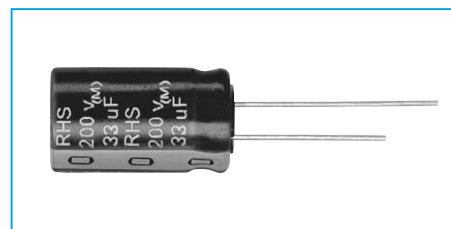
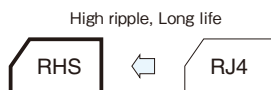


### 105°C Use, Miniature, High-Ripple, Long Life Capacitors

GREEN  
CAP

105°C  
5000hours

- Higher ripple current.
- Guarantees 4000 to 5000 hours at 105°C.
- Best-suited to electronic ballast.



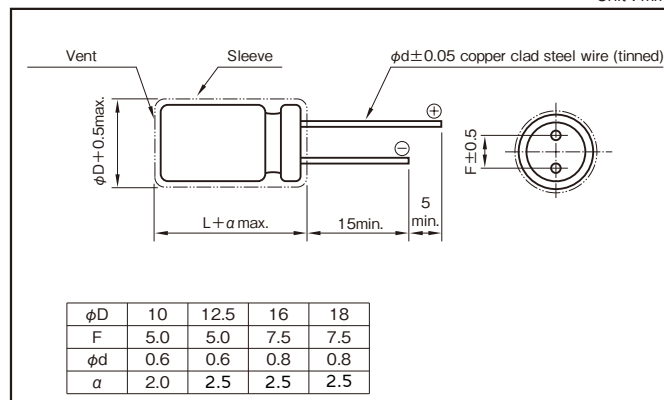
Marking color : White print on a black sleeve

### Specifications

| Item  | Performance   |            |            |  |                   |  |            |            |                       |                                     |      |      |                    |                                      |   |  |                       |   |  |  |
|---|---|------------|------------|--|-------------------|--|------------|------------|-----------------------|-------------------------------------|------|------|--------------------|--------------------------------------|---|--|-----------------------|---|--|--|
| Category temperature range (°C)               | −40 to +105 (−25 to +105 at 350V or more)   |            |            |  |                   |  |            |            |                       |                                     |      |      |                    |                                      |   |  |                       |   |  |  |
| Rated Voltage (V)                             | 160 to 450  |            |            |  |                   |  |            |            |                       |                                     |      |      |                    |                                      |   |  |                       |   |  |  |
| Tolerance at rated capacitance (%)            | ±20 (20°C,120Hz)  |            |            |  |                   |  |            |            |                       |                                     |      |      |                    |                                      |   |  |                       |   |  |  |
| Leakage current (μA)                          | CV≥1000 : Less than 0.06CV+40 (after 1 minutes) CV<1000 : Less than 0.03CV+70 (after 1 minutes)<br>C : Rated capacitance (μF), V : Rated voltage (V) (20°C)   |            |            |  |                   |  |            |            |                       |                                     |      |      |                    |                                      |   |  |                       |   |  |  |
| Tangent of loss angle                         | <table><tr><td>Rated voltage (V)</td><td>160 to 250</td><td>350 to 400</td><td>450</td></tr><tr><td>Tangent of loss angle</td><td>0.12</td><td>0.15</td><td>0.20</td></tr></table> (20°C,120Hz)   |            |            |  | Rated voltage (V) | 160 to 250                                   | 350 to 400 | 450        | Tangent of loss angle | 0.12                                | 0.15 | 0.20 |                    |                                      |   |  |                       |   |  |  |
| Rated voltage (V)                             | 160 to 250  | 350 to 400 | 450        |  |                   |  |            |            |                       |                                     |      |      |                    |                                      |   |  |                       |   |  |  |
| Tangent of loss angle                         | 0.12  | 0.15       | 0.20       |  |                   |  |            |            |                       |                                     |      |      |                    |                                      |   |  |                       |   |  |  |
| Characteristics at high and low temperature   | <table><tr><td colspan="2">Rated voltage (V)</td><td>160 to 250</td><td>350 to 450</td></tr><tr><td rowspan="2">Impedance ratio</td><td>Z−25°C/Z+20°C</td><td>3</td><td>6</td></tr><tr><td>Z−40°C/Z+20°C</td><td>4</td><td>—</td></tr></table> (120Hz)  |            |            |  | Rated voltage (V) |  | 160 to 250 | 350 to 450 | Impedance ratio       | Z−25°C/Z+20°C                       | 3    | 6    | Z−40°C/Z+20°C      | 4                                    | — |  |                       |   |  |  |
| Rated voltage (V)                             |   | 160 to 250 | 350 to 450 |  |                   |  |            |            |                       |                                     |      |      |                    |                                      |   |  |                       |   |  |  |
| Impedance ratio                               | Z−25°C/Z+20°C   | 3          | 6          |  |                   |  |            |            |                       |                                     |      |      |                    |                                      |   |  |                       |   |  |  |
|   | Z−40°C/Z+20°C   | 4          | —          |  |                   |  |            |            |                       |                                     |      |      |                    |                                      |   |  |                       |   |  |  |
| Endurance (105°C)<br>(Applied ripple current) | <table><tr><td>Test time</td><td colspan="3">φ10 : 4000 hours<br/>φ12.5 to 18 : 5000 hours</td></tr><tr><td>Leakage current</td><td colspan="3">The initial specified value or less</td></tr><tr><td>Capacitance change</td><td colspan="3">Within −20% to +20% of initial value</td></tr><tr><td>Tangent of loss angle</td><td colspan="3">300% or less of the initial specified value</td></tr></table> |            |            |  | Test time         | φ10 : 4000 hours<br>φ12.5 to 18 : 5000 hours |            |            | Leakage current       | The initial specified value or less |      |      | Capacitance change | Within −20% to +20% of initial value |   |  | Tangent of loss angle | 300% or less of the initial specified value |  |  |
| Test time                                     | φ10 : 4000 hours<br>φ12.5 to 18 : 5000 hours  |            |            |  |                   |  |            |            |                       |                                     |      |      |                    |                                      |   |  |                       |   |  |  |
| Leakage current                               | The initial specified value or less   |            |            |  |                   |  |            |            |                       |                                     |      |      |                    |                                      |   |  |                       |   |  |  |
| Capacitance change                            | Within −20% to +20% of initial value  |            |            |  |                   |  |            |            |                       |                                     |      |      |                    |                                      |   |  |                       |   |  |  |
| Tangent of loss angle                         | 300% or less of the initial specified value   |            |            |  |                   |  |            |            |                       |                                     |      |      |                    |                                      |   |  |                       |   |  |  |
| Shelf life (105°C)                            | <table><tr><td>Test time</td><td colspan="3">1000 hours</td></tr><tr><td>Leakage current</td><td colspan="3">The initial specified value or less</td></tr><tr><td>Capacitance change</td><td colspan="3">Within −20% to +20% of initial value</td></tr><tr><td>Tangent of loss angle</td><td colspan="3">200% or less of the initial specified value</td></tr></table> Voltage application treatment      |            |            |  | Test time         | 1000 hours                                   |            |            | Leakage current       | The initial specified value or less |      |      | Capacitance change | Within −20% to +20% of initial value |   |  | Tangent of loss angle | 200% or less of the initial specified value |  |  |
| Test time                                     | 1000 hours  |            |            |  |                   |  |            |            |                       |                                     |      |      |                    |                                      |   |  |                       |   |  |  |
| Leakage current                               | The initial specified value or less   |            |            |  |                   |  |            |            |                       |                                     |      |      |                    |                                      |   |  |                       |   |  |  |
| Capacitance change                            | Within −20% to +20% of initial value  |            |            |  |                   |  |            |            |                       |                                     |      |      |                    |                                      |   |  |                       |   |  |  |
| Tangent of loss angle                         | 200% or less of the initial specified value   |            |            |  |                   |  |            |            |                       |                                     |      |      |                    |                                      |   |  |                       |   |  |  |
| Applicable Standards                          | JIS C 5101-01, -04 1998 (IEC 60384-1 1992, 60384-4 1985)  |            |            |  |                   |  |            |            |                       |                                     |      |      |                    |                                      |   |  |                       |   |  |  |

### Outline Drawing

Unit : mm



### Coefficient of Frequency for Rated Ripple Current

| Rated voltage (V) | Frequency (Hz) | 50,60 | 120  | 300  | 1k   | 10k or more |
|-------------------|----------------|-------|------|------|------|-------------|
| 160 to 450        |                | 0.75  | 1.00 | 1.20 | 1.35 | 1.50        |

### Part numbering system (example : 400V10μF)

|             |   |                      |   |                          |                              |               |   |                   |
|-------------|---|----------------------|---|--------------------------|------------------------------|---------------|---|-------------------|
| RHS         | — | 400                  | V | 100                      | M                            | I5            | # | B                 |
| Series code |   | Rated voltage symbol |   | Rated capacitance symbol | Capacitance tolerance symbol | Casing symbol |   | Additional symbol |

## ■ Standard Ratings

| Rated voltage(V)<br>Case<br>φD×L (mm) |  | Item<br>Casing<br>symbol | 160                        |          |  | 200                        |          |  | 250                        |          |  | 350                        |          |  |
|---------------------------------------|--|--------------------------|----------------------------|----------|--|----------------------------|----------|--|----------------------------|----------|--|----------------------------|----------|--|
|                                       |  |                          | Rated<br>capacitance<br>μF | ESR<br>Ω | Rated ripple<br>current<br>mA <sub>rms</sub> | Rated<br>capacitance<br>μF | ESR<br>Ω | Rated ripple<br>current<br>mA <sub>rms</sub> | Rated<br>capacitance<br>μF | ESR<br>Ω | Rated ripple<br>current<br>mA <sub>rms</sub> | Rated<br>capacitance<br>μF | ESR<br>Ω | Rated ripple<br>current<br>mA <sub>rms</sub> |
| 10×12.5                               |  | H3                       | —                          | —        | —  | 4.7                        | 41       | 60   | 4.7                        | 41       | 60   | 3.3                        | 72       | 50   |
| 10×16                                 |  | H4                       | 10                         | 19       | 95   | 10                         | 19       | 95   | —                          | —        | —  | 4.7                        | 51       | 65   |
| 10×20                                 |  | H5                       | 22                         | 9.0      | 145  | 22                         | 9.0      | 145  | 10                         | 19       | 105  | —                          | —        | —  |
| 12.5×20                               |  | I5                       | 33                         | 6.0      | 190  | 33                         | 6.0      | 190  | —                          | —        | —  | 10                         | 24       | 120  |
| 12.5×25                               |  | I6                       | 47                         | 4.0      | 280  | 47                         | 4.0      | 280  | 22                         | 9.0      | 180  | 22                         | 11       | 180  |
|                                       |  |                          | —                          | —        | —  | —                          | —        | —  | 33                         | 6.0      | 250  | —                          | —        | —  |
| 16×20                                 |  | J5                       | 47                         | 4.0      | 280  | 47                         | 4.0      | 280  | 33                         | 6.0      | 250  | 22                         | 11       | 180  |
| 16×25                                 |  | J6                       | 100                        | 2.0      | 380  | —                          | —        | —  | 47                         | 4.0      | 300  | 33                         | 7.0      | 210  |
| 16×31.5                               |  | J7                       | —                          | —        | —  | 100                        | 2.0      | 410  | 100                        | 2.0      | 410  | —                          | —        | —  |
| 16×35.5                               |  | J8                       | —                          | —        | —  | —                          | —        | —  | —                          | —        | —  | 47                         | 5.0      | 300  |
| 18×20                                 |  | K5                       | 100                        | 2.0      | 380  | —                          | —        | —  | 47                         | 4.0      | 300  | —                          | —        | —  |
| 18×25                                 |  | K6                       | —                          | —        | —  | 100                        | 2.0      | 410  | 100                        | 2.0      | 410  | —                          | —        | —  |
| 18×31.5                               |  | K7                       | —                          | —        | —  | —                          | —        | —  | —                          | —        | —  | 47                         | 5.0      | 300  |
| 18×35.5                               |  | K8                       | 220                        | 0.90     | 630  | —                          | —        | —  | —                          | —        | —  | —                          | —        | —  |

| Rated voltage(V)<br>Case<br>φD×L (mm) |  | Item<br>Casing<br>symbol | 400                        |          |  | 450                        |          |  |
|---------------------------------------|--|--------------------------|----------------------------|----------|--|----------------------------|----------|--|
|                                       |  |                          | Rated<br>capacitance<br>μF | ESR<br>Ω | Rated ripple<br>current<br>mA <sub>rms</sub> | Rated<br>capacitance<br>μF | ESR<br>Ω | Rated ripple<br>current<br>mA <sub>rms</sub> |
| 10×12.5                               |  | H3                       | 2.2                        | 109      | 40   | 1.0                        | 318      | 30   |
| 10×16                                 |  | H4                       | 3.3                        | 72       | 50   | 2.2                        | 145      | 45   |
| 10×20                                 |  | H5                       | 4.7                        | 51       | 70   | 3.3                        | 96       | 65   |
| 12.5×20                               |  | I5                       | 10                         | 24       | 120  | —                          | —        | —  |
| 12.5×25                               |  | I6                       | —                          | —        | —  | 4.7                        | 68       | 80   |
|                                       |  |                          | —                          | —        | —  | 10                         | 32       | 140  |
| 16×25                                 |  | J6                       | 22                         | 11       | 200  | 22                         | 14       | 220  |
|                                       |  |                          | —                          | —        | —  | 33                         | 10       | 280  |
| 16×31.5                               |  | J7                       | 33                         | 7.0      | 245  | 47                         | 5.6      | 420  |
| 16×35.5                               |  | J8                       | —                          | —        | —  | 68                         | 3.9      | 520  |
| 18×20                                 |  | K5                       | 22                         | 11       | 200  | —                          | —        | —  |
| 18×25                                 |  | K6                       | 33                         | 7.0      | 245  | —                          | —        | —  |
| 18×31.5                               |  | K7                       | 47                         | 5.0      | 300  | 82                         | 3.2      | 580  |
| 18×35.5                               |  | K8                       | —                          | —        | —  | 100                        | 2.6      | 750  |
| 18×40                                 |  | K9                       | —                          | —        | —  | 120                        | 2.2      | 800  |

(Note) ESR : 20°C, 120Hz ; Rated ripple current : 105°C, 120Hz

## NOTE

Design, Specifications are subject to change without notice.  
Ask factory for technical specifications before purchase and/or use.