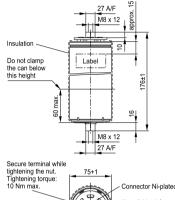# UltraCap$^®$

## Single cell
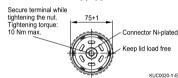## 3600 F/ 2.5 V

## 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



27 A/F
M8 x 12
approx. 15
Insulation
Do not clamp the can below this height
Label
10
176±1
60 max.
16
M8 x 12
27 A/F

Secure terminal while tightening the nut. Tightening torque: 10 Nm max.

75+1

Connector Ni-plated
Keep lid load free

KUC0020-Y-E

Dimensions in mm

## Electrical specifications

| | | | | |
|---|---|---|---|---|
| Rated capacitance | ($T_A$ = 25 °C; DCC) [1] | $C_R$ | 3600 | F |
| Tolerance of $C_R$ | | | −10/+30 | % |
| Rated voltage | ($T_A$ = 25 °C) | $V_R$ | 2.5 | V |
| Capacity | | | 2500 | mAh |
| Specific power | (IEC 62391-2) | | 2.9 | kW/kg |
| Specific power | (IEC 62391-2) | | 3.9 | kW/l |
| Stored energy | ($V = V_R$) | E | 11250 | J |
| Specific energy | ($V = V_R$) | | 3.6 | Wh/kg |
| Specific energy | ($V = V_R$) | | 4.9 | Wh/l |
| Surge voltage | | $V_{surge}$ | 2.8 | V |
| Maximum series resistance | ($T_A$ = 25 °C; 1 kHz) | ESR | 160 | μΩ |
| Maximum series resistance | ($T_A$ = 25 °C; 50 mHz) | $ESR_{DC}$ | 300 | μΩ |
| Weight | | | 870 | g |
| Volume | (without terminals) | | 0.64 | l |
| Operating temperature range | | $T_{op}$ | −30/+70 | °C |
| Storage temperature | ($V = 0$ V) | $T_{st}$ | −40/+70 | °C |
| Lifetime (hours) [2] | ($T_A$ = 25 °C; $V = V_R$) | | 90000 | h |
| Lifetime (cycles) [3] | ($T_A$ = 25 °C; $I = 100$ A) | | 500000 | cycles |

1) DCC: discharging with constant current.

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

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