SinoCeramics

Piezoelectric Ceramic d_{33} Calibrator

The d_{33} calibrator is a special instrument for directly measuring the piezoelectric constant d_{33} values of piezoelectric ceramics, polymers, and single crystals. This meter can also measure the d_{33} values in various single crystal directions for crystals such as lithium niobate, quartz and tourmaline. It is also capable of measuring the d_{33} value over a very large range, at high resolution, and with a high degree of reliability. The measurement is quick and easily made with a minimum amount of training required. Specimens of a variety of sizes and shapes can easily be accommodated and measured. For example, the d_{33} value of disks, blocks, rings, tubes, and semispherical shells can be measured using the d_{33} meter. The direct d_{33} value readout is displayed on a 3.5 inch digital display. This instrument is invaluable as a tool for quality assurance of piezoelectric materials, production in-line inspection, and for research applications.

Specifications

D_{33} Range:	x 1 range:	10 to 2,000pC/N
	x 0.1 range:	1 to 200pC/N
Accuracy:	x 1 range:	± 2% of the d_{33} value in 100 to 2,000pC/N ± 5% of the d_{33} value in 10 to 200pC/N
	x 0.1 range:	± 2% of the d_{33} value in 10 to 200pC/N ± 5% of the d_{33} value in 1 to 20pC/N
Resolution:	x 1 range:	1pC/N
	x 0.1 range:	0.1pC/N
Force:	0.25N	
Frequency:	110Hz Amplitude	
Polarity Indication:	Indicates polarity on upper face of test element in compression	
Shunt Capacitance:	x 1 range:	1 pF
	x 0.1 range:	0.1pF
Force Head Dimensions:	110mm x 140mm	
Chassis Dimensions:	280mm x 200mm x 90mm	
Force Head Weight:	3kg	
Chassis Weight:	2kg	
Power:	110/220V , 50/60Hz , 20W	