

# ALUMINUM ELECTROLYTIC CAPACITORS

APPROVAL NO.

**6397**

**BDA 50 VC 1 (M)**

SERIES

BDA

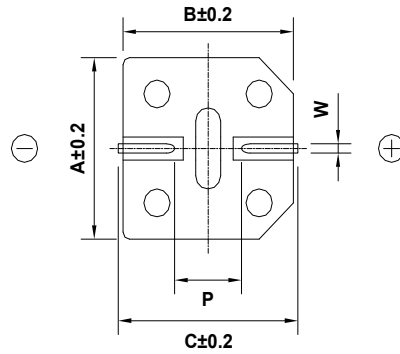
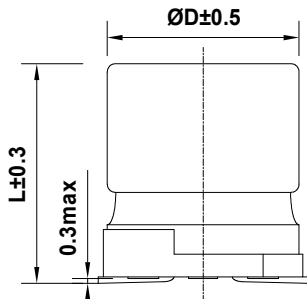
RATING

50 V 1  $\mu$ F

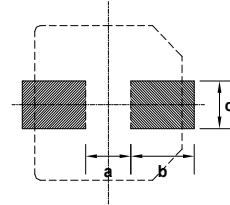
CASE SIZE

$\varnothing$ 4 x 5.2L

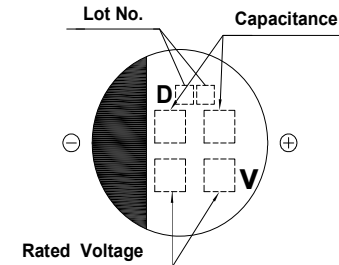
## A. DIAGRAM OF DIMENSION



Recommended Solder land on PC board



█ : Solder land on PC board



Case code	ØD	L	A	B	C	W	P	a	b	c
D55	4	5.2	4.3	4.3	5.1	0.5-0.8	1.0	1.0	2.6	1.6

## B. ELECTRICAL CHARACTERISTICS

- A. OPERATING TEMPERATURE RANGE : **-40 ~ +105 °C**
- B. RATED VOLTAGE : **50 V<sub>DC</sub>**
- C. SURGE VOLTAGE : **63 V<sub>DC</sub>**
- D. CAPACITANCE TOLERANCE : **± 20%** at 20 °C, 120Hz
- E. LEAKAGE CURRENT : Lower **3  $\mu$ A**, after 2 minutes at 20 °C
- F. DISSIPATION FACTOR (TAN $\delta$ ) : Lower **0.12** at 20 °C, 120Hz
- G. MAX. RIPPLE CURRENT : **5.6 mArms** at 105 °C, 120Hz
- H. TEMPERATURE CHARACTERISTIC :  
 (Max. Impedance ratio)  $Z(-25^{\circ}\text{C}) / Z(20^{\circ}\text{C}) = \underline{2}$   
 $Z(-40^{\circ}\text{C}) / Z(20^{\circ}\text{C}) = \underline{3}$  (at 120Hz)
- I. LOAD LIFE : The following specifications shall be satisfied when the capacitors are restored to 20 °C after the rated voltage is applied for **2,000** hours at **105 °C**.
  - # Capacitance change  $\leq$  **±20 %** of the initial value
  - # Tan $\delta$   $\leq$  **200 %** of the initial specified value
  - # Leakage Current  $\leq$  The initial specified value
- J. SHELF LIFE : The following specifications shall be satisfied when the capacitors are restored to 20 °C after exposing them for **1,000** hours at **105 °C** without voltage applied.  
 The rated voltage shall be applied to the capacitors for a minimum of 30 minutes, at least 24 hours and not more than 48 hours before the measurement.
  - # Capacitance change  $\leq$  **±20 %** of the initial value
  - # Tan $\delta$   $\leq$  **200 %** of the initial specified value
  - # Leakage Current  $\leq$  The initial specified value
- K. CLEANING CONDITIONS : Solvent-proof
- L. OTHERS : Satisfied characteristics KS C IEC 60384-4

