

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

Series: **FD, CD, CX, UD, UE**



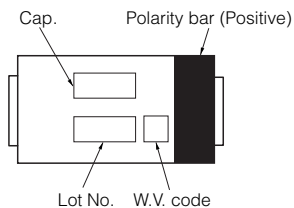
#### ■ Features

- Low ESR
- Excellent Noise-absorbent Characteristics
- RoHS directive compliant

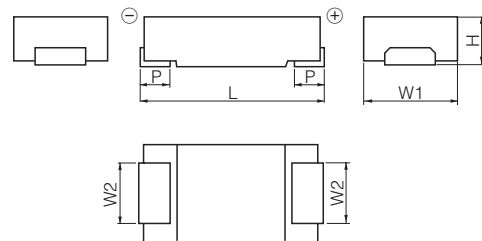
#### ■ Specifications

| Series & Size Code    | FD  | CD                                       | CX                 | UD  | UE                |
|-----------------------|---|--|--------------------|---|-------------------|
| Category Temp. Range  | -40 °C to +105 °C   |  |                    |   |                   |
| Rated W.V.Range       | 2 V.DC to 12.5 V.DC   | 2 V.DC to 16 V.DC                        | 2 V.DC to 6.3 V.DC | 2 V.DC to 8 V.DC  | 2 V.DC to 8 V.DC  |
| Nominal Cap.Range     | 15 μF to 68 μF  | 2.2 μF to 220 μF                         | 100 μF to 470 μF   | 68 μF to 470 μF   | 100 μF to 560 μF  |
| Capacitance Tolerance | ±20 %   |  |                    |   |                   |
| DC Leakage Current    | Reflow 240 °C : $I \leq 0.06 CV (\mu A) 2 \text{ minutes (2 V.DC to 4 V.DC)}$<br>$I \leq 0.04 CV \text{ or } 3 (\mu A) 2 \text{ minutes (6.3 V.DC to 16 V.DC)}$ (Whichever is greater)<br>Reflow 260 °C : $I \leq 0.1 CV (\mu A) 2 \text{ minutes}$ |  |                    |   |                   |
| $\tan \delta$         | $\leq 0.06 (120 \text{ Hz}/+20 \text{ }^\circ\text{C})$   |  |                    | $\leq 0.10 (120 \text{ Hz}/+20 \text{ }^\circ\text{C})$ |                   |
| Surge Voltage         | Rated Working Voltage $\times 1.25 (15 \text{ }^\circ\text{C to } 35 \text{ }^\circ\text{C})$   |  |                    |   |                   |
| 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           |                    |   |                   |
|                       | $\tan \delta$   | $\leq$ Initial specified value           |                    |   |                   |
|                       | DC leakage current  | $\leq$ Initial specified value           |                    |   |                   |
| Moisture resistance   | After storing for 500 hours at 60 °C, 90 %  |  |                    |   |                   |
|                       | Capacitance change of initial measured value  | 2, 2.5 V.DC                              | 4 V.DC             | 6.3 V.DC  | 8 V.DC to 16 V.DC |
|                       |   | +70, -20 %                               | +60, -20 %         | +50, -20 %  | +40, -20 %        |
|                       | $\tan \delta$   | $\leq 200 \%$ of initial specified value |                    |   |                   |
|                       | DC leakage current  | $\leq$ Initial specified value           |                    |   |                   |

#### ■ Marking



#### ■ Dimensions in mm(not to scale)



(mm)

| Series & Size Code | L±0.2 | W1±0.2 | W2±0.1 | H       | P±0.3 |
|--------------------|-------|--------|--------|---------|-------|
| FD                 | 7.3   | 4.3    | 2.4    | 1.1±0.1 | 1.3   |
| CD                 | 7.3   | 4.3    | 2.4    | 1.8±0.1 | 1.3   |
| CX                 | 7.3   | 4.3    | 2.4    | 1.9±0.2 | 1.3   |
| UD                 | 7.3   | 4.3    | 2.4    | 2.8±0.2 | 1.3   |
| UE                 | 7.3   | 4.3    | 2.4    | 4.2±0.1 | 1.3   |

\* Externals of figure are the reference.

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.

00 Sep. 2010

### Standard Products

| Series & Size Code | Rated W.V. (V.DC) | Capacitance (±20 %) (μF) | Case Size |        |        | Specification                          |                             | Part number                             |  | Min. Packaging Q'ty (pcs) |      |
|--------------------|-------------------|--------------------------|-----------|--------|--------|--|-----------------------------|---|--|---------------------------|------|
|                    |                   |                          | L (mm)    | W (mm) | H (mm) | Ripple current (Ar.m.s.) <sup>*1</sup> | ESR <sup>*2</sup> (mΩ max.) | Reflow condition : 240 °C <sup>*3</sup> | Reflow condition : 260 °C [Proposal] <sup>*3</sup> |                           |      |
| FD                 | 2                 | 68                       | 7.3       | 4.3    | 1.1    | 2.0                                    | 28                          | EEFFD0D680R                             | —  | 3500                      |      |
|                    | 2.5               | 56                       | 7.3       | 4.3    | 1.1    | 2.0                                    | 28                          | EEFFD0E560R                             | —  | 3500                      |      |
|                    | 4                 | 39                       | 7.3       | 4.3    | 1.1    | 2.0                                    | 28                          | EEFFD0G390R                             | —  | 3500                      |      |
|                    |                   | 47                       | 7.3       | 4.3    | 1.1    | 2.0                                    | 28                          | EEFFD0G470R                             | —  | 3500                      |      |
|                    | 6.3               | 33                       | 7.3       | 4.3    | 1.1    | 2.0                                    | 28                          | EEFFD0J330R                             | —  | 3500                      |      |
|                    | 8                 | 22                       | 7.3       | 4.3    | 1.1    | 2.0                                    | 28                          | EEFFD0K220R                             | —  | 3500                      |      |
| 12.5               | 15                | 7.3                      | 4.3       | 1.1    | 1.4    | 40                                     | EEFFD1B150R                 | —                                       | 3500   |                           |      |
| CD                 | 2                 | 100                      | 7.3       | 4.3    | 1.8    | 2.5                                    | 18                          | EEFCD0D101R                             | EEFCD0D101ER                                       | 3500                      |      |
|                    |                   |                          | 7.3       | 4.3    | 1.8    | 2.7                                    | 15                          | EEFCD0D101XR                            | EEFCD0D101XE                                       | 3500                      |      |
|                    |                   | 120                      | 7.3       | 4.3    | 1.8    | 2.5                                    | 18                          | EEFCD0D121R                             | EEFCD0D121ER                                       | 3500                      |      |
|                    |                   |                          | 7.3       | 4.3    | 1.8    | 2.7                                    | 15                          | EEFCD0D121XR                            | EEFCD0D121XE                                       | 3500                      |      |
|                    |                   | 150                      | 7.3       | 4.3    | 1.8    | 2.5                                    | 18                          | EEFCD0D151R                             | EEFCD0D151ER                                       | 3500                      |      |
|                    |                   | 180                      | 7.3       | 4.3    | 1.8    | 2.5                                    | 18                          | EEFCD0D181R                             | EEFCD0D181ER                                       | 3500                      |      |
|                    | 220               | 7.3                      | 4.3       | 1.8    | 2.5    | 18                                     | EEFCD0D221R                 | EEFCD0D221ER                            | 3500   |                           |      |
|                    | 2.5               | 82                       | 7.3       | 4.3    | 1.8    | 2.5                                    | 18                          | EEFCD0E820R                             | EEFCD0E820ER                                       | 3500                      |      |
|                    |                   |                          | 7.3       | 4.3    | 1.8    | 2.7                                    | 15                          | EEFCD0E820XR                            | EEFCD0E820XE                                       | 3500                      |      |
|                    |                   | 100                      | 7.3       | 4.3    | 1.8    | 2.5                                    | 18                          | EEFCD0E101R                             | EEFCD0E101ER                                       | 3500                      |      |
|                    |                   |                          | 7.3       | 4.3    | 1.8    | 2.7                                    | 15                          | EEFCD0E101XR                            | EEFCD0E101XE                                       | 3500                      |      |
|                    |                   | 120                      | 7.3       | 4.3    | 1.8    | 2.5                                    | 18                          | EEFCD0E121R                             | EEFCD0E121ER                                       | 3500                      |      |
|                    |                   | 150                      | 7.3       | 4.3    | 1.8    | 2.5                                    | 18                          | EEFCD0E151R                             | EEFCD0E151ER                                       | 3500                      |      |
|                    | 4                 | 56                       | 7.3       | 4.3    | 1.8    | 2.5                                    | 18                          | EEFCD0G560R                             | EEFCD0G560ER                                       | 3500                      |      |
|                    |                   |                          | 7.3       | 4.3    | 1.8    | 2.7                                    | 15                          | EEFCD0G560XR                            | EEFCD0G560XE                                       | 3500                      |      |
|                    |                   | 68                       | 7.3       | 4.3    | 1.8    | 2.5                                    | 18                          | EEFCD0G680R                             | EEFCD0G680ER                                       | 3500                      |      |
|                    |                   |                          | 7.3       | 4.3    | 1.8    | 2.7                                    | 15                          | EEFCD0G680XR                            | EEFCD0G680XE                                       | 3500                      |      |
|                    |                   | 82                       | 7.3       | 4.3    | 1.8    | 2.5                                    | 18                          | EEFCD0G820R                             | EEFCD0G820ER                                       | 3500                      |      |
|                    |                   |                          | 7.3       | 4.3    | 1.8    | 2.7                                    | 15                          | EEFCD0G820XR                            | EEFCD0G820XE                                       | 3500                      |      |
|                    | 100               | 7.3                      | 4.3       | 1.8    | 2.5    | 18                                     | EEFCD0G101R                 | EEFCD0G101ER                            | 3500   |                           |      |
|                    | 6.3               | 10                       | 7.3       | 4.3    | 1.8    | 1.4                                    | 55                          | EEFCD0J100R                             | EEFCD0J100ER                                       | 3500                      |      |
|                    |                   | 22                       | 7.3       | 4.3    | 1.8    | 1.6                                    | 40                          | EEFCD0J220R                             | EEFCD0J220ER                                       | 3500                      |      |
|                    |                   | 33                       | 7.3       | 4.3    | 1.8    | 2.0                                    | 28                          | EEFCD0J330R                             | EEFCD0J330ER                                       | 3500                      |      |
|                    |                   | 47                       | 7.3       | 4.3    | 1.8    | 2.5                                    | 18                          | EEFCD0J470R                             | EEFCD0J470ER                                       | 3500                      |      |
|                    |                   |                          | 7.3       | 4.3    | 1.8    | 2.7                                    | 15                          | EEFCD0J470XR                            | EEFCD0J470XE                                       | 3500                      |      |
|                    |                   | 68                       | 7.3       | 4.3    | 1.8    | 2.5                                    | 18                          | EEFCD0J680R                             | EEFCD0J680ER                                       | 3500                      |      |
|                    | 8                 | 8.2                      | 7.3       | 4.3    | 1.8    | 1.4                                    | 55                          | EEFCD0K8R2R                             | EEFCD0K8R2ER                                       | 3500                      |      |
|                    |                   |                          | 7.3       | 4.3    | 1.8    | 1.6                                    | 40                          | EEFCD0K150R                             | EEFCD0K150ER                                       | 3500                      |      |
|                    |                   | 22                       | 7.3       | 4.3    | 1.8    | 2.0                                    | 28                          | EEFCD0K220R                             | EEFCD0K220ER                                       | 3500                      |      |
|                    |                   | 33                       | 7.3       | 4.3    | 1.8    | 2.5                                    | 18                          | EEFCD0K330R                             | EEFCD0K330ER                                       | 3500                      |      |
|                    |                   | 47                       | 7.3       | 4.3    | 1.8    | 1.8                                    | 25                          | EEFCD0K470R                             | EEFCD0K470ER                                       | 3500                      |      |
|                    |                   |                          | —         | —      | —      | —                                      | —                           | —                                       | EEFCD1A220ER                                       | 3500                      |      |
|                    | 10                | 33                       | 7.3       | 4.3    | 1.8    | 1.8                                    | 25                          | —                                       | EEFCD1A330ER                                       | 3500                      |      |
|                    |                   | 39                       | 7.3       | 4.3    | 1.8    | 1.8                                    | 25                          | —                                       | EEFCD1A390ER                                       | 3500                      |      |
|                    |                   | 4.7                      | 7.3       | 4.3    | 1.8    | 1.0                                    | 80                          | EEFCD1B4R7R                             | —  | 3500                      |      |
|                    | 12.5              | 10                       | 7.3       | 4.3    | 1.8    | 1.0                                    | 60                          | EEFCD1B100R                             | —  | 3500                      |      |
|                    |                   | 15                       | 7.3       | 4.3    | 1.8    | 1.3                                    | 50                          | EEFCD1B150R                             | —  | 3500                      |      |
|                    |                   | 22                       | 7.3       | 4.3    | 1.8    | 1.6                                    | 30                          | EEFCD1B220R                             | —  | 3500                      |      |
|                    |                   | 2.2                      | 7.3       | 4.3    | 1.8    | 1.0                                    | 110                         | EEFCD1C2R2R                             | —  | 3500                      |      |
|                    | 16                | 4.7                      | 7.3       | 4.3    | 1.8    | 1.0                                    | 80                          | EEFCD1C4R7R                             | —  | 3500                      |      |
|                    |                   | 6.8                      | 7.3       | 4.3    | 1.8    | 1.0                                    | 70                          | EEFCD1C6R8R                             | —  | 3500                      |      |
|                    |                   | 8.2                      | 7.3       | 4.3    | 1.8    | 1.3                                    | 45                          | EEFCD1C8R2R                             | —  | 3500                      |      |
|                    |                   | —                        | —         | —      | —      | —                                      | —                           | —                                       | EEFCX0D221R  | 3500                      |      |
|                    | CX                | 2                        | 220       | 7.3    | 4.3    | 1.9                                    | 2.7                         | 15                                      | —  | EEFCX0D271XR              | 3500 |
|                    |                   |                          | 270       | 7.3    | 4.3    | 1.9                                    | 3.0                         | 12                                      | —  | EEFCX0D331R               | 3500 |
|                    |                   |                          | 330       | 7.3    | 4.3    | 1.9                                    | 2.7                         | 15                                      | —  | EEFCX0D331XR              | 3500 |
|                    |                   |                          |           | 7.3    | 4.3    | 1.9                                    | 3.0                         | 12                                      | —  | EEFCX0D391R               | 3500 |
|                    |                   |                          | 390       | 7.3    | 4.3    | 1.9                                    | 2.7                         | 15                                      | —  | EEFCX0D471R               | 3500 |
| 470                |                   |                          | 7.3       | 4.3    | 1.9    | 2.7                                    | 15                          | —                                       | EEFCX0E221R  | 3500                      |      |
| 2.5                |                   | 330                      | 7.3       | 4.3    | 1.9    | 2.7                                    | 15                          | —                                       | EEFCX0E331R  | 3500                      |      |
|                    |                   | 390                      | 7.3       | 4.3    | 1.9    | 2.7                                    | 15                          | —                                       | EEFCX0E391R  | 3500                      |      |
|                    |                   | 470                      | 7.3       | 4.3    | 1.9    | 2.7                                    | 15                          | —                                       | EEFCX0E471R  | 3500                      |      |
| 4                  |                   | 150                      | 7.3       | 4.3    | 1.9    | 2.7                                    | 15                          | —                                       | EEFCX0G151R  | 3500                      |      |
|                    |                   |                          | 7.3       | 4.3    | 1.9    | 2.7                                    | 15                          | —                                       | EEFCX0G181R  | 3500                      |      |
|                    |                   | 180                      | 7.3       | 4.3    | 1.9    | 3.0                                    | 12                          | —                                       | EEFCX0G181XR                                       | 3500                      |      |
|                    |                   |                          | 7.3       | 4.3    | 1.9    | 2.7                                    | 15                          | —                                       | EEFCX0G221R  | 3500                      |      |
|                    |                   | 220                      | 7.3       | 4.3    | 1.9    | 3.0                                    | 12                          | —                                       | EEFCX0G221XR                                       | 3500                      |      |
|                    |                   |                          | 7.3       | 4.3    | 1.9    | 3.0                                    | 12                          | —                                       | EEFCX0J101R  | 3500                      |      |
| 6.3                |                   | 100                      | 7.3       | 4.3    | 1.9    | 2.7                                    | 15                          | —                                       | EEFCX0J121R  | 3500                      |      |
|                    |                   | 120                      | 7.3       | 4.3    | 1.9    | 2.7                                    | 15                          | —                                       | EEFCX0J151R  | 3500                      |      |
|                    |                   | 150                      | 7.3       | 4.3    | 1.9    | 2.7                                    | 15                          | —                                       | EEFCX0J151XR                                       | 3500                      |      |

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

\*3: Please confirm EE25 in detail of the Mounting Specifications.

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.

01 Mar. 2011

### Standard Products

| Series & Size Code | Rated W.V. (V.DC) | Capacitance (±20 %) (μF) | Case Size |        |        | Specification              |                 | Part number                 |  | Min. Packaging Qty (pcs) |
|--------------------|-------------------|--------------------------|-----------|--------|--------|----------------------------|-----------------|-----------------------------|--|--------------------------|
|                    |                   |                          | L (mm)    | W (mm) | H (mm) | Ripple current*1 (Ar.m.s.) | ESR*2 (mΩ max.) | Reflow condition : 240 °C*3 | Reflow condition : 260 °C*3 [Proposal] |                          |
| UD                 | 2                 | 330                      | 7.3       | 4.3    | 2.8    | 3.0                        | 15              | EEFUD0D331R*4               | EEFUD0D331ER*4                         | 2000                     |
|                    |                   |                          | 7.3       | 4.3    | 2.8    | 3.3                        | 12              | EEFUD0D331XR*4              | EEFUD0D331XE*4                         | 2000                     |
|                    |                   |                          | 7.3       | 4.3    | 2.8    | 3.4                        | 9               | EEFUD0D331LR*4              | EEFUD0D331LE*4                         | 2000                     |
|                    |                   | 390                      | 7.3       | 4.3    | 2.8    | 3.0                        | 15              | EEFUD0D391R*4               | EEFUD0D391ER*4                         | 2000                     |
|                    |                   |                          | 7.3       | 4.3    | 2.8    | 3.4                        | 9               | EEFUD0D391LR*4              | EEFUD0D391LE*4                         | 2000                     |
|                    |                   |                          | 7.3       | 4.3    | 2.8    | 3.4                        | 9               | EEFUD0D471LR*4              | EEFUD0D471LE*4                         | 2000                     |
|                    | 2.5               | 220                      | 7.3       | 4.3    | 2.8    | 3.0                        | 15              | EEFUD0E221R*4               | EEFUD0E221ER*4                         | 2000                     |
|                    |                   |                          | 7.3       | 4.3    | 2.8    | 3.3                        | 12              | EEFUD0E221XR*4              | EEFUD0E221XE*4                         | 2000                     |
|                    |                   |                          | 7.3       | 4.3    | 2.8    | 3.4                        | 9               | EEFUD0E221LR*4              | EEFUD0E221LE*4                         | 2000                     |
|                    |                   | 270                      | 7.3       | 4.3    | 2.8    | 3.0                        | 15              | EEFUD0E271R*4               | EEFUD0E271ER*4                         | 2000                     |
|                    |                   |                          | 7.3       | 4.3    | 2.8    | 3.4                        | 9               | EEFUD0E271LR*4              | EEFUD0E271LE*4                         | 2000                     |
|                    |                   |                          | 7.3       | 4.3    | 2.8    | 3.0                        | 15              | EEFUD0G121R*4               | EEFUD0G121ER*4                         | 2000                     |
|                    | 4                 | 120                      | 7.3       | 4.3    | 2.8    | 3.4                        | 12              | EEFUD0G121XR*4              | EEFUD0G121XE*4                         | 2000                     |
|                    |                   |                          | 7.3       | 4.3    | 2.8    | 3.0                        | 15              | EEFUD0G151R*4               | EEFUD0G151ER*4                         | 2000                     |
|                    |                   |                          | 7.3       | 4.3    | 2.8    | 3.3                        | 12              | EEFUD0G151XR*4              | EEFUD0G151XE*4                         | 2000                     |
|                    |                   | 150                      | 7.3       | 4.3    | 2.8    | 3.4                        | 9               | EEFUD0G151LR*4              | EEFUD0G151LE*4                         | 2000                     |
|                    |                   |                          | 7.3       | 4.3    | 2.8    | 2.5                        | 18              | EEFUD0G181R*4               | EEFUD0G181ER*4                         | 2000                     |
|                    |                   |                          | 7.3       | 4.3    | 2.8    | 3.4                        | 9               | EEFUD0G181LR*4              | EEFUD0G181LE*4                         | 2000                     |
|                    | 6.3               | 100                      | 7.3       | 4.3    | 2.8    | 3.0                        | 15              | EEFUD0J101R*4               | EEFUD0J101ER*4                         | 2000                     |
|                    |                   |                          | 7.3       | 4.3    | 2.8    | 3.3                        | 12              | EEFUD0J101XR*4              | EEFUD0J101XE*4                         | 2000                     |
|                    |                   |                          | 7.3       | 4.3    | 2.8    | 3.0                        | 15              | EEFUD0J121R*4               | EEFUD0J121ER*4                         | 2000                     |
|                    |                   | 120                      | 7.3       | 4.3    | 2.8    | 3.3                        | 12              | EEFUD0J121XR*4              | EEFUD0J121XE*4                         | 2000                     |
|                    |                   |                          | 7.3       | 4.3    | 2.8    | 3.4                        | 9               | EEFUD0J121LR*4              | —                                      | 2000                     |
|                    |                   |                          | 7.3       | 4.3    | 2.8    | 2.5                        | 18              | EEFUD0J151R*4               | EEFUD0J151ER*4                         | 2000                     |
| 8                  | 7.3               | 4.3                      | 2.8       | 3.4    | 9      | EEFUD0J151LR*4             | —               | 2000                        |  |                          |
|                    | 68                | 7.3                      | 4.3       | 2.8    | 3.0    | 15                         | EEFUD0K680R     | EEFUD0K680ER                | 2000                                   |                          |
| UE                 | 2                 | 270                      | 7.3       | 4.3    | 4.2    | 3.3                        | 12              | EEFUE0D271R*4               | EEFUE0D271ER*4                         | 2000                     |
|                    |                   |                          | 7.3       | 4.3    | 4.2    | 3.5                        | 10              | EEFUE0D271XR*4              | EEFUE0D271XE*4                         | 2000                     |
|                    |                   |                          | 7.3       | 4.3    | 4.2    | 3.3                        | 12              | EEFUE0D331R*4               | EEFUE0D331ER*4                         | 2000                     |
|                    |                   | 330                      | 7.3       | 4.3    | 4.2    | 3.5                        | 10              | EEFUE0D331XR*4              | EEFUE0D331XE*4                         | 2000                     |
|                    |                   |                          | 7.3       | 4.3    | 4.2    | 3.3                        | 12              | EEFUE0D391R*4               | EEFUE0D391ER*4                         | 2000                     |
|                    |                   |                          | 7.3       | 4.3    | 4.2    | 3.5                        | 10              | EEFUE0D391XR*4              | EEFUE0D391XE*4                         | 2000                     |
|                    |                   | 390                      | 7.3       | 4.3    | 4.2    | 3.7                        | 7               | EEFUE0D391LR*4              | EEFUE0D391LE*4                         | 2000                     |
|                    |                   |                          | 7.3       | 4.3    | 4.2    | 3.3                        | 12              | EEFUE0D471R*4               | EEFUE0D471ER*4                         | 2000                     |
|                    |                   |                          | 7.3       | 4.3    | 4.2    | 3.5                        | 10              | EEFUE0D471XR*4              | EEFUE0D471XE*4                         | 2000                     |
|                    |                   | 470                      | 7.3       | 4.3    | 4.2    | 3.7                        | 7               | EEFUE0D471LR*4              | EEFUE0D471LE*4                         | 2000                     |
|                    |                   |                          | 7.3       | 4.3    | 4.2    | 3.3                        | 12              | EEFUE0D561R                 | EEFUE0D561ER                           | 2000                     |
|                    |                   |                          | 7.3       | 4.3    | 4.2    | 3.7                        | 7               | EEFUE0D561LR                | EEFUE0D561LE                           | 2000                     |
|                    | 2.5               | 220                      | 7.3       | 4.3    | 4.2    | 3.3                        | 12              | EEFUE0E221R*4               | EEFUE0E221ER*4                         | 2000                     |
|                    |                   |                          | 7.3       | 4.3    | 4.2    | 3.5                        | 10              | EEFUE0E221XR*4              | EEFUE0E221XE*4                         | 2000                     |
|                    |                   |                          | 7.3       | 4.3    | 4.2    | 3.3                        | 12              | EEFUE0E271R*4               | EEFUE0E271ER*4                         | 2000                     |
|                    |                   | 270                      | 7.3       | 4.3    | 4.2    | 3.5                        | 10              | EEFUE0E271XR*4              | EEFUE0E271XE*4                         | 2000                     |
|                    |                   |                          | 7.3       | 4.3    | 4.2    | 3.3                        | 12              | EEFUE0E331R*4               | EEFUE0E331ER*4                         | 2000                     |
|                    |                   |                          | 7.3       | 4.3    | 4.2    | 3.5                        | 10              | EEFUE0E331XR*4              | EEFUE0E331XE*4                         | 2000                     |
|                    |                   | 330                      | 7.3       | 4.3    | 4.2    | 3.7                        | 7               | EEFUE0E331LR*4              | EEFUE0E331LE*4                         | 2000                     |
|                    |                   |                          | 7.3       | 4.3    | 4.2    | 3.3                        | 12              | EEFUE0E391R*4               | EEFUE0E391ER*4                         | 2000                     |
|                    |                   |                          | 7.3       | 4.3    | 4.2    | 3.7                        | 7               | EEFUE0E391LR*4              | EEFUE0E391LE*4                         | 2000                     |
|                    |                   | 390                      | 7.3       | 4.3    | 4.2    | 3.3                        | 12              | EEFUE0E471R                 | EEFUE0E471ER                           | 2000                     |
|                    |                   |                          | 7.3       | 4.3    | 4.2    | 3.7                        | 7               | EEFUE0E471LR                | EEFUE0E471LE                           | 2000                     |
|                    |                   |                          | 7.3       | 4.3    | 4.2    | 3.3                        | 12              | EEFUE0G181R*4               | EEFUE0G181ER*4                         | 2000                     |
| 4                  | 180               | 7.3                      | 4.3       | 4.2    | 3.5    | 10                         | EEFUE0G181XR*4  | EEFUE0G181XE*4              | 2000                                   |                          |
|                    |                   | 7.3                      | 4.3       | 4.2    | 3.3    | 12                         | EEFUE0G221R*4   | EEFUE0G221ER*4              | 2000                                   |                          |
|                    |                   | 7.3                      | 4.3       | 4.2    | 3.5    | 10                         | EEFUE0G221XR*4  | EEFUE0G221XE*4              | 2000                                   |                          |
|                    | 220               | 7.3                      | 4.3       | 4.2    | 3.7    | 7                          | EEFUE0G221LR*4  | EEFUE0G221LE*4              | 2000                                   |                          |
|                    |                   | 7.3                      | 4.3       | 4.2    | 3.3    | 12                         | EEFUE0G271R     | EEFUE0G271ER                | 2000                                   |                          |
|                    |                   | 7.3                      | 4.3       | 4.2    | 3.7    | 7                          | EEFUE0G271LR    | EEFUE0G271LE                | 2000                                   |                          |
| 6.3                | 330               | 7.3                      | 4.3       | 4.2    | 3.3    | 12                         | EEFUE0G331R     | EEFUE0G331ER                | 2000                                   |                          |
|                    |                   | 7.3                      | 4.3       | 4.2    | 3.3    | 12                         | EEFUE0J151R*4   | EEFUE0J151ER*4              | 2000                                   |                          |
|                    |                   | 7.3                      | 4.3       | 4.2    | 3.5    | 10                         | EEFUE0J151XR*4  | EEFUE0J151XE*4              | 2000                                   |                          |
|                    | 150               | 7.3                      | 4.3       | 4.2    | 3.3    | 12                         | EEFUE0J181R     | EEFUE0J181ER                | 2000                                   |                          |
|                    |                   | 7.3                      | 4.3       | 4.2    | 3.5    | 10                         | EEFUE0J181XR    | EEFUE0J181XE                | 2000                                   |                          |
|                    |                   | 7.3                      | 4.3       | 4.2    | 3.7    | 7                          | EEFUE0J181LR    | —                           | 2000                                   |                          |
| 8                  | 7.3               | 4.3                      | 4.2       | 3.0    | 15     | EEFUE0J221R                | EEFUE0J221ER    | 2000                        |  |                          |
|                    | 7.3               | 4.3                      | 4.2       | 3.7    | 7      | EEFUE0J221LR               | —               | 2000                        |  |                          |
| 8                  | 100               | 7.3                      | 4.3       | 4.2    | 3.3    | 12                         | EEFUE0K101R*4   | EEFUE0K101ER*4              | 2000                                   |                          |
|                    | 150               | 7.3                      | 4.3       | 4.2    | 3.0    | 15                         | EEFUE0K151R     | EEFUE0K151ER                | 2000                                   |                          |

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

\*3: Please confirm EE25 in detail of the Mounting Specifications.

\*4: Please use proposal part number of EE12, 13 when examining it.

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.