- Signal-Path Isolation: Designed to limit unwanted coupling between signal paths during high-speed RF and digital characterization.
- Precision Pad Access: Configurable pitch supports a wide range of differential pad geometries and device layouts.
- Stable Probe Contact: Designed for repeatable probing and consistent electrical performance.
- Test-System Integration: 2.92 mm RF interfaces support integration with broadband VNA and probe-station setups.





Typical Applications

- High-speed SerDes and differential interconnect characterization
- Differential RFIC/MMIC and balanced RF device characterization
- PCB and package signal integrity analysis
- Wafer-level differential device characterization and production test

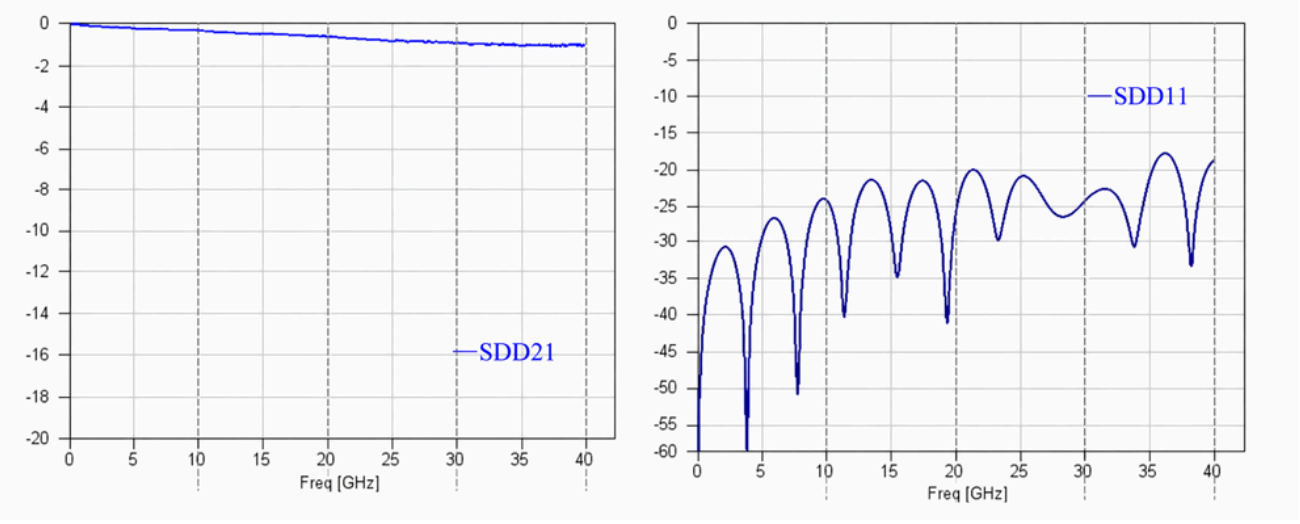
Electrical Specifications

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 Performance: DC~40 GHz GSGSG Probe



Ordering Information

Model format

VST-[Frequency]-[Tip Configuration]-[Pitch]

Where:

- **Frequency** = maximum operating frequency, e.g. 40G, 67G, 110G
- **Tip Configuration** = GS, SG, GSG, GSSG, GSGSG, SS, etc.
- **Pitch** = nominal probe-tip pitch in micrometers

Example:

VST-67G-GSSG-150

(67 GHz GSSG probe with 150 µm pitch)

Custom versions are available upon request (special pitch, 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/