

# High Performance Microwave Probes for RF probing

## ❖ Model SP-325BT

- Durable
- 220 GHz to 325 GHz
- Insertion loss 3 db typical
- Return loss 15 db typical
- Individually spring loaded contacts
- Bias T option available
- Rugged Coaxial design

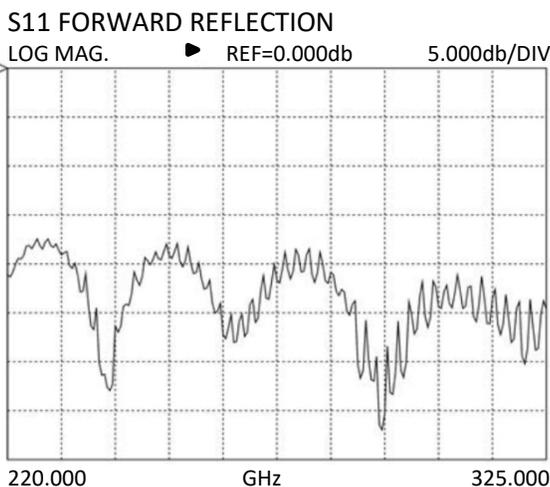


## ❖ Flexible Tips for Flexible Probing

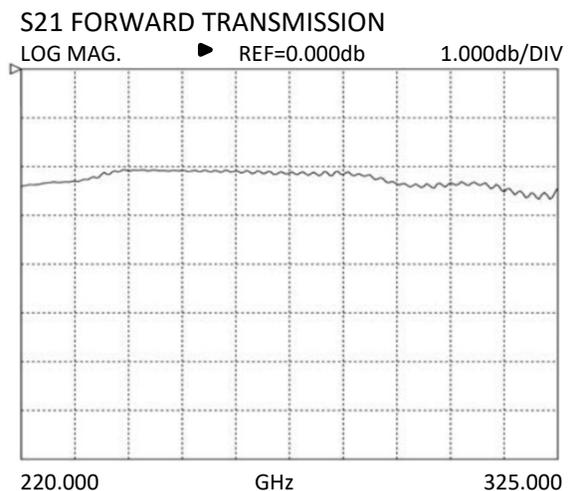
Model SP-325BT (with bias T)

The Model 325B Picoprobe sets new standards in microwave probing performance. Benefiting from coaxial techniques, which have inherent low loss and low dispersion characteristics, the Model SP-325BT achieves an insertion loss of less than 3.0 db and a return loss of greater than 15 db over its frequency range (see accompanying data).

With its individually spring loaded, Beryllium-Copper tips, the Model SP-325BT provides reliable contacts, even when probing nonplanar structures. This reliable low resistance contact is one of the keys to providing highly repeatable measurements. The Model SP-325BT also allows direct viewing of the probe tips for accurate positioning. Any pitch (tip spacing) from 25 to 90 microns is recommended. The probe can be configured with Ground-Signal-Ground (G,S,G), Ground-Signal (G,S), or Signal-Ground (S,G) tip footprints. We recommend a G,S,G footprint for best performance.



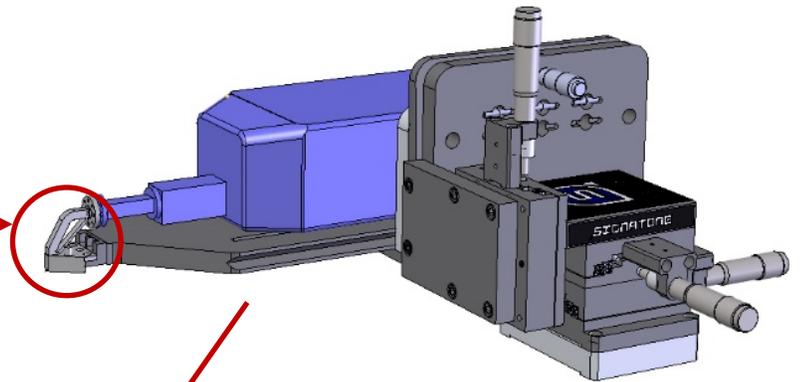
Typical uncalibrated performance of a Model SP-325BT-GSG-80 while touching a 50 ohm load on our CS-15 calibration substrate



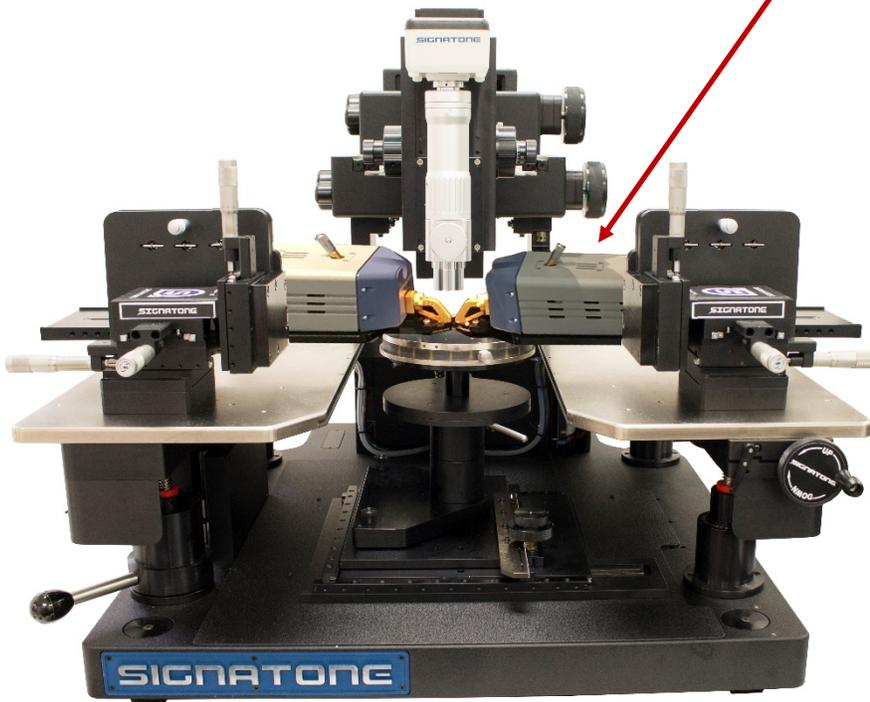
Typical insertion loss of a Model SP-325BT-GSG-80

❖ **Probe Mounting and Dimensions**

Model SP-325BT  
220GHz -325GHz  
Microwave Probe



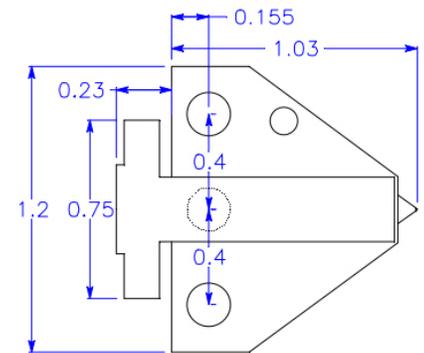
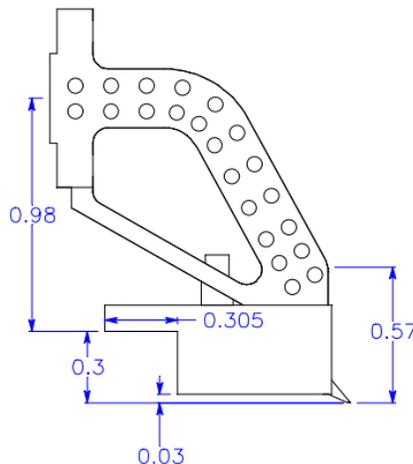
Signatone S-LAP-90 Large Area Positioner for mounting 50-1100GHz probes directly to the Frequency Extender with wave guide.



Micropositioners are available to hold virtually all the current models of Frequency extenders and tuners modules so that the module and the probe are moved and positioned as a unit (together). In this way, total ease of positioning can be achieved with minimum insertion loss.

Image Left: Shows WaveLink 170-THZ probe station with East & West S-LAP-90 Positioners, 325 GHz probes attached to Frequency Extenders.

The Model SP-325BT Picoprobe bias T provides a direct low resistance DC path for supplying up to 250 mA to a device under test. The bias T also has special circuits which add loss at frequencies below the waveguide cut off frequency. Typical uncalibrated performance of a Model 325B-GSG-80-BT while touching a 50 ohm load on our CS-15 calibration substrate. Typical insertion loss of a Model 325B-GSG-80-BT The probes also have a 3 hole mounting adaptor which will fit standard microwave positioners



Model SP-325BT Waveguide Dimensions

## ❖ WARRANTY

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- Standard Warranty 12 months \*
- For Extended Warranty and Service Contracts : Contact Signatone Corp. for more information

\* See *Signatone Corporate Terms and Conditions of Sale* for further details.

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