# Atlas ESR

equivalent series resistance meter

Model: ESR60





PRODUCT BRIEF

# **Simplicity**

Measuring a capacitor's ESR (equivalent series resistance) is a great indicator of capacitor condition.

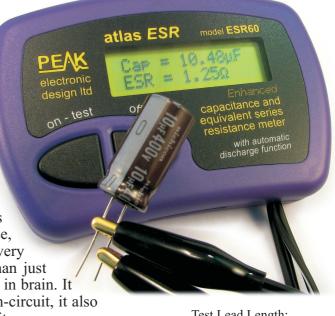
The *Atlas ESR* offers instant results, just connect the probes and press test.

You can even use the *Atlas ESR* in-circuit, saving you the trouble of removing capacitors.

When testing capacitors out-of-circuit, the unit will also display the capacitance.

### All You Need

Traditionally, ESR can be a tricky thing to measure, which is a shame, it's a very useful diagnostic parameter. Of course, ESR meters are available from various sources, some are very famous in the repair sector, but the *Atlas ESR* is more than just another ESR meter. For a start, it's smart, both in looks and in brain. It can measure and compensate for the effects of measuring in-circuit, it also knows that you don't want to be hassled with capacitor polarity.



Test Lead Length: typically 45cm (18")



## **Tough**

Oh yes, it's designed with the real world in mind. Some capacitors can be charged up, a lot, but the *Atlas ESR* doesn't mind. If your capacitor is charged, the unit will automatically carry out a controlled discharge procedure before measuring the capacitance and ESR.

#### Specifications (at 25°C unless otherwise quoted)

Parameter	Min	Тур	Max	Note
Peak test current into S/C	Willi	±20mA	±25mA	Note
Peak test voltage across O/C		±2.5V	±3.0V	
Capacitance measurement range	1uF	±2.5 V	22,000µF	
Capacitance accuracy	$\pm 4\% \pm 0.2 \mu F$			
ESR measurement range	$0\Omega$		$20\Omega$	2
ESR resolution for ESR $\leq 2\Omega$	$0.01\Omega$		$0.02\Omega$	
ESR resolution for ESR $> 2\Omega$	$0.1\Omega$		0.2Ω	
ESR accuracy for ESR $< 2\Omega$	$\pm 1.5\% \pm 0.02\Omega$			
ESR accuracy for ESR $> 2\Omega$	±1.5% ±0.2Ω			
Abuse voltage (for $C < 10\mu F$ )			±275V	3
Abuse voltage (for $C > 10\mu F$ )			±50V	3
Auto-Discharge voltage limit			±50V	
Battery type	MN21/GP23A 12V Alkaline			2
Battery voltage range	8.5V	12V		
Battery voltage warning threshold		8.5V		
Inactivity power-down period	30 seconds			
Dimensions (excluding test leads)	103 x 70 x 20 mm			
Operating temperature range	10°C		40°C	1
Operating temperature range	10°C		40°C	1

#### Notes:

- 1. Subject to acceptable LCD visibility.
- 2. Subject to revision.
- 3. Maximum abuse voltage rated limitation of internal protection electronics. Probes, leads and unit are not certified for high voltage use.

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

#### **Feature Summary**

- Measure capacitance and ESR.
- Resolution down to 0.01 ohms.
- Analyses at industry standard of 100kHz.
- Capable of In-Circuit testing.
- Polarity free, connect any way round.
- Protected against highly charged capacitors.

Gold plated crocodile probes with 4-wire Kelvin connections.



07/2008

# **Peak Electronic Design Limited**

West Road House, West Road, Buxton, Derbyshire, SK17 6HF. Tel.+44 (0)1298 70012, Fax. +44 (0)1298 70046 See us on the Web: www.peakelec.co.uk Email: sales@peakelec.co.uk