

## Model 500B

## High Performance Microwave Probes



## **Features**

- Durable
- 325 GHz to 500 GHz
- Insertion loss 4 db typ.
- Return loss 15 db typ.
- Individually spring loaded contacts
- Bias T option available
- Coaxial design

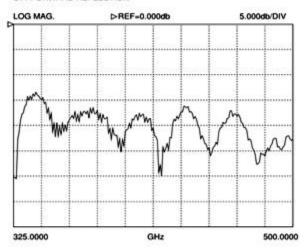
Model 500B Picoprobe with bias T

The Model 500B Picoprobe sets new standards in microwave probing performance. Benefiting from coaxial techniques, which have inherent low loss and low dispersion characteristics, the Model 500B Picoprobe achieves an insertion loss of less than 4.0 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 500B Picoprobe provides reliable contacts, even when probing non-planar structures. This reliable low resistance contact is one of the keys to providing highly repeatable measurements The Model 500B Picoprobe also allows direct viewing of the probe tips for accurate positioning.

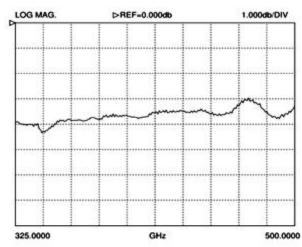
Any pitch (tip spacing) is available, however 25 to 55 microns is recommended. The probe can be configured with Ground-Signal-Ground (G,S,G), Ground-Signal (G,S), or Signal-Ground (S,G) tip footprints. We recommend a G,S,G footprint for best performance.

## S11 FORWARD REFLECTION



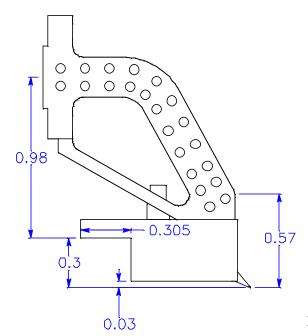
Typical uncalibrated performance of a Model 500B-GSG-50-BT while touching a 50 ohm load on our CS-15 calibration substrate.

S21 FORWARD TRANSMISSION

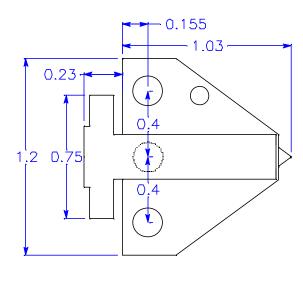


Typical insertion loss of a Model 500B-GSG-50-BT

The Model 500B Picoprob® 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



The probes have a 3 hole mounting adaptor which will fitstandard microwave probe stations.



Model 500B-BT dimensions in inches