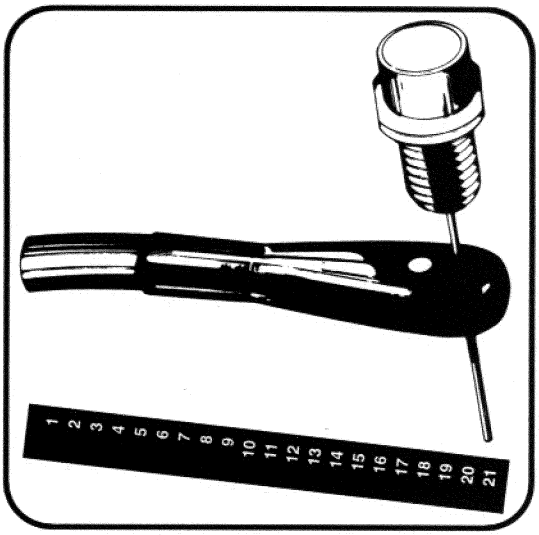
711 Miniature Wideband Current Probe



FEATURES:

MINIATURE SIZE, LOW INSERTION IMPEDANCE

The small size of the Model 711 Current Probe allows its use in confined locations without added length to disturb circuit performance. The current probe adds to the circuit only .02Ω shunted by 4mh.

FAST RISETIME, WIDE BANDWIDTH

The Model 711 has been designed to measure high speed current pulses. Its risetime is less than 1.3nSec. It is useful in measuring pulsed currents with widths of 5nSec to 2000nSec.

HIGH SENSITIVITY AND ACCURACY

When terminated in 50Ω, the sensitivity of the current probe is 1 mV/mA to 7.5V/mA with an accuracy of ±2%.

LARGE SIGNAL RESPONSE

The Model 711 Current Probe can measure current pulses up to 100A with ampere-second products of less than 6A-μs.

MILITARY SPECIFICATION

Probe is also available certified tested to MIL-STD 202, Method 107, Condition A (Thermal Shock Test).

711S and 711B TYPICAL APPLICATIONS:

LASER DIODE DRIVERS

To measure the pulsed drive current waveform slip the drive lead of the laser diode through the 711 Current Probe. Minimal electrical disturbance to the drive circuit. Fast risetime, high pulsed current rating. The component version, 711B, is small and can be designed in the drive for dedicated monitoring or control.

WIDEBAND VIDEO DRIVERS

Flat response over 4 decades of frequency. Miniature probe fits into tight circuits. Can also be used to inject a test signal by driving the 711 Probe from a signal generator.

DEFLECTION COIL DRIVERS

The 711 Current Probe is useful during design and testing to directly measure the inductive coil current.

RF AMPLIFIERS

100MHz bandwidth, good sensitivity, isolated coupling to test equipment. Minimal L/C circuit detuning.

SCR GATE DRIVERS

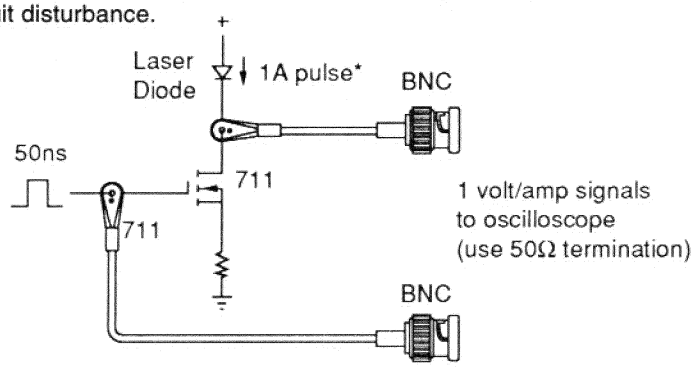
The inherent isolation of the 711 Current Probe allows convenient measurement of drive currents in circuits that may not be ground referenced.

PULSED LASERS

Convenient, accurate measurement of high amplitude current pulses. Isolated coupling between the circuit and test equipment.

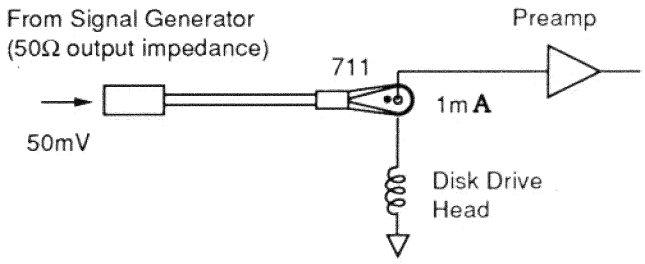
LASER DIODE DRIVER

Directly monitor laser diode current waveform and FET gate drive current. Fast risetime, wide current range, minimal circuit disturbance.



*711 can monitor 1mA to 100A pulses

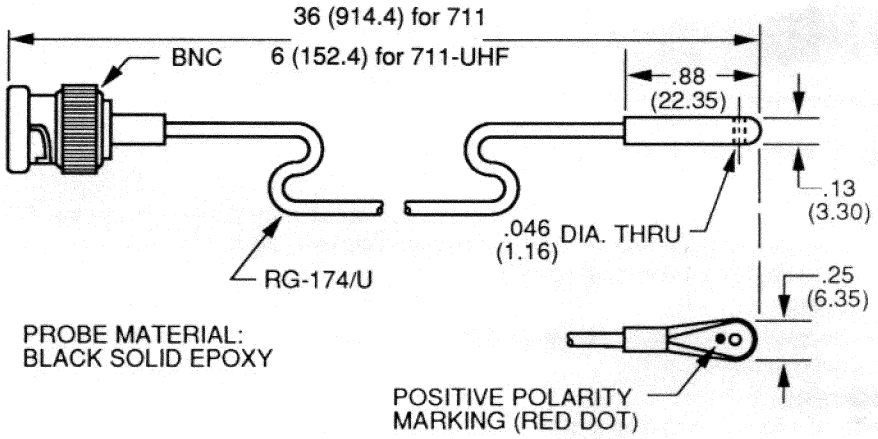
SIGNAL INJECTION FOR TESTING DISK DRIVE PREAMP



Specifications with 50Ω Termination

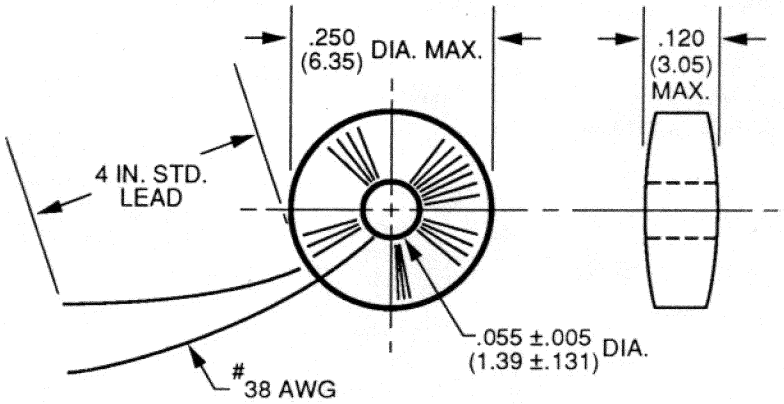
	Model 711	Model 711-UHF
Sensitivity	1mV/mA	7.5mV/mA
Accuracy	±2%	±4%
Risetime (typical)	3.5nSec	1.3nSec
Insertion Impedance (max)	.02Ω	.02Ω
Maximum Peak Current to Wire through Core	100A	100A
Temperature Rating	-25º to +65ºC	-25º to +65ºC
Pulse Width (max) 10% droop	2000nSec	16nSec
Pulse Width (min)	15nSec	5nSec

Mechanical — Model 711 S & 711-UHF S



INCHES (mm)

Mechanical — Model 711B & 711-UHF B



INCHES (mm)