

## Surface Mount Type **SP-Cap**

Series: **G**



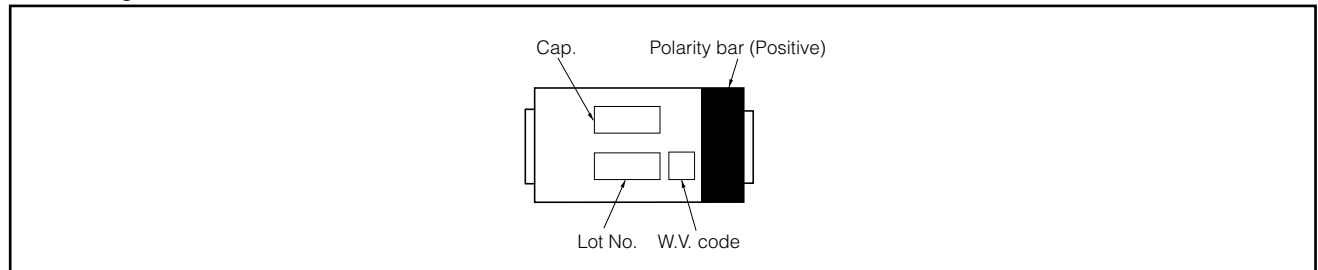
### ■ Features

- Super Low-ESR (3 mΩ)
- High temperature reflow soldering applicable  
(Peak : 260 °C 10s, main heating : 230 °C 40s)
- RoHS directive compliant

### ■ Specifications

|                       |   |                                    |
|-----------------------|---|------------------------------------|
| Category Temp. Range  | -40 °C to +105 °C   |                                    |
| Rated W.V.Range       | 2 V.DC to 2.5 V.DC  |                                    |
| Nominal Cap.Range     | 330 μF to 560 μF  |                                    |
| Capacitance Tolerance | ±20 % (120 Hz/+20 °C)   |                                    |
| DC Leakage Current    | I ≤ 0.1 CV (μA) 2 minutes   |                                    |
| tan δ                 | ≤ 0.06 (120 Hz/+20 °C)  |                                    |
| Surge Voltage         | Rated Working Voltage × 1.25 (15 °C to 35 °C)   |                                    |
| Endurance             | After applying rated working voltage for 1000 hours at 105 °C±2 °C, and then being stabilized at +20 °C, capacitor shall meet the following limits. |                                    |
|                       | Capacitance change  | ±10% of initial measured value     |
|                       | tan δ   | ≤ Initial specified value          |
|                       | DC leakage current  | ≤ Initial specified value          |
| Moisture resistance   | After storing for 500 hours at 60 °C, 90 %  |                                    |
|                       | Capacitance change of initial measured value  | 2 V.DC<br>+70, -20 %               |
|                       | tan δ   | ≤ 200 % of initial specified value |
|                       | DC leakage current  | ≤ Initial specified value          |

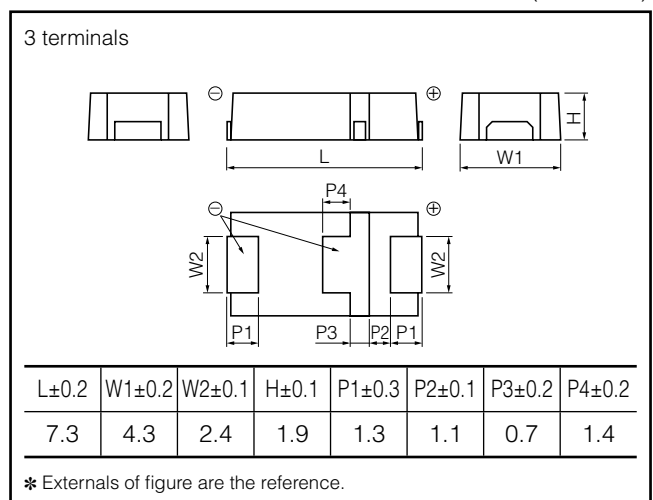
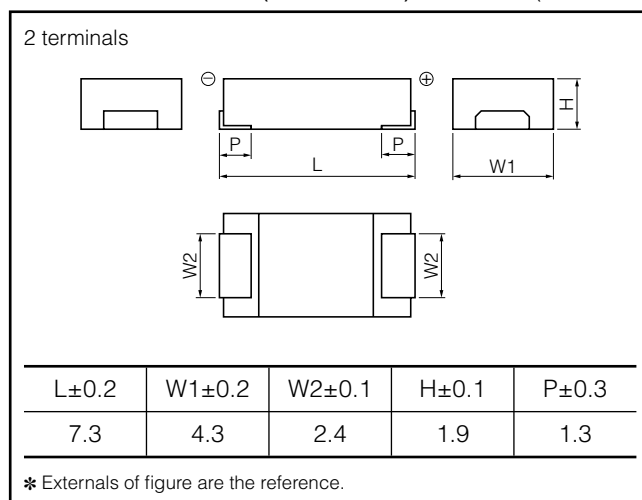
### ■ Marking



### ■ Dimensions in mm(not to scale)

(Unit : mm)

(Unit : mm)



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.

■ Standard Products

| Series & Size Code | Rated W.V. (V.DC) | Capacitance (±20 %) (μF) | Case Size |        |        | Specification                  |                    | Part number | The number of terminals                    |   | Min. Packaging Q'ty (pcs) |
|--------------------|-------------------|--------------------------|-----------|--------|--------|--------------------------------|--------------------|-------------|--|---|---------------------------|
|                    |                   |                          | L (mm)    | W (mm) | H (mm) | *1<br>Ripple current (Ar.m.s.) | *2<br>ESR (Ω max.) |             | *3<br>Reflow condition : 260 °C [Proposal] | 2 |                           |
| GX                 | 2                 | 330                      | 7.3       | 4.3    | 1.9    | 4.0                            | 0.003              | EEFGX0D331R | ○  |   | 3500                      |
|                    |                   | 470                      | 7.3       | 4.3    | 1.9    | 4.0                            | 0.003              | EEFGX0D471R | ○  |   | 3500                      |
|                    |                   | 470                      | 7.3       | 4.3    | 1.9    | 4.0                            | 0.003              | EEFGX0D471L |  | ○ | 3500                      |
|                    |                   | 560                      | 7.3       | 4.3    | 1.9    | 4.0                            | 0.003              | EEFGX0D561R | ○  |   | 3500                      |
|                    |                   | 560                      | 7.3       | 4.3    | 1.9    | 4.0                            | 0.003              | EEFGX0D561L |  | ○ | 3500                      |
|                    | 2.5               | 470                      | 7.3       | 4.3    | 1.9    | 4.0                            | 0.003              | EEFGX0E471R | ○  |   | 3500                      |
|                    |                   | 470                      | 7.3       | 4.3    | 1.9    | 4.0                            | 0.003              | EEFGX0E471L |  | ○ | 3500                      |

\*1: Ripple current (100 kHz/ +20 to +105 °C), \*2: ESR (100 kHz/+20 °C)

\*3: Please refer to the page of "Mounting Specifications".