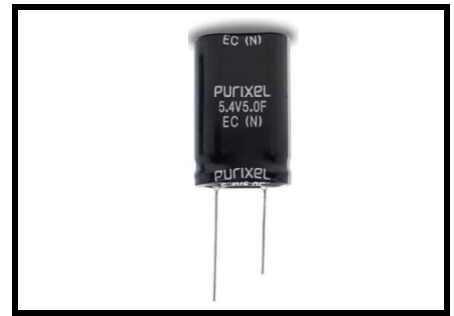


# Purixel(ELECTRIC DOUBLE LAYER CAPACITORS)

# PEC

Module Type  
Standard Series



- Endurance : 5.4V 65°C 1500 hours
- Small size, high capacitance and low resistance
- Longer cycle life than other secondary batteries

| Item                            | Characteristics                                 |                                                                                                |
|---------------------------------|-------------------------------------------------|------------------------------------------------------------------------------------------------|
| Operating Temperature Range     | -40 ~ +65°C                                     |                                                                                                |
| Rated Voltage                   | 5.4 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                                        | 1500 hours                                                                                     |
|                                 | Capacitance charge                              | Within ≤30% of initial value                                                                   |
|                                 | Internal resistance                             | Within ≤100% of initial specified value                                                        |
| Shelf Life                      | After 1500 hours no load test same as endurance |                                                                                                |
| Life Time at RT <sup>(1)</sup>  | 10 years                                        | (1) $ \Delta C  \leq 30\%$ of initial value and $ ESR  \leq 100\%$ of initial specified value. |
| Cycle Life(25°C) <sup>(2)</sup> | 500,000 cycles                                  | (2) Cycle : between rated voltage and half rated voltage under constant current at 25°C        |

## • DIMENSIONS

| L    | W    | D    | P      |        |        | Φd  | Single Cell Size |
|------|------|------|--------|--------|--------|-----|------------------|
|      |      |      | Type-C | Type-S | Type-H |     | ΦD x L           |
| 32.0 | 21.0 | 10.5 | 5.5    | 15.5   | 10.5   | 0.6 | 10 x 20          |

Unit : mm

Module Type - C

Module Type - S

Module Type - H

## • SPECIFICATIONS

| Rated Voltage | Cap. | ESR, 1kHz | ESR, DC | LC(72hr) | Specific Energy | Specific Power | Max. Peak Current | Weight | PART No. |
|---------------|------|-----------|---------|----------|-----------------|----------------|-------------------|--------|----------|
| V             | F    | mΩ        | mΩ      | mA       | Wh/Kg           | kW/kg          | A                 | g      |          |
| 5.4           | 5.0  | 50        | 80      | 0.046    | 2.89            | 13.02          | 9.64              | 7.00   |          |

1. 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) =  $(\frac{1}{2} * C * V^2) / 3600 / \text{weight}$
4. Specific Power (kW/kg) =  $(V^2 / 4 * ESR) / \text{weight}$
5. Max Peak Current in Amps (A), 1 second discharge from rated voltage to half rated voltage =  $(\frac{1}{2} * C * V) / (1 + ESR * C)$