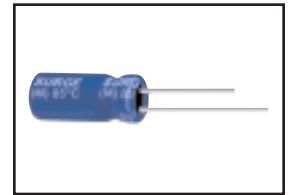




ALUMINUM ELECTROLYTIC CAPACITORS

FEATURES

- 85°C, 1000 HOURS ASSURED, 5MM HEIGHT WITH LOW LEAKAGE CURRENT
- USE IN VERY COMPACT HIGH TEMPERATURE INDUSTRIAL EQUIPMENT

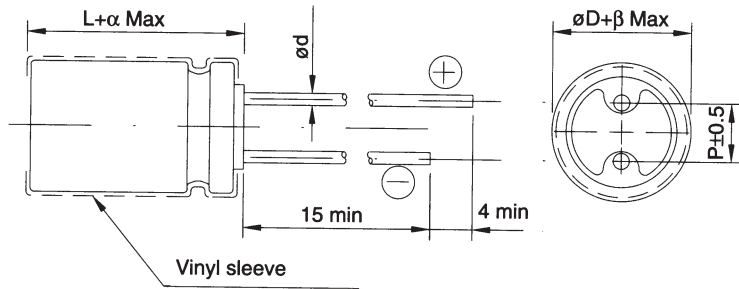


SPECIFICATIONS

| Items | Performance | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----------|--------------------|----------------------------------|--------------------|-----------------------------------|-----------------|------------------------|-----------------|-------------------|------|------|------|------|------|------|--|-------------------|----|---|---|---|---|---|
| Operating Temperature Range | -40°C~+85°C | | | | | | | | | | | | | | | | | | | | | | | | |
| Capacitance Tolerance | ±20% (at 120Hz, 20°C) | | | | | | | | | | | | | | | | | | | | | | | | |
| Leakage Current (at 20 °C) | I = 0.002CV or 0.4(μA) whichever is greater (after 2 minutes) Where, C = rated capacitance in μF. V = rated DC working voltage in V. | | | | | | | | | | | | | | | | | | | | | | | | |
| Dissipation Factor (Tan δ at 120 Hz, 20 °C) | <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>Rated Voltage</td> <td>4</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> </tr> <tr> <td>Tan δ (max)</td> <td>0.35</td> <td>0.27</td> <td>0.23</td> <td>0.19</td> <td>0.15</td> <td>0.13</td> <td>0.11</td> </tr> </table> | Rated Voltage | 4 | 6.3 | 10 | 16 | 25 | 35 | 50 | Tan δ (max) | 0.35 | 0.27 | 0.23 | 0.19 | 0.15 | 0.13 | 0.11 | | | | | | | | |
| Rated Voltage | 4 | 6.3 | 10 | 16 | 25 | 35 | 50 | | | | | | | | | | | | | | | | | | |
| Tan δ (max) | 0.35 | 0.27 | 0.23 | 0.19 | 0.15 | 0.13 | 0.11 | | | | | | | | | | | | | | | | | | |
| Low Temperature Characteristics (at 120 Hz) | <p>Impedance ratio shall not exceed the values given in the table below.</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>Rated Voltage</td> <td>4</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> </tr> <tr> <td>Impedance Ratio</td> <td>Z(-25°C)/Z(+20°C)</td> <td>6</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td></td> <td>Z(-40°C)/Z(+20°C)</td> <td>12</td> <td>9</td> <td>7</td> <td>5</td> <td>3</td> <td>3</td> </tr> </table> | Rated Voltage | 4 | 6.3 | 10 | 16 | 25 | 35 | 50 | Impedance Ratio | Z(-25°C)/Z(+20°C) | 6 | 3 | 2 | 2 | 2 | 2 | | Z(-40°C)/Z(+20°C) | 12 | 9 | 7 | 5 | 3 | 3 |
| Rated Voltage | 4 | 6.3 | 10 | 16 | 25 | 35 | 50 | | | | | | | | | | | | | | | | | | |
| Impedance Ratio | Z(-25°C)/Z(+20°C) | 6 | 3 | 2 | 2 | 2 | 2 | | | | | | | | | | | | | | | | | | |
| | Z(-40°C)/Z(+20°C) | 12 | 9 | 7 | 5 | 3 | 3 | | | | | | | | | | | | | | | | | | |
| Load Life Test | <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>Test Time</td> <td>1000 Hrs</td> </tr> <tr> <td>Capacitance Change</td> <td>4~6.3V ≤ ± 30% 10~50V ≤ ± 25%</td> </tr> <tr> <td>Dissipation Factor</td> <td>Less than 200% of specified value</td> </tr> <tr> <td>Leakage Current</td> <td>Within specified value</td> </tr> </table> <p>*The above specifications shall be satisfied when the capacitors are restored to 20 °C after the rated voltage applied for 1000 hrs at 85°C.</p> | Test Time | 1000 Hrs | Capacitance Change | 4~6.3V ≤ ± 30% 10~50V ≤ ± 25% | Dissipation Factor | Less than 200% of specified value | Leakage Current | Within specified value | | | | | | | | | | | | | | | | |
| Test Time | 1000 Hrs | | | | | | | | | | | | | | | | | | | | | | | | |
| Capacitance Change | 4~6.3V ≤ ± 30% 10~50V ≤ ± 25% | | | | | | | | | | | | | | | | | | | | | | | | |
| Dissipation Factor | Less than 200% of specified value | | | | | | | | | | | | | | | | | | | | | | | | |
| Leakage Current | Within specified value | | | | | | | | | | | | | | | | | | | | | | | | |
| Shelf Life Test | <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>Test Time</td> <td>500 Hrs</td> </tr> <tr> <td>Capacitance Change</td> <td>4~6.3V ≤ ± 30% 10~50V ≤ ± 25%</td> </tr> <tr> <td>Dissipation Factor</td> <td>Less than 200% of specified value</td> </tr> <tr> <td>Leakage Current</td> <td>Within specified value</td> </tr> </table> <p>*The above specifications shall be satisfied when the capacitors are restored to 20 °C after exposing them for 500 hrs at 85 °C without voltage applied.</p> | Test Time | 500 Hrs | Capacitance Change | 4~6.3V ≤ ± 30% 10~50V ≤ ± 25% | Dissipation Factor | Less than 200% of specified value | Leakage Current | Within specified value | | | | | | | | | | | | | | | | |
| Test Time | 500 Hrs | | | | | | | | | | | | | | | | | | | | | | | | |
| Capacitance Change | 4~6.3V ≤ ± 30% 10~50V ≤ ± 25% | | | | | | | | | | | | | | | | | | | | | | | | |
| Dissipation Factor | Less than 200% of specified value | | | | | | | | | | | | | | | | | | | | | | | | |
| Leakage Current | Within specified value | | | | | | | | | | | | | | | | | | | | | | | | |
| Standards | Satisfies Characteristic W of JIS C 5141 | | | | | | | | | | | | | | | | | | | | | | | | |



DIAGRAM OF DIMENSIONS



Unit: mm
LEAD SPACING AND DIAMETER

| | | | |
|-----|-----|-----|------|
| øD | 4 | 5 | 6.3 |
| P | 1.5 | 2.0 | 2.5 |
| ø d | | | 0.45 |
| α | | | 1.0 |
| β | | | 0.5 |

DIMENSION & PERMISSIBLE RIPPLE CURRENT

Dimension: ø D x L(mm)
Ripple Current: mA/rms at 120 Hz, 85 °C

| VDC | code | 4V (0G) | | 6.3V (0J) | | 10V (1A) | | 16V (1C) | | 25V (1E) | | 35V (1V) | | 50V (1H) | |
|------|------|---------|----|-----------|----|----------|----|----------|----|----------|----|----------|----|----------|-----|
| | | ø D x L | mA | ø D x L | mA | ø D x L | mA | ø D x L | mA | ø D x L | mA | ø D x L | mA | ø D x L | mA |
| 0.1 | 0R1 | | | | | | | | | | | | | 4 x 5 | 1 |
| 0.22 | R22 | | | | | | | | | | | | | 4 x 5 | 2 |
| 0.33 | R33 | | | | | | | | | | | | | 4 x 5 | 3 |
| 0.47 | R47 | | | | | | | | | | | | | 4 x 5 | 3.8 |
| 1 | 010 | | | | | | | | | | | | | 4 x 5 | 6.9 |
| 2.2 | 2R2 | | | | | | | | | | | | | 4 x 5 | 10 |
| 3.3 | 3R3 | | | | | | | | | | | | | 4 x 5 | 13 |
| 4.7 | 4R7 | | | | | | | | | 4 x 5 | 14 | 4 x 5 | 16 | 5 x 5 | 19 |
| 10 | 100 | | | | | | | 4 x 5 | 19 | 5 x 5 | 23 | 5 x 5 | 24 | 6.3 x 5 | 32 |
| 22 | 220 | | | 4 x 5 | 22 | 5 x 5 | 24 | 5 x 5 | 28 | 6.3 x 5 | 38 | 6.3 x 5 | 42 | | |
| 33 | 330 | 5 x 5 | 27 | 5 x 5 | 28 | 5 x 5 | 30 | 6.3 x 5 | 41 | 6.3 x 5 | 46 | | | | |
| 47 | 470 | 5 x 5 | 32 | 5 x 5 | 34 | 6.3 x 5 | 43 | 6.3 x 5 | 50 | 6.3 x 5 | 58 | | | | |
| 100 | 101 | 6.3 x 5 | 54 | 6.3 x 5 | 60 | | | | | | | | | | |