



ENGLISH

Datasheet
Stock No. 123-3221
RS PRO ICT 76 Component Tester



Feature:

- 2000 count digital display
- Capacitance measurement up to 20mF
- Resistance measurement
- Transistor hFE measurement
- Transistor leakage current measurement
- SCRs/ thyristors Test
- Diode test
- LED test
- Silicon controlled rectifier test
- Battery test
- Zero adjuster for capacitance

Specifications:(All at 23°C ±5°C, ≤ 80% R.H.)

Capacitance

Range	Resolution	Accuracy	Measuring frequency
200pF	0.1pF	$\pm(0.5\% + 1D + 0.5pF)$	820Hz
2nF	1pF	$\pm(0.5\% + 1D)$	
20nF	10pF		
200nF	100pF		
2μF	1nF		
20μF	10nF		
200μF	100nF		82Hz
2000μF	1μF	$\pm(1\% + 1D)$	8.2Hz
20mF	10μF	$\pm(1.5\% + 1D)$	

Testing voltage : 3.2V peak (max.). The (+) socket is always positive relative to the (-) socket.

Input protection : The tester is protected against capacitor discharge (above 50V) by a 0.25A, 250V quick-acting fuse.

Zeroing for capacitance : restricted to approx. $\pm 20pF$

Resistance

Range	Resolution	Accuracy	Max. off-load voltage	Overload protection
200Ω	0.1Ω	$\pm(0.75\% + 4D)$	3.2V	500 Vd.c./a.c. (max)
2kΩ	1Ω	$\pm(0.5\% + 1D)$	0.5V	
20KΩ	10Ω			
200KΩ	100Ω			
2MΩ	1KΩ	$\pm(0.75\% + 1D)$		
20MΩ	10KΩ	$\pm(2\% + 1D)$		

Diode

Range	Resolution	Accuracy	Max. Measuring current	Max.off-load voltage
Diode	1mV	$\pm(1.5\% + 5D)$	1.5mA	3.2V

Overload protection: 500V (max.)

LED testing

Testing voltage : 3.2V (max.)

Measuring current : 2mA or 10mA (two ranges)

LED's tested by light-up, with forward voltage displayed.

Transistor hFE and leakage current

hFE values from 0 to 1000 for PNP or NPN transistors

hFE base current : approx. 100 μ A

hFE collector voltage : approx. 3V

ICEO : 10nA to 20 μ A.

Silicon-controlled rectifiers

"Good/bad" test


Test limit: The holding current (I_h) of the SCR under test must be less than 0.31mA (for $V_{TM} = 1V$), and the gate current (I_g) must be less than 0.39mA (for $V_{GT} = 0.7V$)

Battery testing

Battery type	Load
9V	approx. 15mA
1.5V (AA, C or D)	approx. 150mA
1.55V button cells	approx. 0.8mA

Approximate battery voltage displayed.

General

Sampling Rate:	2 times/sec
Overload Indication:	"1" or "-1"
Low Battery Indication:	
Auto Power Off:	Approx. 10 minutes after last operation
Operating Temperature:	0°C~50°C
Storage Temperature:	-20°C~60°C
Temperature Coefficient:	0.15×(spec. Acc'y)/°C <18°C, >28°C
Power Requirement:	Single 9V battery (NEDA 1604 or IEC 6F22)
Battery Life:	Typically 200hours
Size:	84mm(W)×175mm(L)×mm(H)
Weight:	330g
Accessories:	Test Leads, Battery and and User Manual