DIGITAL CAPACITANCE METER OPERATING MANUAL

1. SPECIFICATION

1) GENERAL CHARACTERISTICS

Measuring Method: Dual-Slope integration A/D converter system Display Method: LCD display

Maximum Display: 1999 counts (3 Vi digits) with automatic polarity indication Over-range Indication: "1" figure only in the display

Low-Battery Indication: automatic Low-Battery detect, the symbol '1+5" will display

Measurement Rate: updates 2^3 sec

Zero Adjust: manual-zeroing, about ± 20pF

Operating Temperature: 0°C^40°C 0^80% R.H.

Storage temperature: -10°C'---(-50°C 0^70% R.H.

Power Supply: 9v battery (IEC 6F22, NEDA 1604, JIS 006p)

Dimensions: 191L X 89W X 35H mm Accessories: test leads (pair), Operator's Manual

2) ELECTRICAL SPECIFICATION (23±5°C, below 80% R.H.)

Accuracy is given as \pm (% of maximum reading + number of least significant digits)

Range	Resolution	Accuracy	Test Frequency
200pF	0.1 pF	$\pm (0.5\%\text{Cm}+6\text{dgt})$	800Hz
2000pF	lpF	\pm (0.5%Cm+ldgt)	800Hz
20nF	lOpF	\pm (0.5%Cm+ldgt)	800Hz
200nF	lOOpF	\pm (0.5%Cm+ldgt)	800Hz
2uF	InF	\pm (0.5%Cm+ldgt)	800Hz
20uF	lOnF	\pm (0.5%Cm+ldgt)	80Hz
200uF	lOOnF	\pm (0.5%Cm+ldgt)	8Hz
2000uF	luF	$\pm (1.0\%$ Cm+ldgt)	8H^
20mF	lOuF	\pm (2.0%Cm+ldgt)	8Hz

2. METHOD OF MEASUREMENT

1) PRECAUTIONS AND PREPARATIONS FOR MEASUREMENT

- Be sure that battery and fuse are correctly placed.
- The tested capacitor should be discharged before the testing procedure.
- The polarity of tested capacitor must be same to the input terminal.
- Note: never apply voltage to the input terminal, serious damage maybe result.
- Dot short-circuit two input terminal, or will loss power energy and over-range.
- · If the value of tested capacitor is unknown before test, set the Function-range switch to the lowest range and work up.

2) MEASURING

- Set the Function-range to the properly range.
- Measuring the low capacitor, please adjust "ZERO ADJ" for reading accuracy.
- Connect the test capacitor to the input socket or the test leads.
- When only the figure "1" is displayed, over range is being indicated and the Function-range switch has be set to a higher range; When the figure "0" displayed at seniority, set the Function-range to a lower range for higher resolution and accuracy.

NOTE:

^ If the test capacitor is a short capacitor, it will be over-range and only figure "1" is displayed; soaking-out capacitor, the reading will high it's value; open-circuit capacitor, will displayed "0". (maybe±10pF at the 200pF range)

^ Display value will fluctuated, if a soaking-out capacitor connected.

• 0* If use other leads measure capacitor, leads will appear a value, please keep in mind before measure; it would be substrate from displayed value.

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