Electrolytic Capacitor Analyzer

Model No. 13100

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Model 13100

KEY FEATURES

- C meter provides Z/C/D/Q/ESR parameters for test
- Available 7 test frequencies from 100~100kHz for selection
- 0.1% basic measurement accuracy
- The thin-film withstand voltage results can be displayed in graph by converting them to an actual rising curve
- CPK calculation function for 1000 capacitor test results that is convenient for analyzing the production capability
- 320 x 240 dot-matrix LCD display
- 200 sets of internal memories and 4M SRAM interface card for saving and recalling the parameter settings
- Designed for100mΩ range with accuracy measurement up to 0.1mΩ
- Non-Relay switch is built in. It is safe and reliable as the discharge circuit is close to the fixed power
- Perform electric polarity test before charge to avoid the danger of explosion
- Softpanel for leakage current data statistics analysis
- Equipped with RS232, printer and scanner controller interfaces
- Meet the test regulation of EIAJ RC-2364A
- A131001 scan box has four terminals designed for measuring accurate high frequency and low impedance

The Chroma 13100 Electrolytic Capacitor Analyzer is a general measurement instrument designed for analyzing the features of electrolytic capacitors. It has multiple functions that can be programmed based on the capacitor features by altering the settings to test metal oxidization thin-film withstand voltage, capacitor leakage current, capacitance, dissipation factor, impedance and equivalent serial resistance, etc.

Used with the special designed sequential switch test box A131001, it can complete the test for multiple capacitors or aluminum foil rapidly, accurately and simultaneously in a short time without changing any test wire.

The report printing function is capable of printing the test results correctly and completely; and the built-in data calculation function can compute the test data of the product instantly for CPK analysis. To avoid the inefficient calculation process done manually, a test software application is also available for you to create a quality report easily. It meets the EIAJ RC-2364A regulations for electrolytic capacitor test and is a test instrument of choice.

Chroma A131001 is a sequential switch test box of ten channels specially designed for Chroma 13100. Each test socket on the test box is implemented with Kelvin measurement, which is suitable for the precise measurement requirement for low impedance and low leakage current. With the SCAN function in 13100 it is able to control the C, D, Q, Z, ESR and LC tests for electrolytic capacitor to be done consecutively without switching the capacitor manually. This increases the test efficiency significantly as it costs only 1/10 of the original test time.

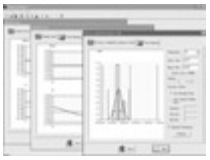
ORDERING INFORMATION

13100 : Electrolytic Capacitor Analyzer
A131001 : 10 Channels Switching Test Fixture
A131005 : 10 Channels W.V. Scan Box

PRINTER RS-232

A131001

A131005



13100 Softpanel

SPECIFICATIONS	
Model	**13100**
Main Function	C Meter/Leakage Current Tester/Foil WV Tester/Scanner Controller
C Meter	
Test Parameter	Cs-D, Cs-Q, Cs-ESR, Cp-D, Cp-Q, IZI-ESR, IZI- θ
Test Signals	
Level	1.0V/0.25V, ±10%
Frequency	100Hz, 120Hz, 1kHz, 10kHz, 20kHz, 50kHz, 100kHz; ±0.01%
Source Ro	25Ω, 100Ω, 25Ω/C.C, 100Ω/25Ω four mode selectable
Measurement Display Range/ Basic Accuracy *1	
C	0.001pF ~ 1.9999F / ±0.1%
Z, ESR	0.01mΩ ~ 99.99MΩ / ±0.1%
D, Q	0.0001 ~ 9999 / ±0.0005
θ	-90.00° ~ +90.00° / ±0.03°
Measurement Speed *2	
Fast/Medium/Slow	Freq. = 100Hz 120Hz : 55ms / 120ms/ 750ms; Freq 1kHz : 35ms / 60ms / 370ms
Function	
Correction	Open / Short zeroing
Averaging	1~99 times
Test Signal Monitor	Vm, Im
Leakage Current Tester	
Test Parameter	LC, IR
Test Signals	
Voltage	1.0 V ~ 100 V, step 0.1 V;101V~650 V, step 1V; (0.5% + 0.2V)
Charge Current Limit	V ≦ 100V: 0.5mA~500mA; V>100V: 0.5mA~150mA; step 0.5mA; (3% + 0.05mA)
Measurement Display Range/ Basic Accuracy *3	
LC (Leakage Current)	0.001uA ~ 99.9mA/ ±(0.3% +0.005uA)
Measurement Speed	45mS
Function	
Correction	Null zeroing
Averaging	1 ~ 99 times
Test Voltage Monitor	Vm: 0.0 V ~ 660.0V; (0.2%+0.1V)
Charge/ Dwell Timer	0 ~ 999 Sec.
Foil WV Tester	
Test Parameter	Tr (Rise Time), Vt (Foil Withstand Voltage), Plot [logT, Vm]
Test Signals	
Voltage Limit	650 V typical
Constant Charge Current	0.5mA~100mA, step 0.5mA; (3% +0.05mA)
Test Display Range	
Tr (Rise Time)	0.05 ~ 120.00 Sec.
Charge Voltage	0.1V ~ 660.0V
Plot [logT, Vm]	220 plots; Vm: 1.5~10 x Vf
Test Time	30 ~ 600 Sec.
Scanner Controller	
Controllable Fixture	Chroma A131001
Test Parameter	C parameter pair x 2, LC parameter x 1
Sample Number	1~1000 pcs.
Function	
Correction	Fixture Open/ Short/ Null zeroing
Comparison Limit	Upper, Lower
Statistics	Maximum, Minimum, Average (X bar), Cpk
Interface	RS232, Printer, Scanner Control Interface
Display	320 × 240 dot-matrix LCD display
Memory (Store/Recall)	
Internal	200 instrument setups
4M SRAM card (Option)	200 instrument setups (for copy and backup)
Trigger	Internal, Manual, Bus, Scanner
General	
Operation Environment	Temperature 0°C~40°C, Humidity < 90 % RH
Power Consumption	400 VA max.
Power Requirement	90~125V AC or 190~250V AC; 48 Hz~62Hz
Dimension (H x W x D)	177 x 430 x 301.4 mm / 6.97 x 16.93 x 11.87 inch
Weight	14 kg / 30.84 lbs

Note*1 : 23±5°C after Open and Short correction, slow measurement speed, refer to Operation Manual for detail measurement accuracy descriptions
Note*2 : 23±5°C after Null correction, average exceeds 10 times, refer to Operation Manual for detail measurement accuracy descriptions
Note*3 : C/D meter in range >1Ω, refer to Operation Manual for detail