KUST Elektronik GmbH

CT1010 Automatic Transformer Tester:



- 9.7 inch 16: TFT LCD display, resolution of 800 x 480 RGB
- Single page result display with clear PASS/FAIL Dispaly
- Built in LCR Mode impedance meter
- 20 Pin automatic Transformer test System
- USB disk result saving no need for computer connection.
- 200kHz test frequency, resolution 10mHz
- BasicAccuracy: 0.05%
- Up to 150 tests per second
- Automatic level control ALC function: voltage and current. (V&I)
- 30 ohm, 100 ohm, 10 /100, 10 /CC, output impedance
- built in 10 comparator, file sorting and counting function.
- Internal memory hold100 set-up files / test programs
- USB disk set-up / test progam loading
- Optional + 10V (+ 100mA) and 1 A internal DC bias source
- Standard RS232C, HANDLER, USB HOST, optional GPIB, LAN



Multi-Winding test.



Rich Communication

KUST CT1010 is an automatic multi-parameter transformer tester used for quality control of magnetic components over a wide range of frequency (20 Hz -- 200 kHz). The primary parameters include: Inductance L, Leakage Inductance Lk, Turns-Ratio Tr, DC resistance DCR, Impedance |Z|, and Capacitance (between windings) C etc.; The secondary parameters include Quality Factor Q, ESR and Phase etc.

The advanced digital sampling technique and high-speed scanning test fixture make the transformer testing more accurate and efficient. CT1010 Provides user friendly Interface and allows to save and store test programs / user set-up's.

CT1010 Transformer tester offers all low Voltage tests to determine quality of produced parts. CT1010 significantly reduces time needed to test parts by eliminating need to re-connect each winding.

LCR Mode of the CT1010 allows to use tester as standard LCR meter with continue scan/measurement of pr-set function.



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20 Pin automatic fixture - scan box.

- · High Quality Relay Matrix optimised for low resistance and capacitance measurements
- True 4 wire connection minimise measurement errors
- Fully automatic switching between up to 10 windings
- Very fast Transformer test
- Test Fixture fully controlled by CT1010 Automatic transformer tester
- Output to manually short/control relays
- Easy to adjust/change test socket for different parts
- Manual and pneumatic version of the fixture available.
- Start/Stop Buttons on the fixture
- PASS/FAIL LED's for easy to understand test result
- Fixture Health check test of the relay matrix
- Standard socket provided 5.08mm / 2.54mm





Simple transformer Pin assignment to the test fixture.

Fully Automatic functional test of relay matrix

Very clear menu/part set-up

(*10ms)

Ignore Std. Trig Delay CYLINDER POWEF

CT1010 Transformer Tester from KUST Elektronik is no bigger then standard LCR meter. Small factor allow implementation of CT1010 Automatic transformer test system in to existing LCR test stations. 200kHz Frequency range, turns ration measured by inductance of primary and secondary winding, all magnetic properties and easy to read result provide all in one test system for variety of magnetic components. CT1010 reduces human error by operating from pre-programmed setting files/test programs. Transformer tester can be operated by unskilled operator which further reduces cost of the quality control.



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Measurement functions		
Test frequency:		CT1010-20PIN~ 20 Hz-200 kHz10mHz Resolution
Transformer test		Turns Ratio (TR), phase (θ), inductance and capacitance (L & C), leakage inductance and quality
parameters:		factor (Lk & Q), the ac resistance, dc resistance, balance
Basic measurement accuracy		
LCRZ		0.05%
DCR, Turns ratio		0.1%
The equivalent circuit		Series and parallel
Functions		Absolute deviation, the percentage deviation
Range way		Automatic, hold, manual
Trigger		Internal, manual, external, BUS
Measurement speed		Super fast: 150 times/SEC, fast: 90 times/SEC, medium speed: 12 times/SEC, slow: 3 times/SEC
(1 KHZ) or higher		
The average number		1—255
Delay time		0-60 s: 1ms resolution
Compensation		Open/short/load
Resolution		Five digits
Display mode		Direct reading, $\Delta \Delta$ %, V/I measured voltage/current (monitoring)
Test signal		
Output impedance		30 Ω, 100 Ω, 10/100, 10 / CC selectable
Test signal level		Normal: 5 mV - 2 V accuracy: 10%, 1mV resolution
DC Bias	Internal:	0 V, 1.5 V, 2 V, accuracy: 1%
	Optional:	KA1022: + \ - 10V DC bias source (+ / - 100 ma)
		KA1023: + \ - 10V & 0-1A DC bias current
Display range		
Z , R, X		0.01mΩ — 99.9999 MΩ
DCR		0.01 mΩ — 99.9999 MΩ
Turns Ratio:		1:0.001-1000:1
Y , G, B		0.00001µS — 99.9999 S
C		0.00001 pF — 9.9999 F
L		0.00001 μH — 9999.99 H
D		0.00001 — 9.9999
Q		0.00001 — 9999.9
θ (DEG)		-179.999° — 179.999 °
θ (RAD)		-3.14159 — 3.14159
Other:		
Memory:		100 groups in internal storage, USB disk 500 files
Interface:		Standard: RS232C, HANDLER, USB HOST, optional GPIB, LAN

