## EPCOS

# UltraCap ${ }^{\circledR}$ 

Single cell<br>200 F/ 2.5 V

Series/Type:<br>Ordering code: B49410A2205Q000<br>Date: March 2005

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## Single cell, 200 F/ 2.5 V

## Features

- Solder pin/4
- 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


## Electrical specifications

| Rated capacitance | $\left(\mathrm{T}_{\mathrm{A}}=25^{\circ} \mathrm{C} ; \mathrm{DCC}\right)^{1)}$ | $\mathrm{C}_{\text {R }}$ | 200 | F |
| :---: | :---: | :---: | :---: | :---: |
| Tolerance of $\mathrm{C}_{\mathrm{R}}$ |  |  | -10/+30 | \% |
| Rated voltage | $\left(\mathrm{T}_{\mathrm{A}}=25^{\circ} \mathrm{C}\right)$ | $V_{\text {R }}$ | 2.5 | V |
| Capacity |  |  | 140 | mAh |
| Specific power | (IEC 62391-2) |  | 3.3 | kW/kg |
| Specific power | (IEC 62391-2) |  | 3.9 | kW/I |
| Stored energy | ( $\mathrm{V}=\mathrm{V}_{\mathrm{R}}$ ) | E | 625 | J |
| Specific energy | $\left(\mathrm{V}=\mathrm{V}_{\mathrm{R}}\right.$ ) |  | 2.7 | Wh/kg |
| Specific energy | $\left(\mathrm{V}=\mathrm{V}_{\mathrm{R}}\right.$ ) |  | 3.1 | Wh/I |
| Surge voltage |  | $\mathrm{V}_{\text {surge }}$ | 2.8 | V |
| Maximum series resistance | ( $\mathrm{T}_{\mathrm{A}}=25^{\circ} \mathrm{C} ; 1 \mathrm{kHz}$ ) | ESR | 1.5 | $\mathrm{m} \Omega$ |
| Maximum series resistance | ( $\mathrm{T}_{\mathrm{A}}=25^{\circ} \mathrm{C} ; 50 \mathrm{mHz}$ ) | $E S R_{\text {DC }}$ | 3.5 | $\mathrm{m} \Omega$ |
| Weight |  |  | 65 | g |
| Volume |  |  | 0.056 | 1 |
| Operating temperature range |  | $\mathrm{T}_{\text {op }}$ | -30/+70 | ${ }^{\circ} \mathrm{C}$ |
| Storage temperature | ( $\mathrm{V}=0 \mathrm{~V}$ ) | $\mathrm{T}_{\text {st }}$ | -40/+70 | ${ }^{\circ} \mathrm{C}$ |
| Lifetime (hours) ${ }^{\text {2) }}$ | ( $\mathrm{T}_{\mathrm{A}}=25^{\circ} \mathrm{C} ; \mathrm{V}=\mathrm{V}_{\mathrm{R}}$ ) |  | 90000 | h |
| Lifetime (cycles) ${ }^{\text {3) }}$ | ( $\mathrm{T}_{\mathrm{A}}=25^{\circ} \mathrm{C} ; \mathrm{l}=8 \mathrm{~A}$ ) |  | 500000 | cycles |

[^0]
[^0]:    1) DCC: discharging with constant current.
    2) Requirements: $\left|\Delta \mathrm{C} / \mathrm{C}_{\mathrm{R}}\right| \leq 30 \%$, $\mathrm{ESR} \leq 2$ times of specified limit, l $_{\text {leak }} \leq 2$ times of initial value.
    3) Requirements: $\left|\Delta \mathrm{C} / \mathrm{C}_{\mathrm{R}}\right| \leq 30 \%$, ESR $\leq 2$ times of specified limit, leak $\leq 2$ times of initial value (1 cycle: charging to $V_{R}, 30 \mathrm{~s}$ rest, discharging to $\mathrm{V}_{\mathrm{R}} / 2,30 \mathrm{~s}$ rest).
