

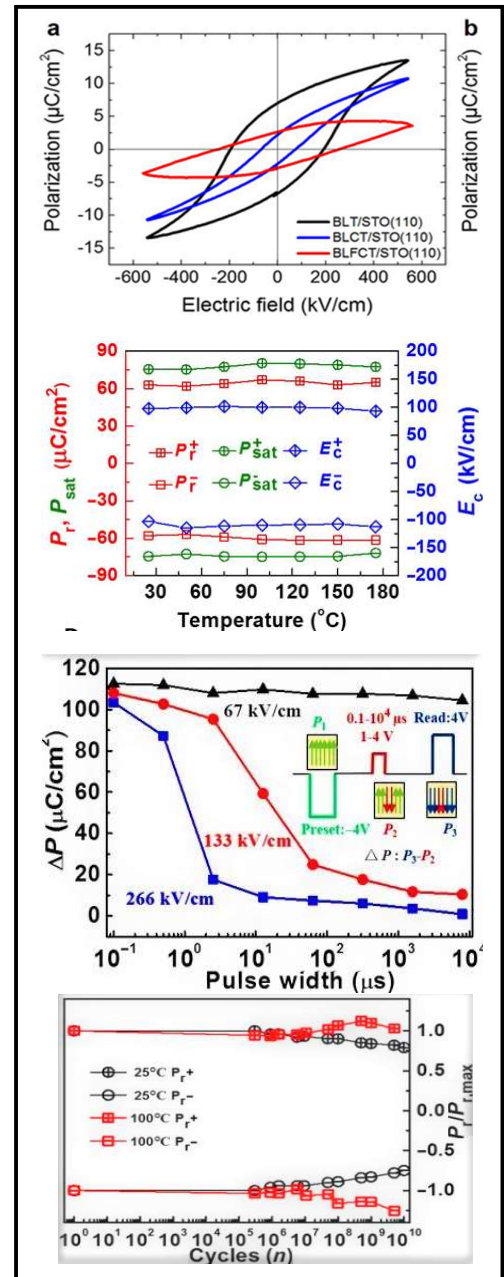
THIN FILM FERROELECTRIC TEST SYSTEM



ABOUT THE SYSTEM

The Thin Film Ferroelectric Test system is a versatile advance model having maximum test facilities for ferroelectric measurements. This is ideal for researcher who have primarily interest in performing advance task of ferroelectricity. The standard ferroelectric test system is available in 10,100, and 500 V each fully upgradable next level. The HV amplifier can also be integrated at any stage.

- Hysteresis Frequency Range 0.03 Hz –600 K Hz at +- 100 V
- 18 Bit Resolution at 2.5 M Hz
- Hysteresis Accuracy 0.5%
- Max Data Points 32768
- Minimum Pulse Width 0.2 us
- Maximum Pulse Width 1 s
- Leakage Current Resolution 1 p A
- 2 external input ± 10 -volt range as low as 20 mV with 1nV resolution
- Fatigue Measurement 2.5 MHz



MODEL: 0.003 THPE 1 MHZ 1P

Various Tests Performed by this Model

- Ferroelectric charge at different frequencies
- Fatigue measurement
- Ferroelectric charge, remnant hysteresis, curve energy, leakage current at different temperature.
- Ferroelectric charge at different magnetic field
- Single point C/V, PUND measurement, General pulse and sample pulse.
- I/V Current vs Voltage at fix temperature point



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TECHNICAL SPECIFICATION

The Highly Advanced Thin Film Ferroelectric test software takes care of important functions of the measurement automatically without any human interventions. The most advance temperature dependent measurement makes the system adaptable to researchers.

MODEL	0.003 THPE 1 MHZ 1P
Field	$\pm 10/100/ 500$ V
Test Frequency range	0.003 to 600 K Hz
Wave Form Generator	18 Bit
ADC Resolution	18 Bit
Minimum Charge Resolution	0.8 fC
Minimum Dot Size	0.08 μ m square
Maximum Charge Resolution	6 m C (with HV amp)
Maximum area resolution	50 cm square (with HV Amp)
Maximum Hysteresis Frequency	600 K Hz
Minimum Hysteresis Frequency	0.03 Hz
Minimum Pulse Width	0.2 us
Maximum Pulse Width	1 s
Minimum Pulse Rise Time (10V)	400 ns
Maximum Delay between Pulse	40 ks
Internal Clock	20 ns
Minimum Leakage Current	1pA
Leakage Current Accuracy	5 p A 2.5% 1 p A 10%
Input Capacitance	5f
Maximum Small Signal Cap Freq	1 MHz
Minimum Small Signal Cap Freq	0.03 Hz
Fatigue	up to 20 th order of cycles
Resolution	18 Bit (1nC)
Temperature	RT- 250 Degree with PID control.
Furnace and Sample Holder	For Bulk Samples
Data	ASCI
Interface	USB 3.0
Size	Rack Mountable Unit 19 Inches 4U
Input Power	220V 5 Amp
Microprobe Station	Refer to Microprobe Station brochure for complete specs

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