

**BS1804****SilkyCase™****6000 Counts Auto Range Multimeter with Capacitance, Frequency and Temp Measurement**

## Features:

- 6000 Counts LCD display
- DC Voltage 600mV to 600V
- AC Voltage 600mV to 600V
- DC Current 600 $\mu$ A to 10A
- AC Current 600 $\mu$ A to 10A
- Resistance 600 $\Omega$  to 50M $\Omega$
- Capacitance 60nF to 100 $\mu$ F
- Frequency 60Hz to 1MHz
- Temperature Measurement in degrees Centigrade and Fahrenheit
- Continuity/ Diode test
- Duty Cycle test
- Relative Measurement
- LED Backlight
- Low Battery Warning
- Auto Power Off
- Data Hold
- CAT III 600V CE-EMC & LVD (Pending)

**General Specifications**

Display	: 3 5/6 digits LCD with max. reading of 5999.
Polarity	: Automatic, (-) negative polarity indication.
Zero adjustment	: Automatic.
Over range indication	: Only the MSD "OL" is displayed.
Power	: Single, standard 9 volt battery NEDA 1604, JIS 006P, IEC6F22.
Dimension	: 80 (W) x 150 (H) x 40 (D) mm.
Weight	: Approx. 320 g (including battery).

## Electrical Specification

Accuracies are  $\pm$ (% of reading + number of least significant digits) at 23°C $\pm$ 5°C, less than 75%RH

### DC Voltage Measurement

Range	Resolution	Accuracy	Input Impedance	Overload Protection
600mV	0.1mV	$\pm$ (1.0% Read. +2dgt)	10M $\Omega$	600V DC/AC rms
6V	0.001V			
60V	0.01V			
600V	1V			

### AC Voltage Measurement

Range	Resolution	Accuracy	Input Impedance	Overload Protection
600mV*	0.1mV	$\pm$ (1.2% Read. +3dgt)	10M $\Omega$	600V DC/AC rms
6V	0.001V			
60V	0.01V			
600V	1V			

\*Only available in manual mode

Frequency range: 40-400Hz

### DC Current Measurement

Range	Resolution	Accuracy	Voltage drop	Overload Protection
600 $\mu$ A	0.1 $\mu$ A	$\pm$ (1.2% Read. + 2dgt)	400mV	Fast 630mA/250V Fuse
6000 $\mu$ A	1 $\mu$ A			
60mA	0.01mA			
600mA	0.1mA			
10A	0.01A	$\pm$ (1.5% Read. + 5dgt)	200mV	Fast 10A/250V Fuse

**AC Current Measurement**

Range	Resolution	Accuracy	Voltage drop	Overload Protection
600 $\mu$ A	0.1 $\mu$ A	$\pm(1.5\%$ Read. + 5dgt)	400mV	Fast 630mA/250V Fuse
6000 $\mu$ A	1 $\mu$ A			
60mA	0.01mA			
600mA	0.1mA			
10A	0.01A	$\pm(2.0\%$ Read. + 5dgt)	200mV	Fast 10A/250V Fuse

Frequency range: 40-400Hz

**Resistance Measurement**

Range	Resolution	Accuracy	Open circuit voltage	Overload Protection
600 $\Omega$	0.1 $\Omega$	$\pm(1.2\%$ Read. + 5dgt)	Approx. 0.2V	250V DC/AC rms <30 sec.
6k $\Omega$	0.001k $\Omega$			
60k $\Omega$	0.01k $\Omega$			
600k $\Omega$	0.1k $\Omega$			
6M $\Omega$	0.001M $\Omega$	$\pm(2.0\%$ Read. + 5dgt)		
50M $\Omega$	0.01M $\Omega$			

**Diode Test**

Range	Accuracy	Open circuit voltage	Overload Protection
$\blacktriangleright$	Approx. 0.6mA	Approx. 1.5V	250V DC/AC rms <30 sec.

**Continuity Test**

Range	Buzzer sounds when resistance value $\leq 100\Omega$	Open circuit voltage	Overload Protection
$\bullet\cdot\cdot\cdot$ )		Approx. 0.5V	250V DC/AC rms <30 sec.

**Capacitance Measurement**

Range	Resolution	Accuracy	Overload Protection
6nF	0.001nF	±(3.5% Read. + 5dgt)	250V DC/AC rms <30 sec.
60nF	0.01nF		
600nF	0.1nF		
6µF	0.001µF		
60µF	0.01µF	±(5.0% Read. + 5dgt)	
100µF	0.1µF		

Test Frequency: Approx. 20kHz

**Frequency Measurement**

Range	Resolution	Accuracy	Input Volt.		Overload Protection
			Min.	Max.	
60Hz	0.01Hz	±(2.0%+5)	1Vp-p	250V rms	600V DC/AC rms <30 sec.
600Hz	0.1Hz			200V rms	
6kHz	0.001kHz		4Vp-p	30V rms	
60kHz	0.01kHz		8Vp-p	20V rms	
600kHz	0.1kHz		12Vp-p	15V rms	
1MHz	0.001MHz				

**Duty Cycle Measurement**

Range	Resolution	Accuracy	Overload Protection
20 – 80%	0.1%	±(3.5% Read. + 5dgt)	250V DC/AC rms <30 sec.

Min. input voltage: 400mV p-p

**Temperature K-type Probe**

Range	Resolution	Accuracy	Overload Protection
-40 – 400°C	1°C	±(0.75% Read. + 3dgt)	Fast 630mA/250V Fuse
401 – 1000°C		±(2.0% Read. + 5dgt)	
-72 – 752°F	1°F	±(0.75% Read. + 3dgt)	
752 – 1832°F		±(2.0% Read. + 5dgt)	

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