# ALUMINUM ELECTROLYTIC CAPACITORS

# <u>nichicon</u>





eatur

- 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 $(-25^{\circ}C)$ / Capacitance $(20^{\circ}C) \times 100 \ge 70\%$				
Impedance ( $\Omega$ ) MAX. 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 0.1 0.1				
Endurance	The specifications listed at right shall be met Capacitance change Within ±30% of the initial capacitance value				
	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 initial 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)



* Coningulation				
φD	Pb-free leadwire Pb-free PET sleeve			
10	PD			
12.5 to 18	HD			

#### Dimensions

Ratings (V-mF)	Code	Case Size $\phi D \times L$ (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

Please refer to page 20, 21, 22 about the formed or taped product spec. Please refer to page 4 for the minimum order quantity.

