

atlas DCA

semiconductor component analyser

Model: DCA55

PEAK

electronic design ltd

PRODUCT BRIEF

The Peak Atlas DCA

A fresh approach to component analysis has resulted in the fantastic Peak Atlas, an intelligent, slim and invaluable tool. A world of detailed component data has never been so accessible.

Just connect your component any way round and press the test button. The Atlas will then present you with detailed component information in concise, easy to read, scrollable pages. The displayed information will include: the component type, special component features, component pinout, and measured parameters (such as gain, leakage current, gate threshold voltages, volt drops etc...). No more searching through data books and catalogues in order to identify components and pinouts, the Atlas does it all.

Simplicity

There is no on/off switch, power is automatically turned on at the start of an analysis and then automatically turned off if inactive for more than 30 seconds. Each page of displayed information is presented in manageable amounts, with each page being displayed when you want it. If you want to concentrate on the "pinout" page then just select that page, you don't have to see information that you don't need.

Analysis portfolio

It doesn't matter how you connect the test clips to the component, the Atlas can analyse a vast number of different component types including bipolar transistors, enhancement mode MOSFETs, depletion mode MOSFETs, Junction FETs, low power thyristors and triacs (less than 5mA trigger and hold), diodes, multiple diode networks, LEDs, bi-colour and tri-colour LEDs. It will even identify special component features such as diode protection and shunt resistors in transistors. For two-leaded components such as diodes and LEDs, any pair of test clips can be applied to the component any way round, the Atlas sorts it all out for you.

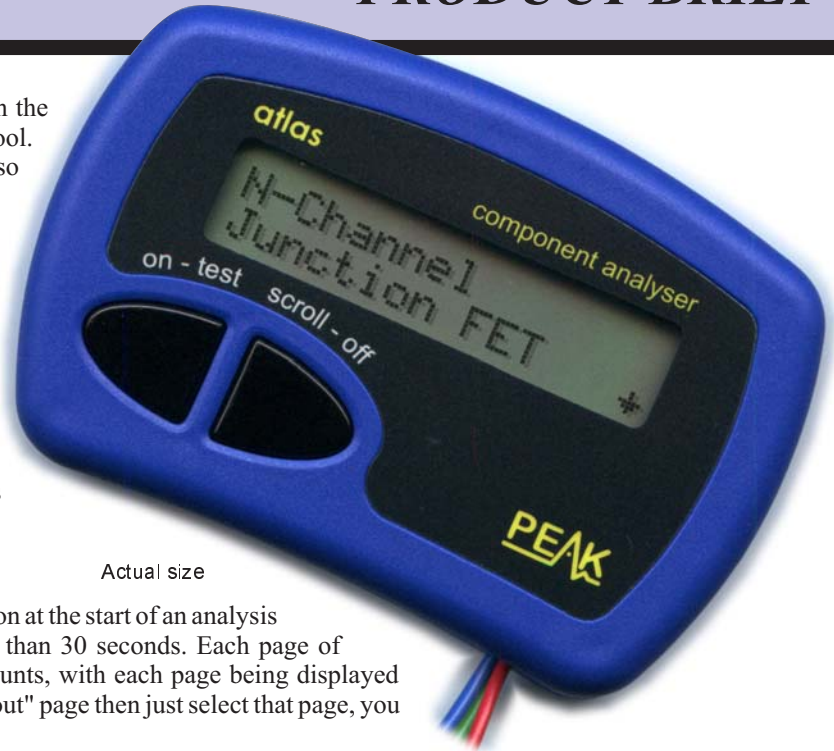
The Atlas Package

The Peak Atlas is supplied complete with a long life battery, universal test probes and a comprehensive illustrated user guide. Furthermore, free and unlimited technical support and advice is available to all users by telephone, fax, email or our web site.

RED GREEN BLUE
Base Emit Coll

Current gain
Hfe=462

Test current
Ic=2.50mA



Actual size

Technical Specifications

Parameter	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		65000	2
Transistor gain accuracy	-3%-5 HFE		+3%+5 HFE	2,9
Transistor V_{CE0}	2.0V		3.0V	2
Transistor V_{BE} accuracy	-2%-20mV		+2%+20mV	9
V_{BE} for Darlington identification		1.0V		3
V_{BE} for Darlington identification (shunted)		0.8V		4
Acceptable transistor V_{BE}			1.80V	
Base-emitter shunt resistance threshold		60k		
Transistor collector-emitter test current	2.45mA	2.50mA	2.55mA	
Acceptable transistor collector leakage		0.7mA		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 gate resistance		8k		
Thyristor/Triac gate test current		4.5mA		7
Thyristor/Triac load test current		5.0mA		
Diode test current			5.0mA	
Diode forward voltage accuracy	-2%-20mV		+2%+20mV	
V_f for LED identification		1.50V		
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

- Between any pair of test clips.
- Collector current of 2.50mA.
- Resistance across reverse biased base-emitter > 60k
- Resistance across reverse biased base-emitter < 60k
- Drain-source current of 2.50mA.
- Collector-emitter voltage of 5.0V.
- Thyristor quadrant I, Triac quadrants I and III.
- Subject to acceptable LCD visibility.
- BJT with no shunt resistors.



Please note that specifications of our products are subject to change without notice. E&OE.

12/02

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