## Stacked Metallized PEN Film Chip Capacitor

## Type: **ECWU(X)**

Stacked metallized PEN film as dielectric with simple mold-less construction

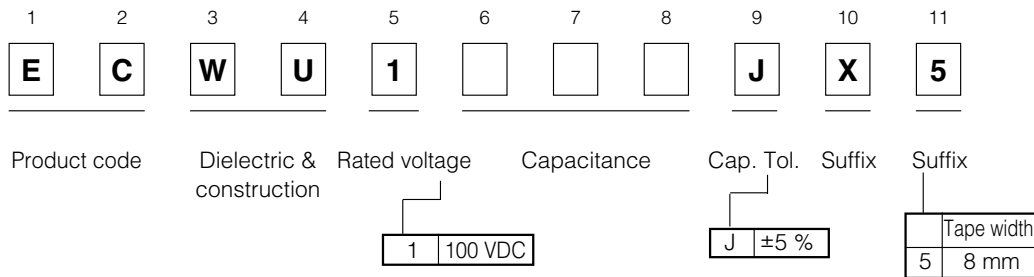### ■Features
- Small in size (minimum size 3.2 mm × 1.6 mm)
- 85 ℃, 85 %RH, W.V. × 1.0 for 500 hours
- For reflow soldering
- RoHS directive compliant

### ■Recommended Applications
- General purpose (Coupling, By-pass)
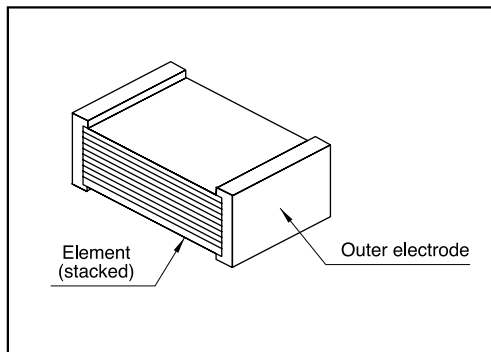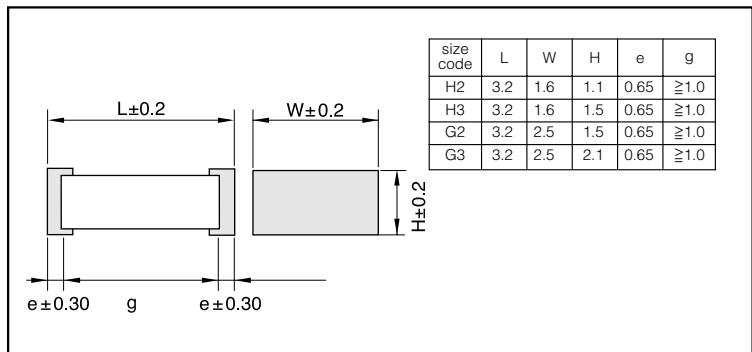
### ■Explanation of Part Numbers

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|---|---|---|---|---|---|---|---|---|----|----|
| E | C | W | U | 1 | | | | J | X | 5 |

| Product code | Dielectric & construction | Rated voltage | Capacitance | | | Cap. Tol. | Suffix | Suffix |

| 1 | 100 VDC |
|---|---------|

| J | ±5 % |
|---|------|

| | Tape width |
|---|-----------|
| 5 | 8 mm |

### ■Specifications

| | |
|---|---|
| Category temp. range (Including temperature-rise on unit surface) | −55 ℃ to +105 ℃ |
| Rated voltage | 100 VDC |
| Capacitance range | 0.0010 µF to 0.010 µF (E12) |
| Capacitance tolerance | ±5 % (J) |
| Withstand voltage | Between terminals : Rated volt. (VDC)×175 %  1 s to 5 s |
| Dissipation factor (tan$\delta$) | tan$\delta$≦1.0 % (20 ℃, 1 kHz) |
| Insulation resistance (IR) | IR≧3000 MΩ (20 ℃, 100 VDC, 60 s) |
| Soldering conditions | Reflow soldering : 240 ℃ max. and 60 s max. at more than 220 ℃ (Temp. at cap. surface) |

✳ In case of applying voltage in alternating current (50 Hz or 60 Hz sine wave) to a capacitor with DC rated voltage, please refer to the page of "Permissible voltage (R.M.S) in alternating current corresponding to DC rated voltage".

### ■Construction



Element (stacked)

Outer electrode

### ■Dimensions in mm (not to scale)



L±0.2    W±0.2

H±0.2

e±0.30    g    e±0.30

| size code | L | W | H | e | g |
|-----------|-----|-----|-----|------|------|
| H2 | 3.2 | 1.6 | 1.1 | 0.65 | ≧1.0 |
| H3 | 3.2 | 1.6 | 1.5 | 0.65 | ≧1.0 |
| G2 | 3.2 | 2.5 | 1.5 | 0.65 | ≧1.0 |
| G3 | 3.2 | 2.5 | 2.1 | 0.65 | ≧1.0 |

■Taping Specification for Automatic Mounting
  Refer to the page of taping specifications.

■Rating, Dimensions & Quantity/Reel
●Capacitance tolerance : ±5 ％(J)

| Cap. (µF) | Rated volt. 100 VDC | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| | Part　No. | Dimensions (mm) | | | Code | Q'ty |
| | | L | W | H | | |
| 0.0010 | ECWU1102JX5 | 3.2 | 1.6 | 1.1 | H2 | |
| 0.0012 | ECWU1122JX5 | 3.2 | 1.6 | 1.1 | H2 | |
| 0.0015 | ECWU1152JX5 | 3.2 | 1.6 | 1.1 | H2 | 3000 |
| 0.0018 | ECWU1182JX5 | 3.2 | 1.6 | 1.1 | H2 | |
| 0.0022 | ECWU1222JX5 | 3.2 | 1.6 | 1.1 | H2 | |
| 0.0027 | ECWU1272JX5 | 3.2 | 1.6 | 1.1 | H2 | |
| 0.0033 | ECWU1332JX5 | 3.2 | 1.6 | 1.5 | H3 | |
| 0.0039 | ECWU1392JX5 | 3.2 | 1.6 | 1.5 | H3 | |
| 0.0047 | ECWU1472JX5 | 3.2 | 1.6 | 1.5 | H3 | |
| 0.0056 | ECWU1562JX5 | 3.2 | 2.5 | 1.5 | G2 | 2000 |
| 0.0068 | ECWU1682JX5 | 3.2 | 2.5 | 1.5 | G2 | |
| 0.0082 | ECWU1822JX5 | 3.2 | 2.5 | 2.1 | G3 | |
| 0.010 | ECWU1103JX5 | 3.2 | 2.5 | 2.1 | G3 | |

cap.≧0.012 µF : Please use 100 VDC rating of ECWU(C)

■Recommened for Land Dimensions (mm)



| Size code | Land dimensions for reflow soldering | | |
| --- | --- | --- | --- |
| | A | B | C |
| H2,H3 | 1.8 | 3.6 | 1.4 |
| G2,G3 | 1.8 | 3.6 | 2.3 |

Design, Specifications are subject to change without notice.　　Ask factory for technical specifications before purchase and/or use.
Whenever a doubt about safety arises from this product, please inform us immediately for technical consultation without fail.

Mar. 2006