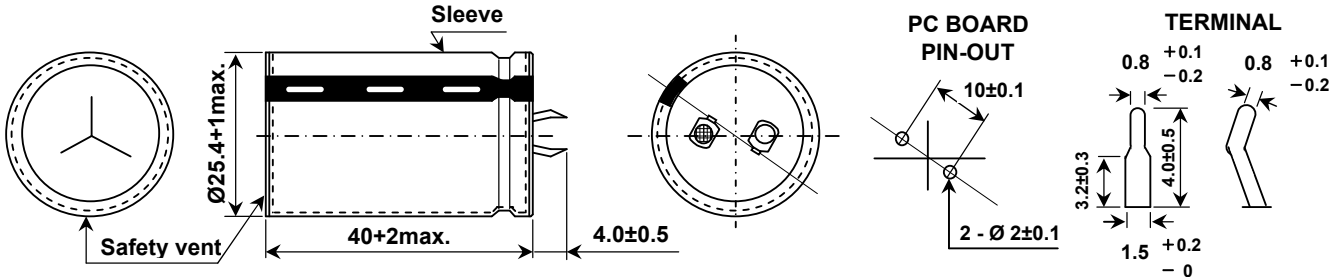


<b>ALUMINUM ELECTROLYTIC CAPACITORS</b>	<b>APPROVAL NO.</b>	
	<b>3411</b>	
<b>TDC 450 VS 220 (M)</b>	<b>SERIES</b>	<b>TDC</b>
	<b>RATING</b>	<b>450 WV 220 <math>\mu</math>F</b>
	<b>CASE SIZE</b>	<b><math>\varnothing</math> 25.4 × 40 L</b>

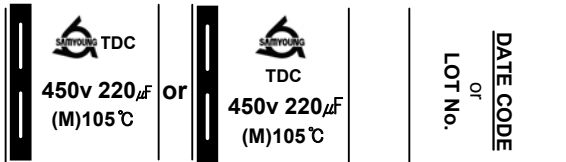
**A. DIAGRAM OF DIMENSION**

[ UNIT : mm ]



**B. MARKING: BROWN SLEEVE & SILVER INK**

< VIEW OF CAPACITOR >



< FRONT >

< BACK >

< LOT No. : Sleeve or bottom plate marking. >

①②③④  
or  
①②  
③④

- ①: The ending figure of manufactured year in
- ②: Manufactured month (1,2,3,...,9,O,N,D)
- ③: Manufactured day (A,B,C,...,Z,a,b,c,d,e)
- ④: SAMYOUNG's symbol No.  
Korea : 1, China : ≤1>

< DATE CODE : Sleeve marking. >

①②③④

- ①②: YEAR : The ending of A.D.
- ③④: WEEKS : 01 ~ 52

**C. ELECTRICAL CHARACTERISTICS**

- A. OPERATING TEMPERATURE RANGE : -25 ~ +105°C
- B. RATED VOLTAGE : 450 V<sub>DC</sub>
- C. SURGE VOLTAGE : 500 V<sub>DC</sub>
- D. CAPACITANCE TOLERANCE : ±20% at 20°C, 120Hz
- E. LEAKAGE CURRENT : Lower 1980  $\mu$ A, after 5 minutes at 20°C
- F. DISSIPATION FACTOR (Tan $\delta$ ) : Lower 0.2 at 20°C, 120Hz
- G. MAX. RIPPLE CURRENT : 1.05 Arms at 105°C, 120Hz
- H. TEMPERATURE CHARACTERISTIC  
(Max. Impedance ratio) :  $Z(-25^\circ\text{C}) / Z(20^\circ\text{C}) = \underline{8}$  (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 the exposing them at max. operating temperature for 1,000 hours 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 :  $\leq$  ±20% of the initial value
  - # Tan $\delta$  :  $\leq$  200% of the initial specified value
  - # Leakage current :  $\leq$  The initial specified value
- K. CLEANING CONDITIONS : Non-solvent proof
- L. OTHERS : Satisfied characteristics W of KS C 6421

	←	←

