

Digital Probe Tester
Model SK-6592

kaise



Exactly to the point!

FEATURES

- ◆ Easy Operation and Reading !
- ◆ AC/DC Voltage, Frequency, Duty Cycle !
- ◆ Resistance, Continuity, Diode, Capacitance !
- ◆ MAX/MIN, Difference and Display Hold !
- ◆ AUTO POWER OFF : Prevents battery consumption !
- ◆ Safety Design : CE IEC61010-1 CATⅢ600V and EMC !

◆ **Measurements**

AC/DC Voltage

Frequency

Duty Cycle

Resistance

Continuity Tests

Diode Tests

Capacitance

◆ **Functions**

Max / Min

Difference

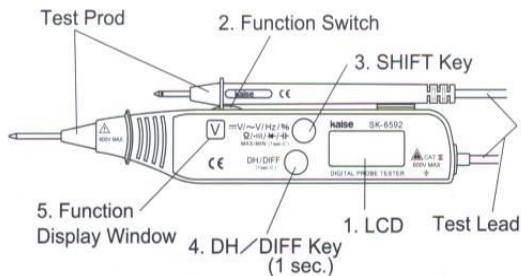
Display Hold

Auto Power Off

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GENERAL SPECIFICATIONS

- DISPLAY :**
 - Numerical Display :** 4000 count LCD, 8mm high.
 - Units and Symbols :** mV, V, Hz, %, Ω , k Ω , M Ω , nF, μ F, \rightarrow , \leftarrow , DIFF, MAX, MIN, BAT, DH, OL, AUTO, APO, \approx , \sim , $-$ and decimal point.
- OPERATING PRINCIPLE :** $\Sigma \Delta$.
- RANGE SELECTION :** Autoranging.
- SAMPLING RATE :** 2 times per second.
- POLARITY :** Autopolarity, $-$ symbol when minus.
- OVERRANGE INDICATION :** OL symbol appears. (excluding DC/AC 600V)
- DISPLAY HOLD / DIFF (Zero Adjustment) :**
 - Display Hold :** Press DH / DIFF Key for less than 0.5 second.
 - Difference Measurement :** Press DH / DIFF Key for more than 1 second.
 - Zero Adjustment :** Press DH / DIFF Key for more than 1 second same as above before measuring Capacitance.
- MAX / MIN Value :** When measuring \approx V, \sim V, Ω , press SHIFT Key for more than 1 second.
- BATTERY WARNING :** BAT symbol appears when battery voltage goes down below approx. 2.4V.
- OPERATING TEMPERATURE & HUMIDITY :** 0°C to 40°C, less than 80%RH in non-condensing.
- STORAGE TEMPERATURE & HUMIDITY :** -20°C to 60°C, less than 80% RH in non-condensing.
- POWER SUPPLY :** One 3V CR2032 Battery.
- POWER CONSUMPTION :** 4.5mW typically.
- BATTERY LIFE :** 70 hours continuous operation.
- AUTO POWER OFF :** Power turns off automatically in 15 minutes after any switch operation.
- DIELECTRIC STRENGTH :** 5.55kV rms for one minute between Input Terminal and Cases.
- OVERLOAD PROTECTION :**
 - V : 900V DC or AC rms max. for 1 minute. (400mV Range is 600V rms)
 - Ω / \rightarrow / \leftarrow / \leftarrow : 300V rms max. for 1 minute.
- DIMENSIONS & WEIGHT :** 179(H) \times 28(W) \times 20(D)mm, 60g
- SAFETY LEVEL :** IEC-61010-1 Overvoltage CAT. III 600V and EMC Test passed.
- ACCESSORY :** One Black Test Lead, Battery (Installed), Carrying Case, Instruction Manual
- OPTIONAL ACCESSORY :** 940 Alligator Clips.



MEASUREMENT SPECIFICATIONS

(23°C \pm 5°C, less than 80% RH in non-condensing)

1. DC Voltage (\approx V)

Range	Accuracy	Resolution	Input Impedance	Max Input Voltage
400.0mV	$\pm 0.5\%rdg \pm 3dgt$	100 μ V	$\approx 100M\Omega$	600V DC
4.000 V		1mV	$\approx 11M\Omega$	
40.00 V		10mV	$\approx 10M\Omega$	
400.0 V	100mV			
600 V	$\pm 1.0\%rdg \pm 3dgt$	1 V		

Overload Protection : 900V rms for 1 minute

2. AC Voltage (\sim V)

Average Rectification

Range	Accuracy	Resolution	Input Impedance	Max Input Voltage
4.000 V	$\pm 1.5\%rdg \pm 5dgt$	1mV	$\approx 11M\Omega$	600V rms
40.00 V		10mV	$\approx 10M\Omega$	
400.0 V		100mV		
600 V		1 V		

Overload Protection : 900V rms for 1 minute

Frequency Response : 50Hz~400Hz

3. Frequency (Hz)

Range	Accuracy	Resolution	Input Sensitivity	Max. Input Voltage
1.000Hz ~100.0kHz	$\pm 0.2\%rdg$ $\pm 2dgt$	0.001Hz ~100Hz	3V RMS	600V rms or 2×10^6 V/Hz

4. Duty Cycle (%)

Range	Accuracy	Resolution	Input Sensitivity	Max. Input Voltage
0.0% ~99.9%	$\pm 0.5\%rdg \pm 5dgt$	0.1%	3V RMS	600V rms

Frequency Scope : 1Hz~1kHz

5. Resistance (Ω)

Range	Accuracy	Resolution	Test Current	Open Circuit Voltage	
400.0 Ω	$\pm 1.5\%rdg \pm 4dgt$	0.1 Ω	$\leq 0.2mA$	$\approx 0.44V$	
4.000k Ω		1 Ω	$\leq 50 \mu A$		
40.00k Ω		$\pm 1.0\%rdg \pm 3dgt$	10 Ω		$\leq 5 \mu A$
400.0k Ω		100 Ω	$\leq 0.5 \mu A$		
4.000M Ω	$\pm 3.0\%rdg \pm 3dgt$	1 k Ω	$\leq 50nA$		
40.00M Ω		10 k Ω			

Overload Protection : 300V rms

6. Continuity Tests (\rightarrow)

Range	Buzzer Sound	Response Time	Open Circuit Voltage	Overload Protection
400.0 Ω	less than 60 Ω	1m sec	$\approx 0.44V$	300V rms

7. Diode Tests (\rightarrow)

Range	Accuracy	Open Circuit Voltage	Test Current	Overload Protection
1.000V	$\pm 5.0\%rdg \pm 3dgt$	$\leq 1.7V$	$\leq 0.7mA$	300V rms

8. Capacitance (\leftarrow)

Range	Resolution	Accuracy	Test Voltage
50.00nF	10pF	$\pm 5.0\%rdg \pm 10dgt$	$\leq 1.7V$
500.0nF	100pF		
5.000 μ F	1nF		
50.00 μ F	10nF		
100.0 μ F	100nF		

Overload Protection : 300V rms

DISTRIBUTOR

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