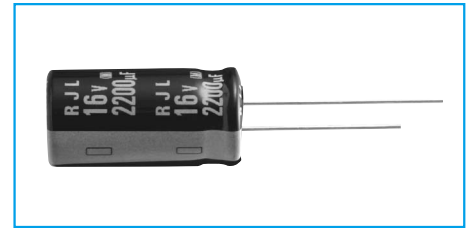
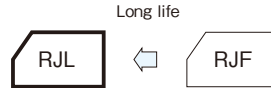


105°C Use, Miniature, Long Life, extra Low Impedance Capacitors

| | | | |
|--------------|------------------|---------------------|------------------------------|
| GREEN CAP | Low Impedance | 105°C 10000hours | Anti- cleaning solvent |
|--------------|------------------|---------------------|------------------------------|

- Long life than RJF Series.
- Guarantees 4000 to 10000 hours at 105°C.



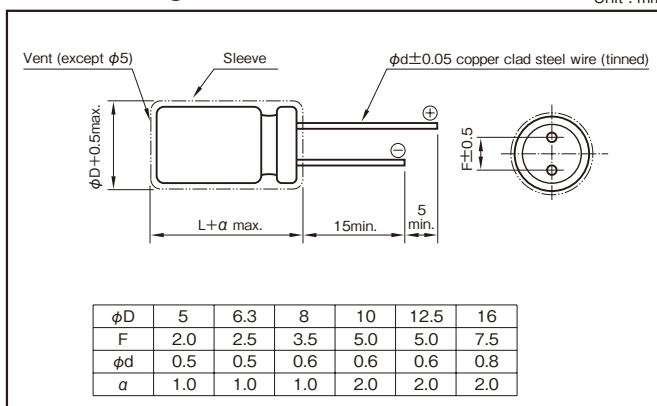
Marking color : White print on a black sleeve

Specifications

| Item | Performance | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|------|------|------|------|------|------|------|-------------------|---|----|----|----|----|----|----|-----|------------------------|-------------------------------------|------|------|------|------|------|------|------|----------------------------------|------------------------------|---|---|---|---|---|---|--|---------------------------|---|--|--|--|--|--|--|--|
| Category temperature range (°C) | -40 to +105 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tolerance at rated capacitance (%) | ±20 (20°C,120Hz) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Leakage current (μA) | Less than 0.01CV or 3 whichever is larger (after 2 minutes) C : Rated capacitance (μF), V : Rated voltage (V) (20°C) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tangent of loss angle (tanδ) | <table><tr><td>Rated voltage (V)</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</td><td>63</td><td>100</td></tr><tr><td>tanδ (max.)</td><td>0.22</td><td>0.19</td><td>0.16</td><td>0.14</td><td>0.12</td><td>0.10</td><td>0.09</td><td>0.08</td></tr></table> | | | | | | | | | Rated voltage (V) | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | 100 | tanδ (max.) | 0.22 | 0.19 | 0.16 | 0.14 | 0.12 | 0.10 | 0.09 | 0.08 | | | | | | | | | | | | | | | | | | |
| | Rated voltage (V) | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | 100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | tanδ (max.) | 0.22 | 0.19 | 0.16 | 0.14 | 0.12 | 0.10 | 0.09 | 0.08 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.02 is added to every 1000μF increase over 1000μF. (20°C,120Hz) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Characteristics at high and low temperature | <table><tr><td>Rated voltage (V)</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</td><td>63</td><td>100</td></tr><tr><td rowspan="2">Impedance ratio (max.)</td><td>Z-25°C/Z+20°C</td><td>4</td><td>3</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td></tr><tr><td>Z-40°C/Z+20°C</td><td>8</td><td>6</td><td>4</td><td>3</td><td>3</td><td>3</td><td>3</td></tr></table> | | | | | | | | | Rated voltage (V) | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | 100 | Impedance ratio (max.) | Z-25°C/Z+20°C | 4 | 3 | 2 | 2 | 2 | 2 | 2 | Z-40°C/Z+20°C | 8 | 6 | 4 | 3 | 3 | 3 | 3 | | | | | | | | | | |
| | Rated voltage (V) | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | 100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Impedance ratio (max.) | Z-25°C/Z+20°C | 4 | 3 | 2 | 2 | 2 | 2 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Z-40°C/Z+20°C | | 8 | 6 | 4 | 3 | 3 | 3 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| (120Hz) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Endurance (105°C) (Applied ripple current) | <table><tr><td>Test time</td><td colspan="8">φ5, φ6.3 : 5000 hours (6.3~10WV : 4000 hours) φ8, φ10 : 7000 hours (6.3~10WV : 6000 hours) φ12.5, φ16 : 10000 hours (6.3~10WV : 8000 hours)</td></tr><tr><td>Leakage current</td><td colspan="8">The initial specified value or less</td></tr><tr><td>Percentage of capacitance change</td><td colspan="8">Within ±25% of initial value</td></tr><tr><td>Tangent of the loss angle</td><td colspan="8">200% or less of the initial specified value</td></tr></table> | | | | | | | | | Test time | φ5, φ6.3 : 5000 hours (6.3~10WV : 4000 hours) φ8, φ10 : 7000 hours (6.3~10WV : 6000 hours) φ12.5, φ16 : 10000 hours (6.3~10WV : 8000 hours) | | | | | | | | Leakage current | The initial specified value or less | | | | | | | | Percentage of capacitance change | Within ±25% of initial value | | | | | | | | Tangent of the loss angle | 200% or less of the initial specified value | | | | | | | |
| | Test time | φ5, φ6.3 : 5000 hours (6.3~10WV : 4000 hours) φ8, φ10 : 7000 hours (6.3~10WV : 6000 hours) φ12.5, φ16 : 10000 hours (6.3~10WV : 8000 hours) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Leakage current | The initial specified value or less | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Percentage of capacitance change | Within ±25% of initial value | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tangent of the loss angle | 200% or less of the initial specified value | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Shelf life (105°C) | <table><tr><td>Test time</td><td colspan="8">1000 hours</td></tr><tr><td>Leakage current</td><td colspan="8">The initial specified value or less</td></tr><tr><td>Percentage of capacitance change</td><td colspan="8">Within ±25% of initial value</td></tr><tr><td>Tangent of the loss angle</td><td colspan="8">200% or less of initial specified value</td></tr></table> | | | | | | | | | Test time | 1000 hours | | | | | | | | Leakage current | The initial specified value or less | | | | | | | | Percentage of capacitance change | Within ±25% of initial value | | | | | | | | Tangent of the loss angle | 200% or less of initial specified value | | | | | | | |
| | Test time | 1000 hours | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Leakage current | The initial specified value or less | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Percentage of capacitance change | Within ±25% of initial value | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tangent of the loss angle | 200% or less of initial specified value | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Voltage application treatment | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Applicable standards | JIS C5101-1, -4 1998 (IEC 60384-1 1992, -4 1985) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Outline Drawing

Unit : mm



Coefficient of Frequency for Rated Ripple Current

| Rated capacitance (µF) \ Frequency (Hz) | 120 | 1k | 10k | 100k |
|---|------|------|------|------|
| to 33 | 0.42 | 0.70 | 0.90 | 1.00 |
| 47 to 270 | 0.50 | 0.73 | 0.92 | 1.00 |
| 330 to 680 | 0.55 | 0.77 | 0.94 | 1.00 |
| 820 to 1800 | 0.60 | 0.80 | 0.96 | 1.00 |
| 2200 to 6800 | 0.70 | 0.85 | 0.98 | 1.00 |

Part numbering system (example : 10V1000µF)

| | | | | | | | |
|-------------|---|----------------------|---|--------------------------|------------------------------|---------------|-------------------|
| RJL | — | 10 | V | 102 | M | H4 | # |
| Series code | | Rated voltage symbol | | Rated capacitance symbol | Capacitance tolerance symbol | Casing symbol | Additional symbol |

NOTE

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

Standard Ratings

| Rated voltage (V) | Item | 6.3 | | | | | 10 | | | | | 16 | | | | |
|------------------------|----------|-----------|---------------|---------------|-------|---------------------------|-----------|---------------|---------------|-------|---------------------------|-----------|---------------|---------------|-------|---------------------------|
| | | Case | Casing symbol | Impedance (Ω) | | Rated ripple current (mA) | Case | Casing symbol | Impedance (Ω) | | Rated ripple current (mA) | Case | Casing symbol | Impedance (Ω) | | Rated ripple current (mA) |
| | | | | 20°C | -10°C | | | | 20°C | -10°C | | | | 20°C | -10°C | |
| Rated capacitance (μF) | | φD×L (mm) | | | | | φD×L (mm) | | | | | φD×L (mm) | | | | |
| 56 | — | — | — | — | — | — | — | — | — | — | — | 5×11.5 | E3 | 0.58 | 2.3 | 210 |
| 100 | — | — | — | — | — | — | 5×11.5 | E3 | 0.58 | 2.3 | 210 | — | — | — | — | — |
| 120 | — | — | — | — | — | — | — | — | — | — | — | 6.3×11.5 | F3 | 0.22 | 0.87 | 340 |
| 150 | 5×11.5 | E3 | 0.58 | 2.3 | 210 | — | — | — | — | — | — | — | — | — | — | — |
| 220 | — | — | — | — | — | — | 6.3×11.5 | F3 | 0.22 | 0.87 | 340 | — | — | — | — | — |
| 330 | 6.3×11.5 | F3 | 0.22 | 0.87 | 340 | — | — | — | — | — | — | 8×12 | G3 | 0.13 | 0.52 | 640 |
| 470 | — | — | — | — | — | — | 8×12 | G3 | 0.13 | 0.52 | 640 | 8×15 | G4 | 0.087 | 0.35 | 840 |
| 560 | 8×12 | G3 | 0.13 | 0.52 | 640 | — | 8×15 | G4 | 0.087 | 0.35 | 840 | — | — | — | — | — |
| 680 | 8×12 | G3 | 0.13 | 0.52 | 640 | — | 10×12.5 | H3 | 0.080 | 0.32 | 865 | 10×16 | H4 | 0.060 | 0.24 | 1210 |
| 820 | 10×12.5 | H3 | 0.080 | 0.32 | 865 | — | 10×16 | H4 | 0.060 | 0.24 | 1210 | 10×20 | H5 | 0.046 | 0.18 | 1400 |
| 1000 | 8×15 | G4 | 0.087 | 0.35 | 840 | — | 10×16 | H4 | 0.060 | 0.24 | 1210 | 10×20 | H5 | 0.046 | 0.18 | 1400 |
| 1200 | 10×16 | H4 | 0.060 | 0.24 | 1210 | — | 10×20 | H5 | 0.046 | 0.18 | 1400 | 10×25 | H6 | 0.042 | 0.17 | 1650 |
| 1500 | 10×20 | H5 | 0.046 | 0.18 | 1400 | — | 10×25 | H6 | 0.042 | 0.17 | 1650 | 12.5×20 | I5 | 0.035 | 0.12 | 1900 |
| 1800 | 10×25 | H6 | 0.042 | 0.17 | 1650 | — | 12.5×20 | I5 | 0.035 | 0.12 | 1900 | 12.5×25 | I6 | 0.027 | 0.089 | 2230 |
| 2200 | 10×25 | H6 | 0.042 | 0.17 | 1650 | — | 12.5×20 | I5 | 0.035 | 0.12 | 1900 | 12.5×25 | I6 | 0.027 | 0.089 | 2230 |
| 2700 | — | — | — | — | — | — | — | — | — | — | — | 16×20 | J5 | 0.027 | 0.078 | 2530 |
| 3300 | 12.5×20 | I5 | 0.035 | 0.12 | 1900 | — | 12.5×25 | I6 | 0.027 | 0.089 | 2230 | 12.5×35 | I8 | 0.020 | 0.065 | 2880 |
| 3900 | — | — | — | — | — | — | — | — | — | — | — | 16×25 | J6 | 0.021 | 0.060 | 2930 |
| 4700 | 12.5×30 | I7 | 0.024 | 0.078 | 2650 | — | 12.5×35 | I8 | 0.020 | 0.065 | 2880 | — | — | — | — | — |
| 5600 | 16×20 | J5 | 0.027 | 0.078 | 2530 | — | 16×25 | J6 | 0.021 | 0.060 | 2930 | — | — | — | — | — |
| 6800 | 16×25 | J6 | 0.021 | 0.060 | 2930 | — | — | — | — | — | — | — | — | — | — | — |

| Rated voltage (V) | Item | 25 | | | | | 35 | | | | | 50 | | | | |
|------------------------|----------|-----------|---------------|---------------|-------|---------------------------|-----------|---------------|---------------|-------|---------------------------|-----------|---------------|---------------|-------|---------------------------|
| | | Case | Casing symbol | Impedance (Ω) | | Rated ripple current (mA) | Case | Casing symbol | Impedance (Ω) | | Rated ripple current (mA) | Case | Casing symbol | Impedance (Ω) | | Rated ripple current (mA) |
| | | | | 20°C | -10°C | | | | 20°C | -10°C | | | | 20°C | -10°C | |
| Rated capacitance (μF) | | φD×L (mm) | | | | | φD×L (mm) | | | | | φD×L (mm) | | | | |
| 10 | — | — | — | — | — | — | — | — | — | — | — | 5×11.5 | E3 | 1.50 | 6.0 | 100 |
| 22 | — | — | — | — | — | — | — | — | — | — | — | 5×11.5 | E3 | 0.70 | 2.8 | 180 |
| 33 | — | — | — | — | — | — | 5×11.5 | E3 | 0.58 | 2.3 | 210 | — | — | — | — | — |
| 47 | 5×11.5 | E3 | 0.58 | 2.3 | 210 | — | — | — | — | — | — | — | — | — | — | — |
| 56 | — | — | — | — | — | — | 6.3×11.5 | F3 | 0.22 | 0.87 | 340 | 6.3×11.5 | F3 | 0.30 | 1.2 | 295 |
| 100 | 6.3×11.5 | F3 | 0.22 | 0.87 | 340 | — | — | — | — | — | — | 8×12 | G3 | 0.17 | 0.68 | 555 |
| 120 | — | — | — | — | — | — | — | — | — | — | — | 8×15 | G4 | 0.12 | 0.48 | 730 |
| 150 | — | — | — | — | — | — | 8×12 | G3 | 0.13 | 0.52 | 640 | 10×12.5 | H3 | 0.12 | 0.48 | 760 |
| 180 | — | — | — | — | — | — | 8×15 | G4 | 0.087 | 0.35 | 870 | 8×20 | G5 | 0.091 | 0.36 | 910 |
| 220 | 8×12 | G3 | 0.13 | 0.52 | 640 | — | 8×15 | G4 | 0.087 | 0.35 | 870 | 10×16 | H4 | 0.084 | 0.34 | 1050 |
| 270 | — | — | — | — | — | — | 8×20 | G5 | 0.069 | 0.27 | 1050 | 10×20 | H5 | 0.060 | 0.24 | 1220 |
| 330 | 8×15 | G4 | 0.087 | 0.35 | 840 | — | 10×16 | H4 | 0.060 | 0.24 | 1210 | 10×25 | H6 | 0.055 | 0.22 | 1440 |
| 470 | 10×16 | H4 | 0.060 | 0.24 | 1210 | — | 10×20 | H5 | 0.046 | 0.18 | 1400 | 12.5×20 | I5 | 0.045 | 0.15 | 1660 |
| 560 | — | — | — | — | — | — | 10×25 | H6 | 0.042 | 0.17 | 1650 | 12.5×25 | I6 | 0.034 | 0.11 | 1950 |
| 680 | 10×20 | H5 | 0.046 | 0.18 | 1400 | — | 12.5×20 | I5 | 0.035 | 0.12 | 1900 | 12.5×25 | I6 | 0.034 | 0.11 | 1950 |
| 820 | 10×25 | H6 | 0.042 | 0.17 | 1650 | — | 12.5×25 | I6 | 0.027 | 0.089 | 2230 | 12.5×30 | I7 | 0.030 | 0.10 | 2310 |
| 1000 | 12.5×20 | I5 | 0.035 | 0.12 | 1900 | — | 12.5×25 | I6 | 0.027 | 0.089 | 2230 | 16×25 | J6 | 0.025 | 0.075 | 2555 |
| 1200 | 12.5×25 | I6 | 0.027 | 0.089 | 2230 | — | 16×20 | J5 | 0.027 | 0.078 | 2530 | — | — | — | — | — |
| 1500 | 12.5×25 | I6 | 0.027 | 0.089 | 2230 | — | 12.5×35 | I8 | 0.020 | 0.065 | 2880 | — | — | — | — | — |
| 1800 | 16×20 | J5 | 0.027 | 0.078 | 2530 | — | 16×25 | J6 | 0.021 | 0.060 | 2930 | — | — | — | — | — |
| 2200 | 12.5×35 | I8 | 0.020 | 0.065 | 2880 | — | — | — | — | — | — | — | — | — | — | — |
| 2700 | 16×25 | J6 | 0.021 | 0.060 | 2930 | — | — | — | — | — | — | — | — | — | — | — |

| Rated voltage (V) | Item | 63 | | | | | 100 | | | | |
|------------------------|----------|-----------|---------------|---------------|-------|---------------------------|-----------|---------------|---------------|-------|---------------------------|
| | | Case | Casing symbol | Impedance (Ω) | | Rated ripple current (mA) | Case | Casing symbol | Impedance (Ω) | | Rated ripple current (mA) |
| | | | | 20°C | -10°C | | | | 20°C | -10°C | |
| Rated capacitance (μF) | | φD×L (mm) | | | | | φD×L (mm) | | | | |
| 6.8 | — | — | — | — | — | — | 5×11.5 | E3 | 2.3 | 9.3 | 55 |
| 15 | 5×11.5 | E3 | 2.3 | 9.3 | 55 | — | 6.3×11.5 | F3 | 1.2 | 5.0 | 115 |
| 27 | 6.3×11.5 | F3 | 1.2 | 5.0 | 115 | — | 8×12 | G3 | 0.63 | 2.8 | 232 |
| 47 | — | — | — | — | — | — | 10×12.5 | H3 | 0.43 | 1.8 | 288 |
| 56 | 8×12 | G3 | 0.63 | 2.8 | 232 | — | 8×20 | G5 | 0.33 | 1.6 | 362 |
| 68 | — | — | — | — | — | — | 10×16 | H4 | 0.31 | 1.5 | 357 |
| 82 | 8×15 | G4 | 0.45 | 2.1 | 300 | — | 10×20 | H5 | 0.21 | 0.94 | 466 |
| 100 | — | — | — | — | — | — | 10×25 | H6 | 0.20 | 0.84 | 531 |
| 120 | 10×16 | H4 | 0.31 | 1.5 | 357 | — | 12.5×20 | I5 | 0.16 | 0.64 | 690 |
| 180 | 10×20 | H5 | 0.21 | 0.94 | 466 | — | 12.5×25 | I6 | 0.120 | 0.45 | 784 |
| 220 | 10×25 | H6 | 0.20 | 0.84 | 531 | — | 16×20 | J5 | 0.091 | 0.38 | 1040 |
| 270 | 12.5×20 | I5 | 0.16 | 0.64 | 690 | — | 16×25 | J6 | 0.073 | 0.27 | 1250 |
| 330 | 12.5×25 | I6 | 0.12 | 0.45 | 784 | — | — | — | — | — | — |
| 390 | 16×20 | J5 | 0.091 | 0.38 | 1040 | — | — | — | — | — | — |
| 470 | 16×20 | J5 | 0.091 | 0.38 | 1040 | — | — | — | — | — | — |
| 560 | 16×25 | J6 | 0.073 | 0.27 | 1250 | — | — | — | — | — | — |

(Note) Impedance : 100kHz ; Rated ripple current : 105°C, 100kHz

NOTE

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