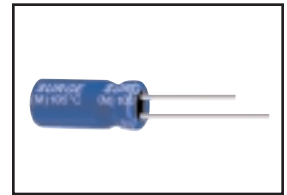




ALUMINUM ELECTROLYTIC CAPACITORS
LOW LEAKAGE, HIGH TEMP, REDUCED SIZE



FEATURES

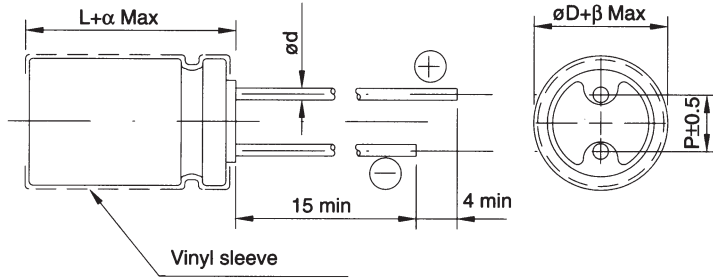
- 105 °C, WIDE TEMPERATURE
- 7MM HEIGHT
- LOW LEAKAGE CURRENT
- SUITABLE FOR USE IN VERY COMPACT HIGH TEMPERATURE INDUSTRIAL EQUIPMENT

SPECIFICATIONS

Items	Performance																											
Operating Temperature Range	-40°C~+105°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> <td>63</td> </tr> <tr> <td>Tan δ (max)</td> <td>0.35</td> <td>0.24</td> <td>0.21</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> <td>0.10</td> </tr> </table>	Rated Voltage	4	6.3	10	16	25	35	50	63	Tan δ (max)	0.35	0.24	0.21	0.16	0.14	0.12	0.10	0.10									
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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> <td>63</td> </tr> <tr> <td>Impedance Ratio Z(-25°C)/Z(+20°C)</td> <td>6</td> <td>4</td> <td>3</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Ratio Z(-40°C)/Z(+20°C)</td> <td>12</td> <td>10</td> <td>6</td> <td>6</td> <td>4</td> <td>4</td> <td>4</td> <td>3</td> </tr> </table>	Rated Voltage	4	6.3	10	16	25	35	50	63	Impedance Ratio Z(-25°C)/Z(+20°C)	6	4	3	3	2	2	2	2	Ratio Z(-40°C)/Z(+20°C)	12	10	6	6	4	4	4	3
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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>≤ ± 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> <p>*The above specifications shall be satisfied when the capacitors are restored to 20 °C after the rated voltage applied for 1000 hrs at 105°C.</p>	Test Time	1000 Hrs	Capacitance Change	≤ ± 20%	Dissipation Factor	Less than 200% of specified value	Leakage Current	Within specified value																			
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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>≤ ± 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> <p>*The above specifications shall be satisfied when the capacitors are restored to 20 °C after exposing them for 500 hrs at 105 °C without voltage applied.</p>	Test Time	500 hrs	Capacitance Change	≤ ± 20%	Dissipation Factor	Less than 200% of specified value	Leakage Current	Within specified value																			
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Ripple Current & Frequency Multipliers	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: center;">Freq. (Hz)</td> <td>60 (50)</td> <td>120</td> <td>500</td> <td>1K</td> <td>10K up</td> </tr> <tr> <td style="text-align: center;">Cap. (μF)</td> <td>Under 47</td> <td>0.70</td> <td>1.00</td> <td>1.20</td> <td>1.30</td> </tr> <tr> <td></td> <td>47 to 220</td> <td>0.80</td> <td>1.00</td> <td>1.10</td> <td>1.15</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>1.15</td> <td>1.20</td> </tr> </table>	Freq. (Hz)	60 (50)	120	500	1K	10K up	Cap. (μF)	Under 47	0.70	1.00	1.20	1.30		47 to 220	0.80	1.00	1.10	1.15					1.15	1.20			
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Standards	Satisfies Characteristic W of JIS C 5141																											



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: ø D x L(mm)
Ripple Current: mA/rms at 120 Hz, 105 °C

DIMENSION & PERMISSIBLE RIPPLE CURRENT

μF	code	4V (0G)		6.3V (0J)		10V (1A)		16V (1C)		25V (1E)		35V (1V)		50V (1H)		63V (1J)	
		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	3	4 x 7	3
0.22	R22													4 x 7	5	4 x 7	5
0.33	R33													4 x 7	6	4 x 7	6
0.47	R47													4 x 7	7	4 x 7	7
1	010													4 x 7	10	4 x 7	10
2.2	2R2													4 x 7	16	5 x 7	19
3.3	3R3											4 x 7	18	4 x 7	20	6.3 x 7	29
4.7	4R7								4 x 7	19	5 x 7	21	6.3 x 7	24	6.3 x 7	36	
10	100						4 x 7	27	5 x 7	29	6.3 x 7	32	8 x 7	40			
22	220					4 x 7	36	4 x 7	40	6.3 x 7	44	6.3 x 7	49				
33	330	4 x 7	33	4 x 7	41	5 x 7	44	5 x 7	50	6.3 x 7	55	8 x 7	67				
47	470	4 x 7	39	5 x 7	49	6.3 x 7	54	6.3 x 7	62	8 x 7	74						
100	101	6.3 x 7	59	6.3 x 7	75	8 x 7	90										