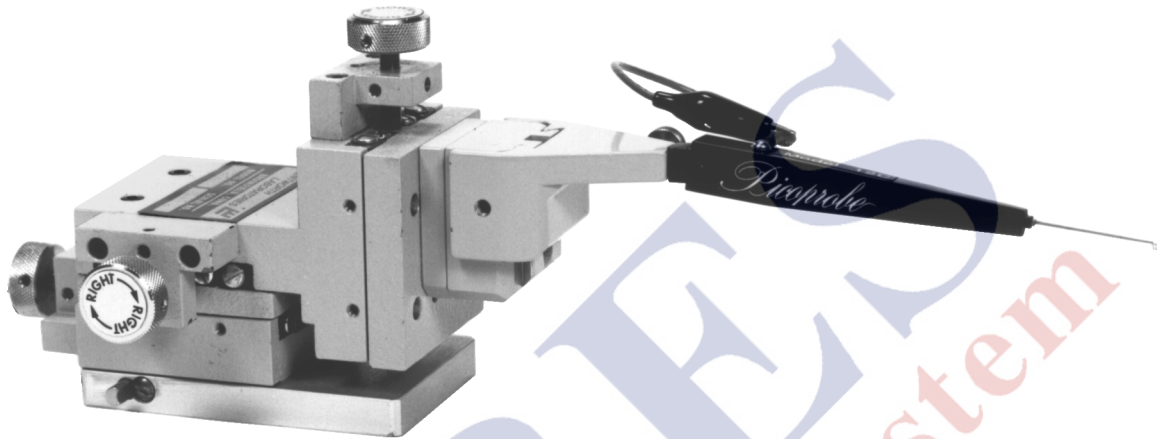


Picoprobe®

BY GGB INDUSTRIES INC.



(Shapes available for use on any micropositioner with any probing system)

PICOPROBE® MODEL 18C & PICOPROBE® MODEL 19C combine the most advanced MOS and bipolar technologies with special, low capacitance packaging techniques to achieve truly remarkable electronic measurement capabilities. While being manufactured each instrument is individually optimized for the best possible performance. The extremely low input capacitance and almost negligible input leakage current permits the direct probing of even the most sensitive MOS dynamic nodes. At the same time, the full dc capability of the probe coupled with the high speed capability permits the full characterization of even the fastest circuits.

The 20 micron tungsten probe wire is tapered to an extremely fine point to allow the probing of lines less than 1 micron. The fine probe wire flexes when in contact with the circuit, so that damage to the circuit and probe point is minimized. Also the flexing tends to keep the probe point in contact with the circuit even in the presence of probe table vibrations. MODEL 18C & MODEL 19C probe tips are also available with a 50 micron tungsten probe wire sharpened to approximately 3 microns.

The circuitry located in the MODEL 18C & MODEL 19C Picoprobe® body is very rugged; however, the unprotected MOS input in each probe tip is subject to destruction by electrostatic discharge. Should the probe tip become damaged, it can easily be removed and replaced.

SPECIFICATIONS:

	MODEL 18C	MODEL 19C
Input Capacitance*	0.02pf	0.02pf
Input Leakage	10^{-14} A	10^{-14} A
Rise/Fall Time	1.2 ns	1.2 ns
Frequency Response	dc to 350 Mhz	dc to 350 Mhz
Operating Range	0 to +10V	-7 to +3V
Linearity	0.2% 5V range 2% 10V range	0.2% $\pm$ 3V range 2% -7 to +3 range
Gain Accuracy	$\pm 5\%$	$\pm 5\%$
Signal Attenuation	(High input impedance oscilloscope) 10 to 1 (50 ohm input) 20 to 1	(High input impedance oscilloscope) 10 to 1 (50 ohm input) 20 to 1

*For 3ns or longer rise and fall signals. Speed limitations of the capacitance cancelling circuitry results in approximately 0.06pf input capacitance for 1 ns or shorter rise or fall inputs.

PICOPROBE® Model 18C & Model 19C REPLACEMENT TIPS

Part Number	Tungsten Wire Shaft Diameter	Point Diameter	Probe Tip Housing Shape
18C-1-10	10 micron	<0.1 micron	
18C-1-20	20 micron	<1.0 micron	
18C-1-50	50 micron	<3.0 micron	
18C-2-10	10 micron	<0.1micron	
18C-2-20	20 micron	<1.0 micron	
18C-2-50	50 micron	<3.0 micron	
18C-4-10	10 micron	<0.1 micron	
18C-4-20	20 micron	<1.0 micron	
18C-4-50	50 micron	<3.0 micron	

When ordering simply state the make and the model of your probe station and micropositioners. A Picoprobe® and tip with the proper shape will be supplied. For home built stations please contact our business office for special instructions.

PICOPROBE® MODEL 19, Model 19C and Model 18B use PICOPROBE® MODEL 18C tips.

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