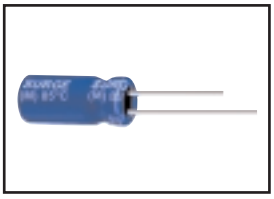
SURGE
Components Inc.
1016 Grand Boulevard
Deer Park, NY 11729 • 631 595-1818 • FAX: 631 595-1283

ALUMINUM ELECTROLYTIC CAPACITORS
NON POLAR, REDUCED SIZE



FEATURES
☐ NON-POLARIZED SERIES WITH 7MM HEIGHT
☐ DEVELOPED FOR USE WHERE LOW LEAKAGE CURRENT IS ESSENTIAL
☐ LEAKAGE CURRENT REMAINS VERY LOW EVEN AFTER PROLONGED STORAGE

SPECIFICATIONS

<table>
<tr><th>Items</th><th>Performance</th></tr>
<tr><td>Operating Temperature Range</td><td>-40˚C~+85˚C</td></tr>
<tr><td>Capacitance Tolerance</td><td>±20% (at 120Hz, 20˚C)</td></tr>
<tr><td>Leakage Current (at 20 ˚C)</td><td>I = 0.05CV or 10(μA) whichever is greater (after 2 minutes)
Where, C = rated capacitance in μF. V = rated DC working voltage in V.</td></tr>
<tr><td>Dissipation Factor
(Tan δ at 120 Hz, 20 ˚C)</td><td>
<table>
<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><td>63</td></tr>
<tr><td>Tan δ (max)</td><td>0.35</td><td>0.24</td><td>0.20</td><td>0.16</td><td>0.16</td><td>0.14</td><td>0.12</td><td>0.10</td></tr>
</table>
</td></tr>
<tr><td>Low Temperature
Characteristics (at 120 Hz)</td><td>Impedance ratio shall not exceed the values given in the table below.
<table>
<tr><td colspan="2">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><td>63</td></tr>
<tr><td rowspan="2">Impedance Ratio</td><td>Z(-25˚C)/Z(+20˚C)</td><td>4</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>10</td><td>10</td><td>8</td><td>6</td><td>4</td><td>3</td><td>3</td><td>3</td></tr>
</table>
</td></tr>
<tr><td>Load Life Test
(after application of the rated voltage at 85 ˚C, the polarity inverted every 250hrs.)</td><td>
<table>
<tr><td>Test Time</td><td>1000 Hrs</td></tr>
<tr><td>Capacitance Change</td><td>≤ ± 20%</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>
*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.
</td></tr>
<tr><td>Shelf Life Test</td><td>
<table>
<tr><td>Test Time</td><td>500 Hrs</td></tr>
<tr><td>Capacitance Change</td><td>≤ ± 20%</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>
*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.
</td></tr>
<tr><td>Standards</td><td>Satisfies Characteristic W of JIS C 5141</td></tr>
</table>

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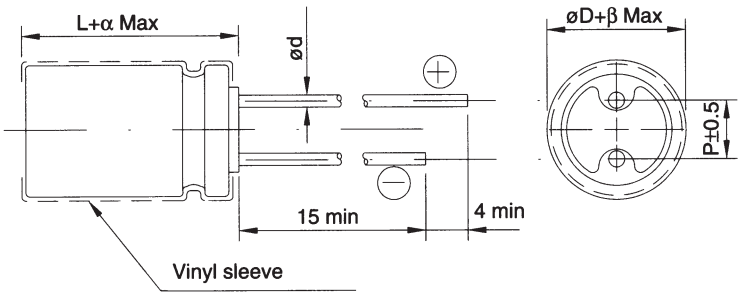
DIAGRAM OF DIMENSIONS



Unit: mm

LEAD SPACING AND DIAMETER

øD	4	5	6.3	8
P	1.5	2.0	2.5	3.5
ø d	0.45	0.5		
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

V.DC		4V (0G)		6.3V (0J)		10V (1A)		16V (1C)		25V (1E)		35V (1V)		50V (1H)		63V (1J)	
µF	code	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	ø D x L	mA
0.1	0R1													4 x 7	2.1	4 x 7	2.6
0.22	R22													4 x 7	4.5	4 x 7	5
0.33	R33													4 x 7	5.6	4 x 7	6.1
0.47	R47													4 x 7	6.6	4 x 7	7.3
1	010													4 x 7	9.7	4 x 7	10
2.2	2R2											4 x 7	13	4 x 7	14	5 x 7	16
3.3	3R3									4 x 7	15	5 x 7	16	5 x 7	18	6.3 x 7	20
4.7	4R7							4 x 7	18	5 x 7	18	5 x 7	20	6.3 x 7	22	8 x 7	24
10	100					4 x 7	23	5 x 7	27	6.3 x 7	28	8 x 7	30				
22	220			5 x 7	40	5 x 7	40	6.3 x 7	45	8 x 7	52						
33	330	5 x 7	40	5 x 7	40	6.3 x 7	45	8 x 7	52								
47	470	6.3 x 7	45	6.3 x 7	49	8 x 7	55										
100	101	8 x 7	66														