

DCA55 Reseller Resources

Title Atlas DCA - Semiconductor Analyser (Model DCA55)

Catalogue copy Connect any way round to automatically identify and measure a wide range of semiconductor devices. The DCA55 will automatically identify the type of the part, pinout and many component parameters. Components supported include bipolar NPN/PNP transistors, darlington, diode-protected transistors, transistors with built-in resistors, enhancement mode MOSFETs, depletion mode MOSFETs, diodes, diode networks, LEDs, 2 and 3 lead bicolour LEDs, JFETs and many more. Further measurements are displayed including transistor gain, leakage current, pn voltage drops, LED voltages, MOSFET threshold voltages and much more. Even if you don't know anything about the part, just connect it in any configuration and the DCA55 will identify the type of part for you and also identify all the leads. Supplied with universal gold plated hook probes, battery and illustrated user guide. Not designed for in-circuit testing.

Key Features:

- Automatic pinout detection and identification, connect any way round.
- Automatic part type identification.
- Supports semiconductors including transistors, MOSFETs, diodes, LEDs, JFETs and much more.
- Detection of special component features such as transistors with diodes or transistors with built-in resistors.
- Transistor gain measurement.
- Transistor leakage measurement.
- MOSFET gate threshold measurement.
- Semiconductor voltage drop measurement.
- Supplied with gold plated red/green/blue universal hook probes.

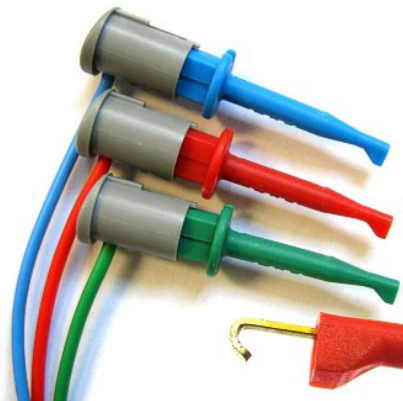
Specification Summary

Parameters	Minimum	Typical	Maximum	Notes
Peak test current into S/C	-5.5mA		5.5mA	1
Peak test voltage across O/C	-5.1V		5.1V	1
Measurable transistor gain range (H_{FE})	4		65,000	2
Transistor gain accuracy (for $H_{FE} < 1000$)	-3%-5 H_{FE}		+3%+5 H_{FE}	2,9
Transistor V_{CEO}	2.0V		3.0V	2
Transistor V_{BE} accuracy	-2%-20mV		+2%+20mV	9
V_{BE} threshold for Darlington identification		0.9V		3
V_{BE} threshold for Darlington identification (shunted)		0.8V		4
Acceptable transistor V_{BE}			1.8V	
Base-emitter shunt resistance threshold		60k		
Transistor collector-emitter test current	2.45mA	2.50mA	2.55mA	
Acceptable transistor collector leakage		1.25mA		6
MOSFET gate threshold range	0.1V		5.0V	5
MOSFET gate threshold accuracy	-2%-20mV		+2%-20mV	5
MOSFET drain-source test current	2.45mA	2.50mA	2.55mA	
MOSFET minimum acceptable gate resistance		8k		
Thyristor/Triac gate test current		4.5mA		7
Thyristor/Triac load test current		5mA		

Diode test current			5mA	
Diode forward voltage accuracy	-2%-2mV		+2%+2mV	
V _F threshold for LED		1.50V		
Short circuit detection threshold		10 ohms		
Battery type	GP23A 12V Alkaline			
Battery voltage range	7.50V	12V		
Battery voltage warning threshold		8.25V		
Inactivity power-down period		30 secs		
Dimensions (excluding test leads)	103 x 70 x 20 mm			
Operating temperature range	0°C		50°C	8

1. Between any pair of test clips.
2. Collector current of 2.50mA.
3. Resistance across reverse biased base-emitter > 60k.
4. Resistance across reverse biased base-emitter < 60k.
5. Drain-source current of 2.50mA.
6. Collector-Emitter voltage of 5V.
7. Thyristor quadrant 1, Triac quadrants I and III.
8. Subject to acceptable LCD visibility.
9. BJT with no shunt resistors.

Photography



Other Downloads

[dca55_userguide_en.pdf](#)

[dca55_datasheet_en.pdf](#)

Dimensions per product (excluding leads)

103 x 70 x 20 mm

Dimensions per product (packaged)

200 x 138 x 30 mm

Weight per product (nett)

0.098kg

Weight per product (packaged inc docs)

0.154kg

Bulk order multiple	20, 80
Harmonisation / Commodity Code	9030 8200 GB
Fundamental Materials	Plastic, glass and metal.
Country of manufacture	England (UK)
Certification	CE, WEEE, ROHS
Keywords	peakelec, peak electronic design, peak electronics, peak electronic, Peak Atlas, Atlas, DCA55, DCA50, DCA50e, Atlas DCA, DCA, Semiconductor tester, semiconductor analyser, semiconductor analyzer, transistor tester, transistor analyser, transistor analyzer, component tester, component analyser, component analyzer, component identifier, semiconductor identifier.
Suitable Accessories	UPS56 , ATC55 , ATC01 , GP23A

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