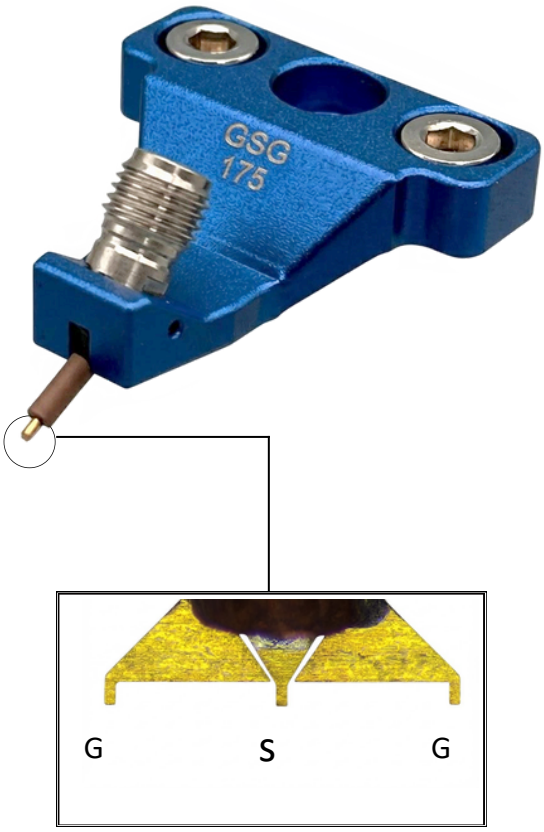
DC~40GHz GSG Probe

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

Product Overview

The Vinstronics VST-40G-GSG-LL is a high-performance RF probe optimized for applications requiring minimal signal attenuation. Featuring an enhanced low-loss internal structure, it provides superior transparency in the signal path from DC to 40 GHz. It is the ideal solution for measuring extremely low-level signals where preserving power budget and signal-to-noise ratio (SNR) is critical.



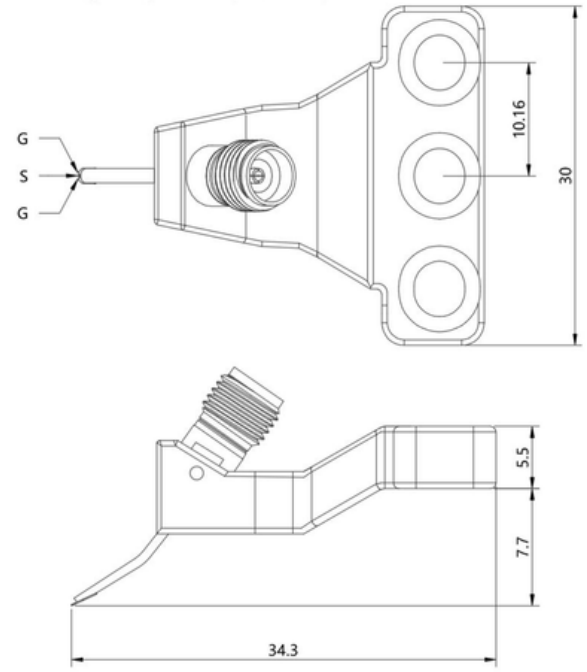
Key Features

- Minimized Insertion Loss: Advanced internal geometry reduces signal attenuation across the full 40 GHz band.
- High Signal Fidelity: Optimized impedance matching to ensure maximum power transfer and minimal reflection.
- Enhanced Sensitivity: Lower inherent loss allows for more accurate characterization of low-gain devices.
- Stable 50 Ω Environment: Maintains precise impedance stability for highly repeatable measurements.

Typical Applications

- Low-gain and high-sensitivity device testing.
- Precision loss characterization of passive components.
- Long-cable measurement setups requiring power compensation.
- R&D verification for power-efficient RF front-ends.

Pitch Range:100μm~1250μm,▲=50μm



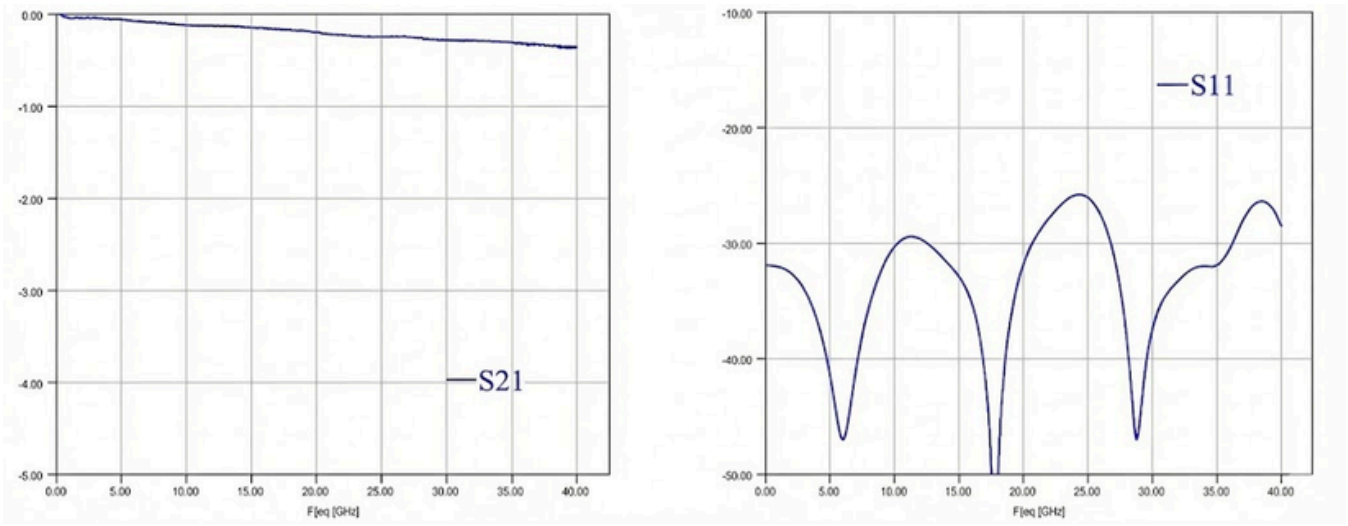
Typical Electrical Characteristics

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-LL 175 micron pitch



Ordering Information

Model formatVST-40G-GSG-XXX-LL

Where:

- 40G = frequency range (DC–40 GHz)
- GSG = tip configuration
- XXX = pad pitch in microns
- LL = Lower Loss optimized version

Example:VST-40G-GSG-175-LL (40 GHz Lower Loss GSG probe with 175 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/