

## Features

- High voltage
- Wider temperature range
- RoHS compliant
- Consumer electronic
- Pulse power
- Hold-up power



| Items                        | Characteristics  |   |                    |   |     |  |
|------------------------------|--|---|--------------------|---|-----|--|
| Rated Voltage                | 3V   |   |                    |   |     |  |
| Operating Temperature Range  | -40 ~ +65°C (-40 ~ +85°C @ 2.5V)   |   |                    |   |     |  |
| Surge Voltage                | 3.2V   |   |                    |   |     |  |
| Capacitance Range            | 1~50F  |   |                    |   |     |  |
| Capacitance Tolerance (25°C) | -10~+30%   |   |                    |   |     |  |
| Temperature Characteristics  | The specifications shall be met at category temperature range from -40°C to 65°C                               | <table border="1"> <tr> <td>Capacitance Change</td><td>Within 30% of the initial value at 25°C</td></tr> <tr> <td>ESR</td><td>Less than 2 times of the initial specified value</td></tr> </table> | Capacitance Change | Within 30% of the initial value at 25°C | ESR | Less than 2 times of the initial specified value |
| Capacitance Change           | Within 30% of the initial value at 25°C  |   |                    |   |     |  |
| ESR                          | Less than 2 times of the initial specified value   |   |                    |   |     |  |
| High Temperature Loaded      | The specifications shall be met after rated voltage applied at 65°C for 1000 hours                             | <table border="1"> <tr> <td>Capacitance Change</td><td>Within 30% of the initial value</td></tr> <tr> <td>ESR</td><td>Less than 4 times of the initial specified value</td></tr> </table>         | Capacitance Change | Within 30% of the initial value         | ESR | Less than 4 times of the initial specified value |
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| ESR                          | Less than 4 times of the initial specified value   |   |                    |   |     |  |
| High Temperature Storage     | The specifications shall be met after storage at 65°C for 1000 hours   | <table border="1"> <tr> <td>Capacitance Change</td><td>Within 30% of the initial value</td></tr> <tr> <td>ESR</td><td>Less than 2 times of the initial specified value</td></tr> </table>         | Capacitance Change | Within 30% of the initial value         | ESR | Less than 2 times of the initial specified value |
| Capacitance Change           | Within 30% of the initial value  |   |                    |   |     |  |
| ESR                          | Less than 2 times of the initial specified value   |   |                    |   |     |  |
| Cycle Life                   | The specifications shall be met after 500,000 cycles at 25°C, cycle of charge/discharge from $V_R$ to $1/2V_R$ | <table border="1"> <tr> <td>Capacitance Change</td><td>Within 30% of the initial value</td></tr> <tr> <td>ESR</td><td>Less than 2 times of the initial specified value</td></tr> </table>         | Capacitance Change | Within 30% of the initial value         | ESR | Less than 2 times of the initial specified value |
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## Dimensions

mm

|    |  |     |     |    |    |    |   |     |     |     |  |    |     |     |     |  |   |     |  |     |  |
|----|--|-----|-----|----|----|----|---|-----|-----|-----|--|----|-----|-----|-----|--|---|-----|--|-----|--|
|    | <table border="1"> <tr> <td>ΦD</td><td>8</td><td>10</td><td>16</td><td>18</td></tr> <tr> <td>p</td><td>3.5</td><td>5.0</td><td>7.5</td><td></td></tr> <tr> <td>Φd</td><td>0.6</td><td>0.6</td><td>0.8</td><td></td></tr> <tr> <td>a</td><td>1.5</td><td></td><td>2.0</td><td></td></tr> </table> | ΦD  | 8   | 10 | 16 | 18 | p | 3.5 | 5.0 | 7.5 |  | Φd | 0.6 | 0.6 | 0.8 |  | a | 1.5 |  | 2.0 |  |
| ΦD | 8  | 10  | 16  | 18 |    |    |   |     |     |     |  |    |     |     |     |  |   |     |  |     |  |
| p  | 3.5  | 5.0 | 7.5 |    |    |    |   |     |     |     |  |    |     |     |     |  |   |     |  |     |  |
| Φd | 0.6  | 0.6 | 0.8 |    |    |    |   |     |     |     |  |    |     |     |     |  |   |     |  |     |  |
| a  | 1.5  |     | 2.0 |    |    |    |   |     |     |     |  |    |     |     |     |  |   |     |  |     |  |

## Standard Ratings for SRE Series

| U <sub>s</sub><br>(Surge<br>Voltage)<br>Code | Rated<br>Capacitance<br>25°C | Impedance         |                           | Leakage<br>Current<br>(72hrs) | Size<br>ΦD×L | Weight | P/N                    |
|--|------------------------------|-------------------|---------------------------|-------------------------------|--------------|--------|------------------------|
|  |                              | ESR <sub>DC</sub> | ESR <sub>AC</sub><br>1KHz |                               |              |        |                        |
| (V)  | (F)                          | (mΩ)              | (mΩ)                      | (mA)                          | (mm)         | (g)    | -                      |
| 3<br>(3.2)<br>3R0                            | 1                            | 400               | 260                       | 0.010                         | 8 x 14       | 0.8    | SCCDER3R0105QRH080014E |
|  | 2                            | 250               | 130                       | 0.012                         | 8 x 14       | 1      | SCCDER3R0205QRH080014E |
|  | 3                            | 150               | 80                        | 0.014                         | 8 x 20       | 1.4    | SCCDER3R0305QRH080020E |
|  | 5                            | 130               | 70                        | 0.018                         | 10 x 20      | 2.1    | SCCDER3R0505QRH100020E |
|  | 7                            | 80                | 55                        | 0.025                         | 10 x 25      | 2.3    | SCCDER3R0705QRH100025E |
|  | 10                           | 60                | 40                        | 0.040                         | 10 x 30      | 3.2    | SCCDER3R0106QRH100030E |
|  | 25                           | 35                | 25                        | 0.080                         | 16 x 25      | 7      | SCCDER3R0256QRH160025E |
|  | 50                           | 22                | 15                        | 0.150                         | 18 x 40      | 12.8   | SCCDER3R0506QRH180040E |