## Stacked Coin Type

Series: SE

■ Features

Endurance: 70 °C 1000 h
Automatic insertion available
RoHS directive compliant

#### ■ Recommended Applications

 Memory back-up for video and audio equipment, cameras, telephones, printers, data terminals, rice cookers and intelligent remote controls.



### ■ Specifications

| Category Temp. Range      |   | −25 °C to +70 °C   |  |  |
|---------------------------|---|--|--|--|
| Maximum Operating Voltage | 5.5 V.DC  |  |  |  |
| Nominal Cap.Range         | 0.22 F  |  |  |  |
| Characteristics at Low    | Capacitance change  | ±30 % of initial measured value at +20 °C (at -25 °C)    |  |  |
| Temperature               | Internal resistance   | ≤5 times of initial measured value at +20 °C (at -25 °C) |  |  |
|                           | After 1000 hours application of 5.5 V. DC at +70 °C, the capacitor shall meet the following limits.           |  |  |  |
| Endurance                 | Capacitance change  | ±30 % of initial measured value                          |  |  |
|                           | Internal resistance   | ≤4 times of initial specified value                      |  |  |
| Shelf Life                | After 1000 hours storage at +70 °C without load, the capacitor shall meet the specified limits for Endurance. |  |  |  |

#### ■ Dimensions in mm(not to scale)

5.4±0.8

P<sub>2</sub>

P<sub>3</sub>

P<sub>4</sub>

P<sub>5</sub>

P<sub>6</sub>

P<sub>7</sub>

P<sub>8</sub>

P<sub>8</sub>

P<sub>9</sub>

P<sub>1</sub>

P<sub>1</sub>

P<sub>1</sub>

P<sub>2</sub>

P<sub>3</sub>

P<sub>4</sub>

P<sub>5</sub>

P<sub>6</sub>

P<sub>7</sub>

P<sub>7</sub>

P<sub>7</sub>

P<sub>8</sub>

P<sub>8</sub>

P<sub>9</sub>

| Dimensions              | Nominal  | Tolerance    |  |
|-------------------------|----------|--------------|--|
| <b>ø</b> d              | 0.55     | ±0.05        |  |
| P0                      | 12.7     | ±0.2         |  |
| F                       | 5.0      | +0.8<br>-0.2 |  |
| W                       | 18.0     | ±0.5         |  |
| Wo                      | 5.5≦     | =            |  |
| <b>W</b> 1              | 9.0      | ±0.5         |  |
| W <sub>2</sub>          | 0 to 3.0 | =            |  |
| H₀                      | 16.4     | ±0.5         |  |
| $\phi$ D $\circ$        | 4.0      | ±0.2         |  |
| Р                       | 12.7     | ±1.0         |  |
| P <sub>1</sub>          | 3.85     | ±0.50        |  |
| P <sub>2</sub>          | 6.35     | ±1.00        |  |
| $\Delta$ h, $\Delta$ h1 | 0        | ±1.0         |  |
| H <sub>1</sub>          | 30.3≧    | _            |  |
|                         |          |              |  |

# ■ Standard Products \*: Last purchasing order: Received by the end of Sep. of 2014 / Last shipment: The end of Mar. of 2015 Please consider 0.22 F.

| Maximum<br>Operating Voltage |   | Capacitance | Capacitance tolerance | Internal resistance (Initial specified value) | Part number | Min. Packaging<br>Q'ty |  |
|------------------------------|---|-------------|-----------------------|---|-------------|------------------------|--|
| (V.DC)                       |   | (F)         | (F)                   | $(\Omega)$ at 1kHz                            |             | (pcs)                  |  |
| 5.5                          | * | 0.022       | 0.0176 to 0.0396      | ≤ 150   | EECSE0H223  | 1000                   |  |
|                              | * | 0.047       | 0.0376 to 0.0846      | ≦ 120   | EECSE0H473  | 1000                   |  |
|                              | * | 0.10        | 0.080 to 0.180        | ≤ 75  | EECSE0H104  | 1000                   |  |
|                              |   | 0.22        | 0.176 to 0.396        | ≤ 75  | EECSE0H224  | 1000                   |  |

Note: 1. When ordering please observe the minimum packaging quantity.

- 2. When the surface mount component goes through UV or a heat oven to affix the adhesive glue, the capacitor's surface temperature should not exceed 100 °C for more than 60 seconds (maximum temperature should not exceed 105 °C)
- 3. Do not use reflow soldering. (IR, Atmosphere heating methods, etc.) Please refer to the page of "Application Guidelines".

Design and specifications are each subject to change without notice. Ask factory for the current technical specifications before purchase and/or use. Should a safety concern arise regarding this product, please be sure to contact us immediately.

(Unit: mm)