

ALUMINUM ELECTROLYTIC CAPACITORS

APPROVAL NO.

8126

NBL 400 VB 220 (M)

SERIES

NBL

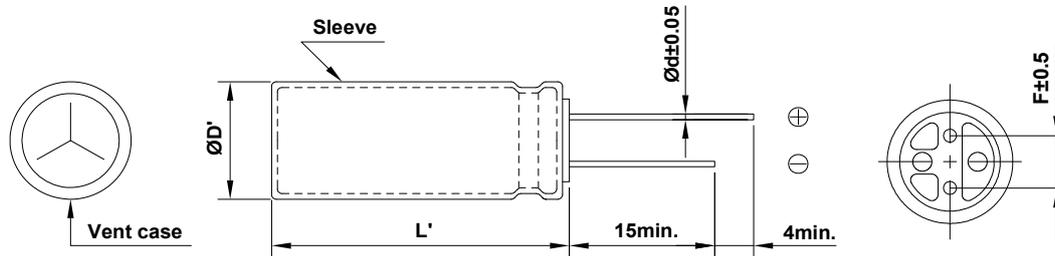
RATING

400 V 220 μ F

CASE SIZE

 \varnothing 22 \times 50 L

A. DIAGRAM OF DIMENSION

B. MARKING : DARK BLUE SLEEVE & SILVER INK

FRONT VIEW OF CAPACITOR

DATE CODE

<M> 105 $^{\circ}$ C

BACK VIEW OF CAPACITOR

C. ELECTRICAL CHARACTERISTICS

- A. OPERATING TEMPERATURE RANGE : -40 ~ +105 $^{\circ}$ C
- B. RATED VOLTAGE : 400 V_{DC}
- C. SURGE VOLTAGE : 450 V_{DC}
- D. CAPACITANCE TOLERANCE : $\pm 20\%$ at 20 $^{\circ}$ C, 120Hz
- E. LEAKAGE CURRENT : Lower 3620 μ A, after 1 minute at 20 $^{\circ}$ C
- F. DISSIPATION FACTOR (TAN δ) : Lower 0.24 at 20 $^{\circ}$ C, 120Hz
- G. RATED RIPPLE CURRENT : 1356 mArms at 105 $^{\circ}$ C, 120Hz

- H. RATED RIPPLE CURRENT MULTIPLIERS
(Frequency Multipliers)

Freq.(Hz)	120	1k	10k	50k	100k
Factor	1.00	1.67	2.05	2.15	2.25

- I. TEMPERATURE CHARACTERISTIC
(Max. Impedance ratio)

Z(-25 $^{\circ}$ C) / Z(20 $^{\circ}$ C)	3
Z(-40 $^{\circ}$ C) / Z(20 $^{\circ}$ C)	6

(at 120Hz)

- J. LOAD LIFE : The following specifications shall be satisfied when the capacitors are restored to 20 $^{\circ}$ C after the rated voltage with the rated ripple current is applied (the peak voltage shall not exceed the rated voltage) for 20,000 hours at 105 $^{\circ}$ C.

- # Capacitance change \leq $\pm 20\%$ of the initial value
- # Tan δ \leq 200% of the initial specified value
- # Leakage Current \leq The initial specified value

- K. SHELF LIFE : The following specifications shall be satisfied when the capacitors are restored to 20 $^{\circ}$ C after exposing them for 1,000 hours at 105 $^{\circ}$ 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 measurements.

- # Capacitance change \leq $\pm 20\%$ of the initial value
- # Tan δ \leq 200% of the initial specified value
- # Leakage Current \leq 500% of the initial specified value

- L. CLEANING CONDITIONS : Non-solvent proof

- M. OTHERS : Satisfied characteristics KS C IEC 60384-4

