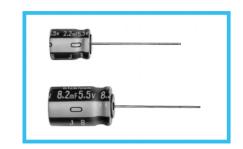
# **ALUMINUM ELECTROLYTIC CAPACITORS**





- Developed for memory back-up, with load life of 1000 hours at +85°C.
- Superior to electric double layer type capacitors in the following characteristics:
  - •Better voltage maintenance.
  - •Speedier charge-up available due to low impedance feature.
  - •Wider operating temperature range of -25 to +85°C.
- Compliant to the RoHS directive (2002/95/EC).

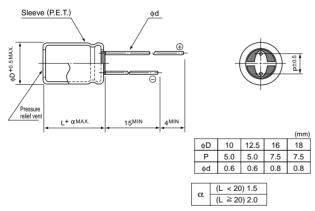
Products which are scheduled to be discontinued. Not recommended for new designs



### ■ Specifications

| Item                             | Performance Characteristics   |  |  |  |  |
|----------------------------------|---|--|--|--|--|
| Category Temperature Range       | −25 to +85°C  |  |  |  |  |
| Rated Voltage Range              | 5.5V  |  |  |  |  |
| Rated Capacitance Range          | 2.2 to 47mF See Note 1  |  |  |  |  |
| Capacitance Tolerance            | -10 to +50%   |  |  |  |  |
| Leakage Current                  | C (μA) (C = Rated capacitance value in mF) See Note 2   |  |  |  |  |
| Voltage Maintenance              | More than 3.5V See Note 3   |  |  |  |  |
| Stability at Low Temperature     | Capacitance (-25°C) / Capacitance (20°C) × 100 ≥ 70%  |  |  |  |  |
| Impedance (Ω) MAX.<br>See Note 4 | Capacitance (mF) 2.2 3.3 4.7 8.2 10 18 22 27 33 39 47   |  |  |  |  |
|                                  | Impedance (Ω) 1.5 1.0 0.6 0.3 0.3 0.2 0.2 0.2 0.2 0.1 0.1   |  |  |  |  |
| Endurance                        | The specifications listed at right shall be met   |  |  |  |  |
|                                  | when the capacitors are restored to 20°C Impedance Within 4 times of the specified value  |  |  |  |  |
|                                  | after the rated voltage is applied for 1000 Leakage current Less than or equal to the initial specified value   |  |  |  |  |
|                                  | hours at 85°C. Voltage maintenance Satisfies the intial specified value   |  |  |  |  |
| Shelf Life                       | After storing the capacitors under no load at 85°C for 500 hours and then performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they shall meet the requirements for the endurance characteristics listed above. |  |  |  |  |
| Marking                          | Printed with white color letter on black sleeve.  |  |  |  |  |

### Radial Lead Type



• Please refer to page 20 about the end seal configulation.

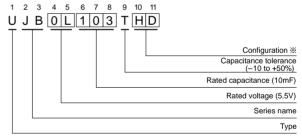
#### Note:

1. After charging a capacitor at the rated voltage of 5.5V for an hour, the capacitance is calculated by the following formula, measuring the time of duration,  $\Delta T$  (Sec.) from 4V down to 3V when constant current dischage at i (mA) =  $0.02 \times$  nominal capacitance is carried out.

Capacitance (mF) =  $i \times \Delta T$ 

- 2. Current value (20°C) after applying the rated voltage of 5.5V for an hour.
- Voltage value maintained after the capacitor is subjected to 1 hour voltage application at 5V and then left at room temperature (lower than 25°C) for 24 hours.
- 4. Measuring Frequency : 1kHz (20°C)

## Type numbering system (Example: 5.5V 10mF)



#### ※ Configuration

| φD         | Pb-free leadwire<br>Pb-free PET sleeve |
|------------|--|
| 10         | PD                                     |
| 12.5 to 18 | HD                                     |
|            |  |

# Dimensions

| Ratings (V—mF) | Code  | Case Size $\phi D \times L \text{ (mm)}$ |
|----------------|-------|--|
| 5.5 — 2.2      | 0L222 | 10×12.5                                  |
| 5.5 — 3.3      | 0L332 | 10×16                                    |
| 5.5 — 4.7      | 0L472 | 10×20                                    |
| 5.5 — 8.2      | 0L822 | 12.5×20                                  |
| 5.5 — 10       | 0L103 | 12.5×25                                  |
| 5.5 — 18       | 0L183 | 16×25                                    |
| 5.5 — 22       | 0L223 | 16×31.5                                  |
| 5.5 — 27       | 0L273 | 16×35.5                                  |
| 5.5 — 33       | 0L333 | 18×31.5                                  |
| 5.5 — 39       | 0L393 | 18×35.5                                  |
| 5.5 —47        | 0L473 | 18×40                                    |