



UltraCap[®]

Single cell
2700 F/ 2.5 V

Series/Type:

Ordering code: B49410B2276Q000

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.

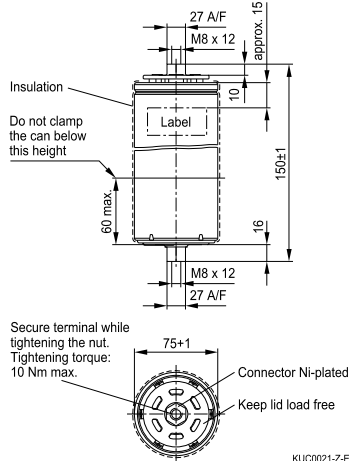
Purchase orders are subject to the General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry recommended by the ZVEI (German Electrical and Electronic Manufacturers' Association), unless otherwise agreed.

Single cell, 2700 F/ 2.5 V
Features

- Screw terminals 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


KUC0021-Z-E

Dimensions in mm

Electrical specifications

| | | | | |
|---------------------------------|---|--------------------|---------|-------------|
| Rated capacitance | ($T_A = 25\text{ °C}$; DCC) ¹⁾ | C_R | 2700 | F |
| Tolerance of C_R | | | -10/+30 | % |
| Rated voltage | ($T_A = 25\text{ °C}$) | V_R | 2.5 | V |
| Capacity | | | 1900 | mAh |
| Specific power | (IEC 62391-2) | | 2.7 | kW/kg |
| Specific power | (IEC 62391-2) | | 3.6 | kW/l |
| Stored energy | ($V = V_R$) | E | 8438 | J |
| Specific energy | ($V = V_R$) | | 3.4 | Wh/kg |
| Specific energy | ($V = V_R$) | | 4.5 | Wh/l |
| Surge voltage | | V_{surge} | 2.8 | V |
| Maximum series resistance | ($T_A = 25\text{ °C}$; 1 kHz) | ESR | 210 | $\mu\Omega$ |
| Maximum series resistance | ($T_A = 25\text{ °C}$; 50 mHz) | ESR _{DC} | 400 | $\mu\Omega$ |
| Weight | | | 690 | g |
| Volume | (without terminals) | | 0.53 | l |
| Operating temperature range | | T_{op} | -30/+70 | °C |
| Storage temperature | ($V = 0\text{ V}$) | T_{st} | -40/+70 | °C |
| Lifetime (hours) ²⁾ | ($T_A = 25\text{ °C}$; $V = V_R$) | | 90000 | h |
| Lifetime (cycles) ³⁾ | ($T_A = 25\text{ °C}$; $I = 100\text{ A}$) | | 500000 | cycles |

1) DCC: discharging with constant current.

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

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