

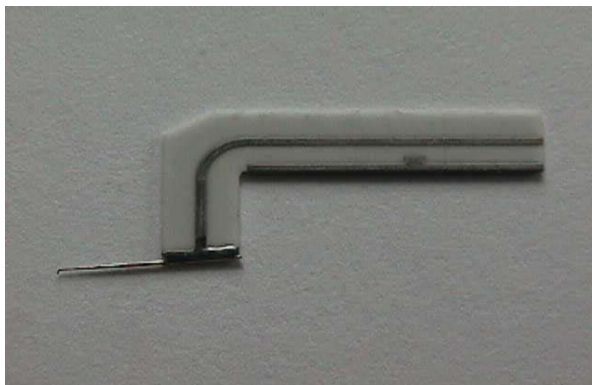
# High Frequency Probing

## HIGH FREQUENCY PROBING

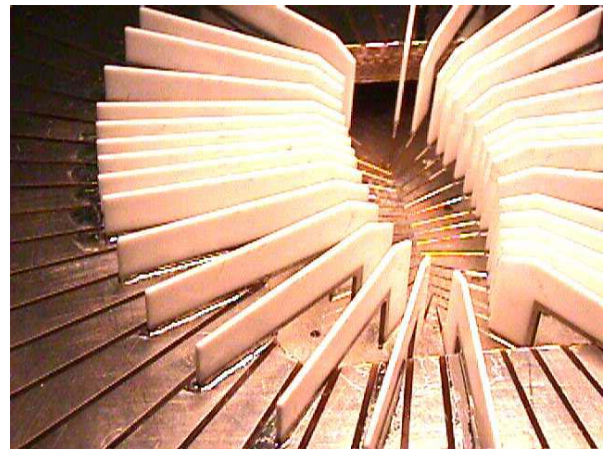
With microprocessors and networking technologies now in the GHz range, manufacturing and test engineering need to be able to accurately test and characterize devices at these frequencies. Probing at high frequencies requires attention to signal loss, noise, crosstalk, and grounding. Accuprobe offers a number of economical solutions to solve high frequency probing applications.

## CERAMIC BLADE PROBES

Ceramic blades are available for use in applications where critical signal levels require a probe with superior low noise characteristics. Stripline probes are also available for sensitive applications and are the perfect solution for mixed signal, RF and high-speed digital applications. Ceramic blades can be mixed with metal blades provided that blade profiles with the working depth are selected. Typical uses for mixed blades would be using the metal blades for power and ground and the ceramic blades for the critical signal measurements. Other mixed applications could apply metal blades connected to ground and located on both sides of a ceramic blade to serve as "guards" to reduce stray pickup.



CZ Series —Ceramic Blade Probe



## CZ—50 OHM STRIPLINE PROBES

Accuprobe offers 50 ohm stripline ceramic blade probes for critical measurement applications. These probes can be connected to 50-ohm coaxial cable or terminated with SMA type connectors. Model CZ1 has working depth of 144 Mils, CZ2 has a 244 working depth. Tungsten or beryllium copper tips can be used on the CZ series probes, with BeCu providing reliable connectivity to gold pads with low contact resistance.

## MI PROBES - FOR RF APPLICATIONS

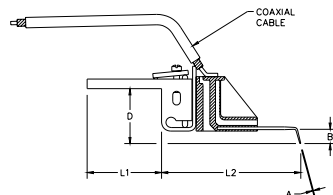
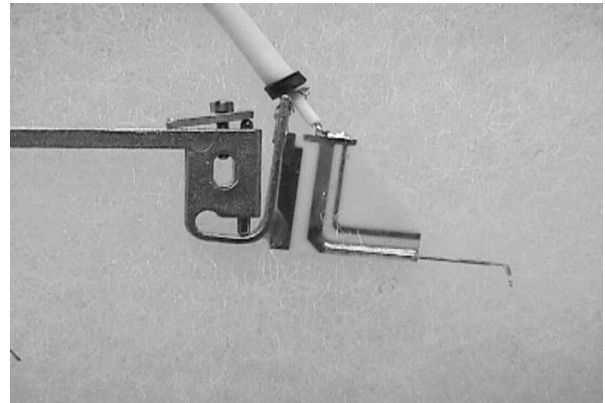
MI-Type probes also utilize stripline ceramic construction for high speed applications. These matched-impedance probes are designed for testing high speed/high frequency devices at test rates up to 2 GHz.

The probes have a dual impedance stripline layout for either 50 ohm or 100 ohm applications. The MI-Type probes are offered with single tip probes or co-planar dual needle probes. In co-planar mode a ground needle can provide signal needle shielding between the device under test and the test instrument. Provision is made on the ceramic substrate for mounting series or parallel passive components.

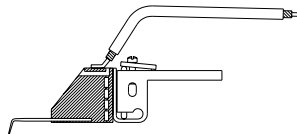
Probing the World  
of Microelectronics

# High Frequency Probing

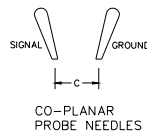
Accuprobe's proven Z-adjustable probe holders provides precision probe to probe planarization and complete compatibility with all other Z-adjustable probes for mixed use applications. Each probe is supplied with 24 inch (61cm) coaxial cable.



MI-TYPE CONTROLLED IMPEDANCE ADJUSTABLE PROBE



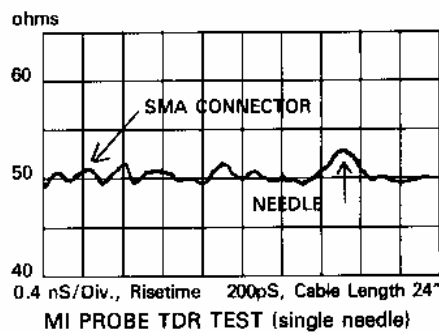
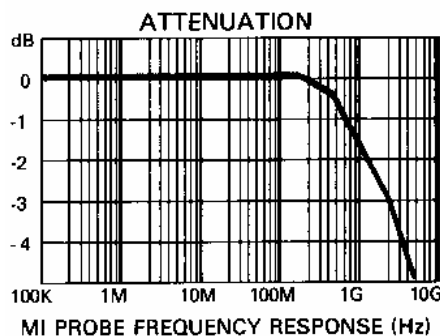
METALLIZED SIDE



CO-PLANAR PROBE NEEDLES

## MI-TYPE PROBE SPECIFICATIONS

Impedance:	50 or 100 ohms
Bandwidth:	DC to 1.5 GHz
(actual line attenuation)	(@ -3db)
Input Capacitance:	50pF (+/-5pF)
(When not operating in transmission line mode)	
Rise time:	200 psec
(Instrument rise time 50 psec, 500 ohm source)	
Propagation Delay:	2.4 nsec
	(+/- 100 psec)
Ceramic Capacitance:	1.7 pF
Attenuation:	1X +0%, -2%



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