AVTECH

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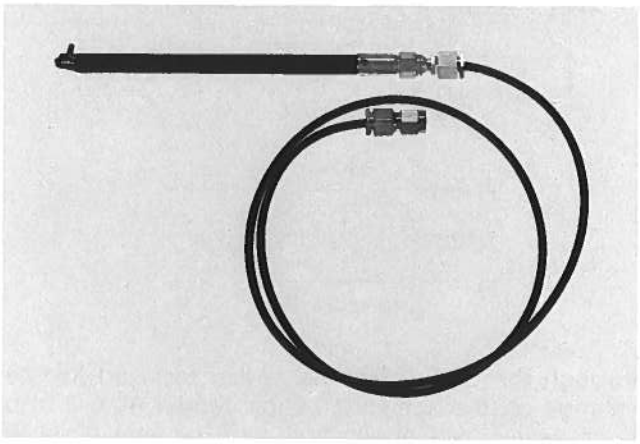
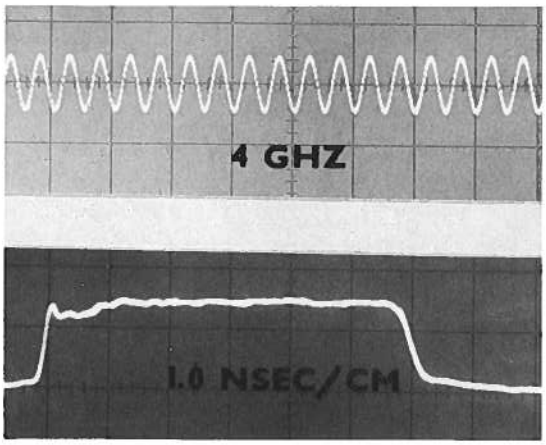
AVX-BP-1
HIGH IMPEDANCE 100 PSEC RISE TIME SCOPE PROBE





The AVX-BP-1 probe was specifically designed to be used with a 50 ohm sampling oscilloscope to allow probing of test points in microstrip structures and in discrete RF circuits and subnanosecond pulse circuits operating at frequencies as high as 5 GHz and with rise times as low as 100 psec. The 500 ohm probe input impedance permits measurements to be made freely at nominally low impedance points in RF and subnanosecond pulse circuits. Using the probe it is possible to conveniently check waveforms throughout an RF or pulse circuit using a 50 ohm high speed sampling scope rather than being constrained to displaying only the output of the circuit. For state-of-the-art RF and nanosecond pulse circuit development, the AVX-BP-1 offers the user the convenience of a real time scope with a high impedance probe but with the vastly increased bandwidth and rise time capabilities of a sampling scope. The waveforms shown above were obtained using the AVX-BP-1 probe to monitor the voltage on a 50 ohm microstrip line. In the top waveform a 4.0 GHz CW signal is displayed while in the lower waveform a 100 psec rise time pulse provided by an Avtech Model AVP-AV-1 pulse generator is displayed.

The probe is hand held on the test points. A large ground area near the probe tip with a tapped 2-56 stud is provided. Ground lugs may be attached at this point if required to access the circuit ground when displaying lower speed waveforms. The probe is connected to the sampling scope via a 2 foot length of miniature coaxial 50 ohm cable (included). The attenuation factor is 10X (or 20 db). Model AVX-BP-1 may also be used with real time scopes but the input to the vertical amplifier must be shunted by a 50 ohm load.

Input impedance:	500 ohms
Attenuation:	10X (20 db)
Rise time:	$\leq$ 100 psec
Bandwidth:	DC to 5.0 GHz
Scope input impedance:	50 ohms
Max. input voltage:	CW RF: 22 volts (RMS) Peak pulse voltage: 150 volts
Max. power dissipation:	1.0 watt
Output connector:	SMA plug
Cable length:	24 in. (included)