

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China







Data Sheet

Manual Ranging Tool Kit® DMM with Transistor Test

Model 2704C





The 2704C has all of the functionality for basic DMM applications including some high end features you might not expect. The 2000 count LCD can display resistance values up to 2 G Ω , capacitance to 20 uF or a transistors common-emitter gain value up to 1000. Value-packed features make this meter a must in every "Tool Kit*".

Continuity test

■ Logic test

DC voltage to 1000 V

Resistance to 2000 M Ω

Features

- Magnetic hanger
- AC voltage to 750 V
- Capacitance to 20 uF
- Diode test
- hFE Transistor test
- One-handed operation
- Measures up to 10 A (AC & DC)

Specifications model							
	2704C						
DC Volts							
Ranges	200 mV, 2 V, 20 V, 200 V, 1000V						
Resolution	0.1 mV, 1 mV, 10 mV, 100 mV, 1 V						
Accuracy	$\pm (0.8 \% \text{ rdg} + 1 \text{ dgts})$						
Input Impedance	10 ΜΩ						
Overload Protection	1000 VDC or 750 VACrms*						
AC Volts (50 Hz-500 I	Hz)						
Ranges	200 mV, 2 V, 20 V, 200 V, 750V						
Resolution	0.1 mV, 1 mV, 10 mV, 100 mV, 1 V						
Accuracy	200 mV & 20 V ranges: ±(1.5 % rdg + 5 dgts)						
	200 V & 750 V ranges: ±(2.0 % rdg + 5 dgts)						
Input Impedance	10 ΜΩ						
Overload Protection	1000 VDC or 750 VACrms*						
DC Current							
Ranges	20 mA 200 mA 10 A						

10 uA, 100 uA, 10 mA

20 mA to 200 mA ranges: \pm (1.0 % rdg + 1 dgts)

0.5 A/500 V & 10 A/600 V fast blow ceramic fuses

10 A for 60 sec max. followed by a 10 minute cooling period

10 A range: $\pm (3.0 \% \text{ rdg} + 3 \text{ dgts})$

Ranges	20 mA, 200 mA, 10 A					
Resolution	10 uA, 100 uA, 10 mA					
Accuracy	20 mA to 200 mA ranges: ±(2.0 % rdg + 5 dgts)					
	10 A range: ±(3.0 % rdg + 5 dgts)					
Input Protection	0.5 A/500 V & 10 A/600 V fast blow ceramic fuses					
10A Input	10 A for 60 sec max. followed by a 10 minute cooling perior					
Resistance	To read see man renewed by a ro minute cooling period					
Ranges	200 Ω, 2 kΩ, 200 kΩ, 20 ΜΩ, 2000 ΜΩ					
Resolution	0.1Ω , 1.0Ω , 100Ω , $10 k\Omega$, $1 M\Omega$					
Accuracy	200 Ω to 200 kΩ ranges: \pm (1.0 % rdg + 4 dgts)					
7 tecuracy	20 MΩ range: \pm (2.0 % rdg + 4 dgts)					
	2000 MΩ range: \pm (5.0 % rdg + 10 dgts)					
Open Circuit Voltage (typic						
Overload Protection	500 VDC/ACrms					
Capacitance	300 VBC// CIMS					
Ranges	2 nF , 20 nF, 200 nF, 2.0 uF, 20 uF					
Resolution	1 pF, 10 pF, 100 pF, 1 nF, 10 nF					
Accuracy	$\pm (4 \% \text{ rdg} + 10 \text{ dgts})$					
Overload Protection	Discharge capacitor before connecting					
Prequency	Discharge capacitor before conflicting					
Ranges	2 kHz, 20 kHz, 200 kHz, 2 MHz, 20 MHz					
Resolution	1 Hz, 10 Hz, 100 Hz, 1 kHz, 10 kHz					
Accuracy	$\pm (0.1 \% \text{ rdg} + 3 \text{ dgts})$					
Sensitivity	2.0 Vrms minimum					
Minimum Pulse Width	>25 ns					
Duty Cycle Limits	>30 % and <70 %					
Overload Protection	500 VDC/AC rms					
Diode Test	300 VDC/AC Hils					
Test Current	I O m A (h miss)					
Resolution	1.0 mA (typical)					
	$\pm (1.5 \% \text{ rdg} + 3 \text{ dgts})$					
Accuracy	3.0 VDC (typical)					
Open Circuit Voltage	500 VDC/ACrms					
Overload Protection	300 VDC/ACIIIS					
Continuity	1					
Audible Indication	Less than 100 Ω					
Response Time	100 ms					
Overload Protection	500 VDC/ACrms					
Transistor hFE						
Range	0 to 1000					
Base Current	Approximately 10 uADC (VcE = 3.0 VDC)					
ogic Test	T					
Threshold	Logic Hi (2.8 V ±0.8 V) / Logic Lo (0.8 V ±0.5 V)					
Indication	40 msec beep at logic Lo					
Overload Protection	500 VDC/AC rms					
General						
Display	3 1/2 digit, 2000 count LCD					
Polarity	Automatic, positive implied, negative polarity indication					
Overrange	OL or -OL is displayed					
Low Battery Indication	Battery symbol will display when battery voltage drops below					
	operating levels					
Measurement Rate	2.5 times per second					
Operating Environment	0°C to 50°C at <70 % relative humidity					
Storage Environment	-20°C to 60°C at 0 to 80 % relative humidity					
Accuracies	Stated accuracy at 23°C +5°C at <75 % relative humidity					
Temperature Coefficient	0.1 x (specified accuracy) per °C. (°C to 18°C, 28°C to 50°C					
Power	Single standard 9 volt battery, NEDA 1604, JIS 006P, IEC 6F					
Battery Life	150 hours typical					
Dimensions	165 mm (H) x 78 mm (W) x 42.5 mm (D)					
Weight	Approximately 10 oz. (285 g) with battery and hanger					
	1 3					

^{*= 600} VDC/Acrms for 15 seconds on 200 mV range



Supplied Accessories: User manual, one set of test leads, one spare fuse, and 9V battery (installed)

Resolution

IOA Input

Input Protection

Accuracy

B&K Precision's 2700 Tool Kit® Series

Models 2703C, 2704C, 2705B, 2706B, 2707B, 2708B, 2709B & 2712

These excellent meters are for most jobs that require flexibility, accuracy and speed. Value-packed features make these meters a must for everyone's "Tool Kit®".

Common Features:

- DC Voltage to 1000V
- DC Current to 10A
- Diode test
- Magnetic hanging strap
- AC Voltage to 750V
- Continuity test
- Drop resistant case





Back Light / Easy-to-Read LCD

Model 2706B



Ultra-bright blue LCD back light for low ambient light measurements

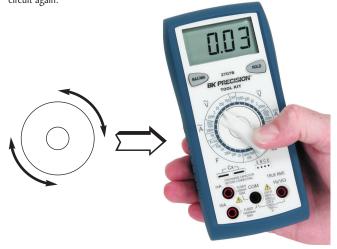
Models 2709B & 2712



Large easy-to-read LCD with green LED backlight

Single-handed operation

The ergonomic design allows both left and right handed users to rotate the knob while holding the meter in one hand. While one hand keeps the probe on the circuit, the other hand changes the meter's function. This speeds up troubleshooting because you don't have to locate the probe point in the circuit again.



Features								models
	2712	2709B	2708B	2707B	2706B	2705B	2704C	2703C
Ranging	Auto/Manual	Auto/Manual	Auto/Manual	Manual	Manual	Auto/Manual	Manual	Manual
True RMS	AC + DC	√	√	√	-	-	-	-
Current	10 A AC/DC	10 A AC/DC	10 A AC/DC	10 A AC/DC	200 mA AC/DC	10 A AC/DC	10 A AC/DC	10 A DC
Capacitance	to 40 uF	to 66 mF	-	to 20 uF	to 20 mF	-	to 20 uF	-
Transistor Test	-	-	-	√	-	-	√	-
Frequency Counter	to 500 kHz	to 66 MHz	-	to 20 MHz	to 40 kHz	-	to 20 MHz	-
Temperature	-	-	-	-	√	-	-	-
Logic Probe	-	-	-	√	-	-	√	-
Backlight LCD	√	√	-	-	√	-	-	-
Analog Bar Graph	√	-	V	-	-	-	-	-
Battery Test	-	-	-	-	-	-	-	√
Auto Power off	√	√	√	-	√	√	-	-

Page 2 of 2 v041113 www.bkprecision.com