


GENERAL SPECIFICATIONS

Displaying	:	LCD
Max. displaying	:	1999 (3 ½) digits automatic polarity display
Measuring method	:	Dual integral A/D conversion
Sampling rate	:	Approx. 3 times/second
Over range display	:	The highest digit displays "OL" or "-OL"
Low voltage display	:	 appears.
Working environment	:	(0~40)°C, Relative humidity: <80% .
Power supply	:	One 9V battery (6F22 or equivalent model).
Dimension	:	190 mm × 94.5 mm × 39.5 mm (length X width X height)
Weight	:	About 450g (including 9V battery).

TECHNICAL SPECIFICATIONS

Accuracy: $\pm(a\% \times \text{reading data} + \text{digit})$, ensuring the accuracy. Environment temperature (23±5)°C, relative humidity <75% and the calibration warranty period lasts for one year from the date of leaving the factory.

DCV

Range	Resolution	Accuracy	Overload Protection
200mV	100uV	$\pm(0.5\%rdg+3dgt)$	1000V DC / 750V AC RMS
2V	1mV		
20V	10mV		
200V	100mV		
1000V	1V	$\pm(1.0\%rdg+10dgt)$	

Input impedance	:	All range is 10MΩ
Overload protection	:	250V DV or AC effective value for range 200mV 1000V DC or 750V AC effective value for other range

ACV

Range	Resolution	Accuracy	Overload Protection
200mV	100uV	$\pm(0.8\%rdg+5dgt)$	1000V DC / 750V AC RMS
2V	1mV		
20V	10mV		
200V	100mV		
750V	1V	$\pm(1.2\%rdg+10dgt)$	

Input impedance	:	All range is 10MΩ
Overload protection	:	250V DV or AC effective value for range 200mV 1000V DC or 750V AC effective value for other range
Frequency response	:	(40~400)Hz for all ranges
Displaying	:	Sine wave effective (AVG value response)



DCA

Range	Resolution	Accuracy	Overload Protection
2mA	1uA	$\pm(0.8\%rdg+10dgt)$	200mA/250V
20mA	10uA		
200mA	100uA		
20A	1mA	$\pm(2.0\%rdg+10dgt)$	12A/250V

Max measurement voltage drop	:	200mV.
Max input current	:	20A (no more than 10 seconds).
Overload protection	:	the 200mA following measuring range is 0.2A/250V resettable fuse, the 20A measuring range 12A/250V fast-acting fuse.

ACA

Range	Resolution	Accuracy	Overload Protection
2mA	1uA	$\pm(1.0\%rdg+15dgt)$	200mA/250V
20mA	10uA		
200mA	100uA		
20A	1mA	$\pm(3.0\%rdg+20dgt)$	12A/250V

Max measurement voltage drop	:	200mV.
Max input current	:	20A (no more than 10 seconds).
Overload protection	:	the 200mA following measuring range is 0.2A/250V resettable fuse, the 20A measuring range 12A/250V fast-acting fuse.

*Technical Specifications & Appearance are subject to change without prior notice

Resistance

Range	Resolution	Accuracy	Overload Protection
200Ω	0.1Ω	±(0.8%rdg+5dgt)	250V DC / AC effective value
2KΩ	1Ω	±(0.8%rdg+3dgt)	
20KΩ	10Ω		
200KΩ	100Ω		
2MΩ	1KΩ		
20MΩ	10KΩ	±(1.0%rdg+25dgt)	
2000MΩ	1MΩ	±[5.0%(reading-10)+20]	

Open circuit voltage : Lower than 3V.
 Overload protection : 250V DC and AC effective value.

Capacitance (C)

Range	Resolution	Accuracy	Overload Protection
20nF	10pF	±(2.5%rdg+20dgt)	36V DC / AC effective value
200nF	100pF		
2uF	1nF		
20uF	10nF		
200uF	100nF	±(5.0%rdg+20dgt)	

Testing frequency : 100Hz
 Overload protection : 36V DC and AC effective value.

Inductance (C)

Range	Resolution	Accuracy	Overload Protection
2mH	1uH	±(2.5%rdg+30dgt)	36V DC / AC effective value
20mH	10uH		
200mH	100uH		
2H	1mH		
20H	10mH		

Testing frequency : 100Hz
 Overload protection : 36V DC and AC effective value.

Temperature (°C)

Range	Resolution	Accuracy
(-20~1000)°C	1°C	±(1.0rdg+4dgt) < 400°C ±(1.5%rdg+15dgt) ≥ 400°C


Thermo-element (banana plug type, temperature: -20~250°C)

Frequency (F)

Range	Resolution	Accuracy	Overload Protection
2kHz	1Hz	±(1.0%rdg+10dgt)	250V DC / AC effective value
20kHz	10Hz		
200kHz	100Hz		
2000kHz	1KHz		
10MHz	10kHz		

Input sensitivity : Higher than 2V effective value
 Overload protection : 250V AC or DC effective value (no more than 10 seconds)

Diode and continuity test

Range	Resolution	Accuracy	Overload Protection
	The positive DC current is approx 1mA, negative voltage is approx 3V	Positive voltage drop of diode	250V DC / AC effective value
	Open voltage is approx 3V	Buzzer sounds, the resistance is less than (30±10)W	

Overload protection : 250V AC or DC effective value
 Warning : Don't input any voltage in this range

Temperature (°C)

Range	Displaying	Test Condition
hFE NPN or PNP	0~1000	Basic current is approx. 10uA, Vce is about 3V

*Technical Specifications & Appearance are subject to change without prior notice