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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!



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# $\mathsf{UltraCap}^{\circledR}$

Module 600 F/ 14 V

Series/Type:

Ordering code: B48621A4605Q006

Date: March 2005

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UltraCap<sup>®</sup> B48621A4605Q006

### Module, 600 F/ 14 V

#### **Features**

- Screw terminal M8 × 15 (plus),  $M10 \times 15$  (minus)
- Active cell voltage balancing
- Case material polyethylene, black
- Power type
- 6 serial single cells of 3600 F
- Maintenance-free
- Short-circuit-proof
- Low ESR due to laser-welded interconnections

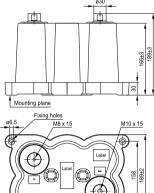
### **Options**

Passive cell voltage balancing (by resistor)

#### Note

Please pay attention to the safety, transport and waste disposal instructions in chapter "Cautions".

#### **Dimensional drawing**





Dimensions in mm

## **Electrical specifications**

Rated capacitance	$(T_A = 25  ^{\circ}C;  DCC)^{1)}$	CR	600	F
Tolerance of C <sub>R</sub>			-10/+30	%
Rated voltage	(T <sub>A</sub> = 25 °C)	$V_R$	14	V
Capacity			2300	mAh
Specific power	(IEC 62391-2)		1.9	kW/kg
Specific power	(IEC 62391-2)		1.8	kW/l
Stored energy	$(V = V_B)$	E	58800	J
Specific energy	$(V = V_B)$		2.3	Wh/kg
Specific energy	$(V = V_B)$		2.2	Wh/I
Surge voltage		$V_{\text{surge}}$	16	V
Maximum series resistance	$(T_A = 25  ^{\circ}C;  1  \text{kHz})$	ESR	1.0	mΩ
Maximum series resistance	$(T_A = 25  ^{\circ}C; 50  \text{mHz})$	ESR <sub>DC</sub>	1.8	mΩ
Weight			7.0	kg
Volume			7.4	1
Operating temperature range		T <sub>op</sub>	-30/+70	°C
Storage temperature	(V = 0 V)	T <sub>st</sub>	-40/+70	°C
Lifetime (hours) 2)	$(T_A = 25  {}^{\circ}C; V = V_R)$		90000	h
Lifetime (cycles) 3)	$(T_A = 25  ^{\circ}C; I = 100  A)$		500000	cycles

<sup>1)</sup> DCC: discharging with constant current.

<sup>2)</sup> Requirements:  $|\Delta C/C_R| \le 30\%$ , ESR  $\le 2$  times of specified limit,  $I_{leak} \le 2$  times of initial value.

<sup>3)</sup> Requirements:  $|\Delta C/C_R| \le 30\%$ , ESR  $\le 2$  times of specified limit,  $I_{leak} \le 2$  times of initial value (1 cycle: charging to  $V_R$ , 30 s rest, discharging to V<sub>R</sub>/2, 30 s rest).