Preliminary

Carbon-based Power Capacitor Specifications



| | 60140Y-180-40 | |
|---|---------------|--------------------|
| Nominal capacity (discharged with standard profile $<1C$) $\pm 5\%$ | 18,0 | Ah |
| Nominal energy (discharging @1C till cut-off) | 65,0 | Wh |
| Nominal voltage | 4,00 | V |
| Recommended cut-off voltage @ 1C | 2,50 | V |
| Max. recommended charging voltage ** | 4,20 | V |
| Rated capacity (discharging 50% max current till cut-off voltage) | 17,9 | Ah |
| Rated energy (discharged 50% max. current until the cut-off voltage) (cell) | 61,5 | Wh |
| Max. C-rate charging *** (cell) | 10 | С |
| Max. C-rate discharging *** (cell) | 10 | С |
| Max. continuous charging current *** (cell) | 180 | А |
| Max. continuous discharging current *** (cell) | 180 | А |
| Max. sustained power capability *** (cell) | 576 | W |
| Ohmic Resistance Ri (@50% SoC) | ≤ 2 | mΩ |
| Gravimetric energy density (cells) (@1C) | 73,9 | Wh/kg |
| Volumetric energy density (cells) (@1C) | 164 | Wh/dm ³ |
| Gravimetric power density (cells) @ max. C-rate | 818 | W/kg |
| Cycles life at 25°C | > 10.000 | cycles |
| Dimensions of cell | 60∅ x 140H | mm |
| Recommended transportation voltage | 3,50 | V |
| Recommended storage voltage | 4,00 | V |
| Operation temperature | -40 to +80 | °C |
| Storage temperature | -20 to +45 | °C |
| Retained energy after 28 days at 25°C | 92 | % |
| Short circuit temperature | < 150 | °C |
| Weight of cells | 880 | g |
| Guarantee period (manufacturing) | 12 | months |
| Fire Hazardous substances: Cells do not pose a fire or explosion risk. | | |
| | | |

* Custom designed. Specifications might deviate.

** Cell damage possible outside these margins

 *** Max. C-rating of powerpack is limited by selected cable and connector parameters and can be lower than theoretical maximum derived from cell parameters.
C-rates can be higher than maximum for a short duration. Contact Altreonic case by case.

Graphs as tested on a specific cell



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