



LCR Meter Model 11021/11021-L

KEY FEATURES

- Test frequencies:
 - 100Hz, 120Hz, 1kHz and 10kHz (9.6kHz) (11021)
 - 1kHz, 10kHz, 40kHz, 50kHz (11021-L)
- Basic accuracy:
 - 0.1% (11021), 0.2% (11021-L)
- 0.1mΩ-99.99 MΩ measurement range, 4 1/2 digits resolution
- Lower harmonic-distortion affection
- Fast measurement speed (75ms)
- Standard RS232 interface
- Optional GPIB & Handler interface
- Programmable trigger delay time is convenient for measurement timing adjustment in automatic production
- Bin-sorting function
- Comparator and pass/fail alarming beeper function
- Text mode 40x4 matrix LCD display
- Friendly user interface
- Open/short zeroing
- On-line firmware refreshable (via RS232)
- Input protection (1 Joule)

The Chroma 11021/11021-L LCR Meter are the most cost-effective digital LCR Meter, provides 100Hz, 120Hz, 1kHz, and 10kHz test frequencies for the 11021 and 1kHz, 10kHz, 40kHz, 50kHz test frequencies for the 11021-L. Standard RS232 interface, optional GPIB & Handler interface, high speed and stable measurement capabilities enable the Chroma 11021/11021-L can be used for both component evaluation on the production line and fundamental impedance testing for bench-top applications. The Chroma 11021/11021-L use lower harmonic-distortion phase-detection technology to reduce affection of measurement accuracy caused by hysteresis distortion in magnetic component or high dielectric-coefficient capacitor measurement, which is not provided in general low-end LCR Meters.

The 11021-L is the ideal selection for high frequency coil, core, choke, ect passive components incoming/outgoing material quality inspect and automatic production.

ORDERING INFORMATION

- 11021** : LCR Meter 1kHz
- 11021** : LCR Meter 10kHz
- 11021-L** : LCR Meter
- A110104** : SMD Test Cable #17
- A110211** : Component Test Fixture
- A110212** : Component Remote Test Fixture
- A110242** : Battery ESR Test Kit
- A110232** : 4 BNC Test Cable with Clip#18
- A110234** : High Frequency Test Cable
- A110235** : GPIB & Handler Interface
- A110236** : 19" Rack Mounting Kit
- A133004** : SMD Test Box
- A165009** : 4 BNC Test Cable with Probe

SPECIFICATIONS

Model	11021	11021-L
Measurement Parameter		
Primary Display	L, C, R, Z	
Secondary Display	Q, D, ESR, Xs, θ	
Test Signals Information		
Test Level	0.25V / 1V, \pm (10% + 3 mV)	
Test Frequency	100Hz, 120Hz, 1kHz, 10kHz (9.6kHz)	1kHz, 10kHz, 40kHz, 50kHz
Frequency Accuracy	\pm 0.25%	\pm 0.02%
Output Impedance (Typical)	Varies as range resistors 25, 100, 1K, 10K, 100K	
Measurement Display Range		
Primary Parameter	L: 0.01 μ H ~ 9.999kH, C: 0.01pF ~ 99.99mF, R, Z : 0.1m. ~ 99.99M Ω	
Secondary Parameter	Q: 0.1 ~ 9999.9, D: 0.0001 ~ 9999.9, θ : -180.00° ~ +180.00°	
Basic Accuracy *1	\pm 0.1%	\pm 0.2%
Measurement Time (1KHz) *2		
Fast	Freq = 1K/10KHz : 75mS Freq = 100/120Hz: 85mS	Freq = 1KHz/10KHz : 75mS Freq = 40KHz : 105mS Freq = 50KHz : 90mS
Medium	145mS	
Slow	325mS	
Trigger	Internal, Manual, External, Bus	
Display		
L, C, R, Z , Q, D, R, θ	40 x 4 (Character Module) LCD Display	
Function		
Correction	Open/Short zeroing	
Equivalent Circuit Mode	Series, Parallel	
Interface & Input/Output		
Interface	RS-232 (Standard), Handler & GPIB (Optional)	
Output Signal	Bin-sorting & HI/GO/LOW judge	
Comparator	Upper/Lower limits in value	
Bin Sorting	8 bin limits in %	
Trigger Delay	0 ~ 9999mS	
General		
Operation Environment	Temperature : 10°C ~ 40°C, Humidity < 90 % R.H.	
Power Consumption	50VA max.	
Power Requirement	90 ~ 125Vac or 190 ~ 250Vac, 48 Hz ~ 62 Hz	
Dimension (H x W x D)	100 x 320 x 206.4 mm / 3.94 x 12.6 x 8.13 inch	
Weight	4 kg / 8.81 lbs	

Note*1 : 23 \pm 5°C after OPEN and SHORT correction, slow measurement speed. Refer to operation manual for detail measurement accuracy descriptions

Note*2 : Measurement time includes sampling, calculation and judge test parameter measurement