DC~110 GHz GSSG Probe

Model:VST-110G-GSSG-XXX

Product Overview

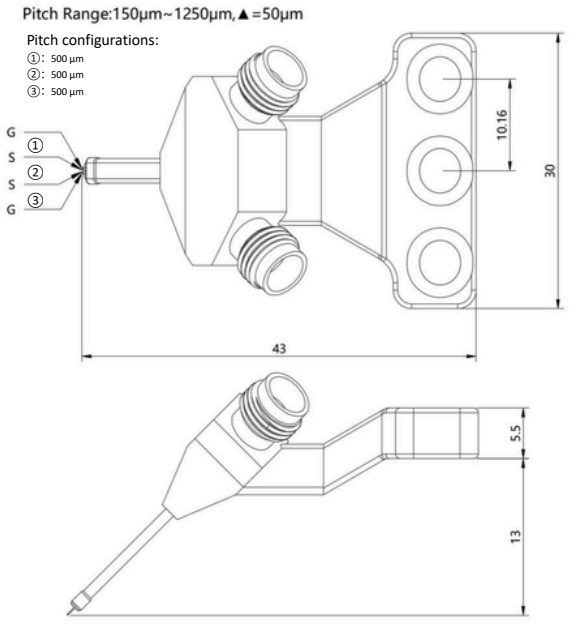
The Vinstronics VST-110G-GSSG-XXX is a W-band differential RF probe designed for high-frequency characterization up to 110 GHz. Its GSSG contact geometry provides controlled signal and ground paths to support accurate differential and mixed-mode measurements, helping preserve signal integrity in demanding high-speed digital, mmWave RF, and advanced device characterization.





Key Features

- W-Band Differential Probing: Designed for differential and mixed-mode characterization through 110 GHz.
- Signal-Path Symmetry: Controlled signal geometry helps minimize skew and differential-to-common-mode conversion at high frequencies.
- Ground-Shielded GSSG Contact: Dedicated ground contacts provide controlled return paths and help reduce unwanted coupling.
- Precision Pad Access: Configurable pitch supports a wide range of differential pad geometries for wafer, package, and device-level testing.
- Stable Probe Contact: Designed for repeatable contact and consistent high-frequency measurement performance.
- Test-System Integration: 1.0 mm RF interface for integration with W-band VNA and probe-station test setups.



Typical Applications

- High-speed SerDes and differential signal integrity characterization
- W-band and 6G differential RFIC/MMIC characterization
- 77–81 GHz automotive radar IC and front-end testing
- Wafer-level device and advanced packaging characterization

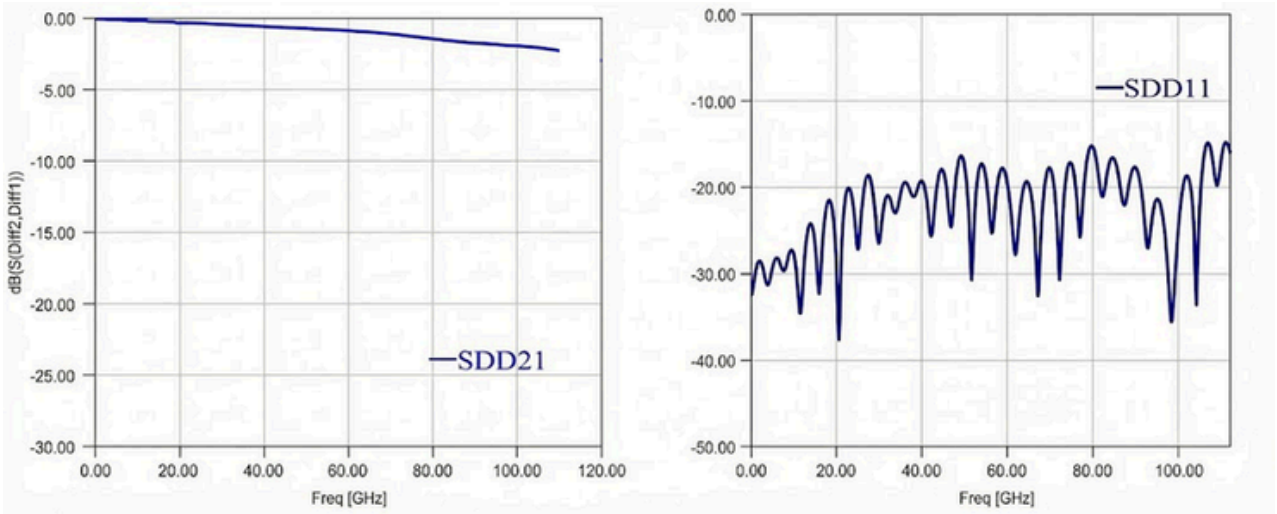
Electrical Specifications

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	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 Performance: DC~110 GHz GSSG Probe 150 micron pitch



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/