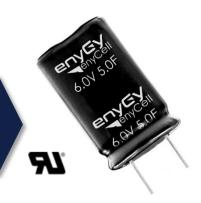


EnyGy® enyCell Series, Module Type (Electric Double Layer Capacitors)

Datasheet EC6R050510030M

- Endurance: 6.0V 65°C 1000 hours
- High capacitance and small size
- Low ESR

- Long cycle life
- UL recognized
- RoHS compliant



Specifications

| Part Number | EC6R050510030M | |
|-------------------|----------------|-------|
| Rated Voltage | V | 6.0 |
| Capacitance | F | 5.0 |
| ESR, 1kHz | mΩ | 50 |
| ESR, DC | mΩ | 90 |
| LC(72hr) | mA | 0.060 |
| Specific Energy | Wh/kg | 3.79 |
| Specific Power | kW/kg | 15.15 |
| Max. Peak Current | Α | 10.34 |
| Weight | g | 6.60 |

- Capacitance and Equivalent Series Resistance (ESR) measured according to IEC62391-1 at +25°C, with current in milliamps (mA) = 10*C
- 2. Leakage Current at 25°C after 72 hour charge and hold
- 3. Specific Energy (Wh/kg) = $(\frac{1}{2} \text{ C}^*\text{ V}^2/3600)$ /weight
- 4. Specific Power (kW/kg) = $(V^2/4*ESR)/weight$
- Max Peak Current in Amps (A), 1 second discharge from rated voltage to half rated voltage = (½*C*V)/(1+ESR*C)

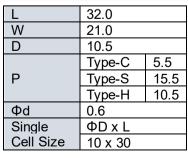
Characteristics

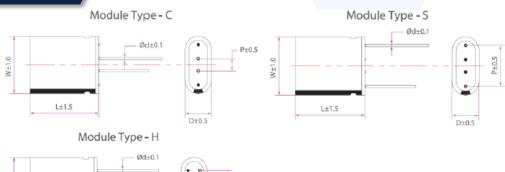
| Operating Temperature Range | -40 ~ +65°C | |
|---------------------------------|---|---|
| Rated Voltage | 6.0 VDC | |
| Capacitance Tolerance | -10% ~ +20% | |
| Temperature Characteristics | Capacitance change | Within ±5% of initial value at +25°C |
| | Internal resistance | Within ±50% of initial value at +25°C |
| Endurance | Duration | 1000 hours |
| | Capacitance charge | Within ≤30% of initial value |
| | Internal resistance | Within ≤100% of initial specified value |
| Shelf Life | After 1000 hours no load test same as endurance | |
| Lifetime at RT ⁽¹⁾ | 10 years | |
| Cycle Life(25°C) ⁽²⁾ | 500,000 cycles | |

- (1) $\Delta C \leq 30\%$ of initial value and $|ESR| \leq 100\%$ of initial specified value.
- (2) Cycle: between rated voltage and half rated voltage under constant current at 25°C.

L±1.5

Dimensions Unit:mm





D±0.5

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