

UltraCap[®]

Single cell 1800 F/ 2.5 V

Series/Type:

Ordering code: B49410B2186Q000

Date: March 2005

© EPCOS AG 2005. Reproduction, publication and dissemination of this data sheet, enclosures hereto and the information contained therein without EPCOS' prior express consent is prohibited.

Purchase orders are subject to the General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry recommended by the ZVEI (German Electrical and Electronic Manufacturers' Association), unless otherwise agreed.



UltraCap[®] B49410B2186Q000

Single cell, 1800 F/ 2.5 V

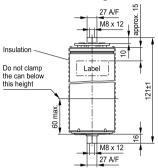
Features

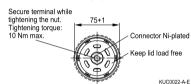
- Screw terminal M8 × 12
- Power type
- Insulated with polyurethane
- Short-circuit-proof

Note

- Do not put into fire!
- Do not open the capacitor!
- To avoid health and fire hazards, do not operate the capacitor beyond the voltage or temperature limits given in the data sheet. Any excess may also result in a reduction of lifetime.
- Please pay also attention to the transport and waste disposal instructions in chapter "Cautions"

Dimensional drawing





Dimensions in mm

Electrical specifications

Rated capacitance	(T _A = 25 °C; DCC) ¹⁾	C _R	1800	F
Tolerance of C _R			-10/+30	%
Rated voltage	(T _A = 25 °C)	V_R	2.5	V
Specific power	(matched load)		10	kW/kg
Specific power	(matched load)		13	kW/I
Stored energy	$(V = V_R)$	E	5625	J
Specific energy	$(V = V_R)$		2.9	Wh/kg
Specific energy	$(V = V_R)$		3.9	Wh/I
Surge voltage		V_{surge}	2.8	V
Maximum series resistance	$(T_A = 25 ^{\circ}C; 1 \text{kHz})$	ESR	300	μΩ
Maximum series resistance	$(T_A = 25 ^{\circ}C; 50 \text{mHz})$	ESR _{DC}	600	μΩ
Weight			540	g
Volume	(without terminals)		0.40	1
Operating temperature range	9	T _{op}	-30/+70	°C
Storage temperature	(V = 0 V)	T _{st}	-40/+70	°C
Lifetime (hours) ²⁾	$(T_A = 25 {}^{\circ}C; V = V_R)$		90000	h
Lifetime (cycles)3)	$(T_{\Delta} = 25 ^{\circ}C; I = 75 A)$		500000	cycles

¹⁾ DCC: Discharging with constant current.

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

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