

SMD Aluminum Electrolytic Capacitors

LC Series – Low Impedance Chip Type 105°C 1000hrs



Specifications

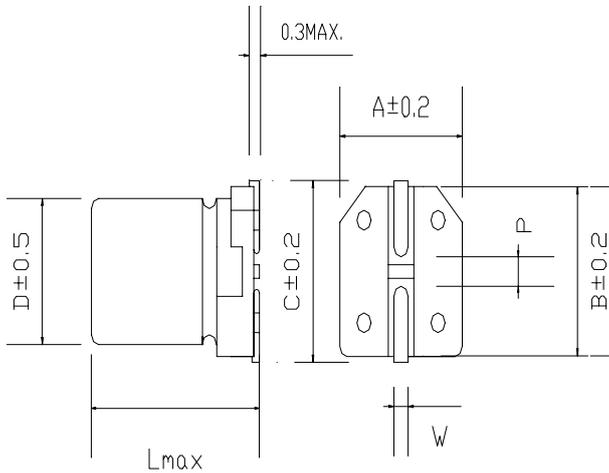
Item	Performance																					
Operating Temperature Range	-55 to +105°C																					
Rated Working Voltage Range	6.3 – 50VDC																					
Nominal Capacitance Range	1 – 220µ F																					
Capacitance Tolerance	± 20% (at +20°C , 120Hz)																					
Leakage Current (20°C)	$I \leq 0.01CV$ or $3(\mu A)$, after 2 minutes whichever is greater measured with rated working voltage applied..																					
Dissipation Factor (tanδ) (120Hz\+20°C)	<table border="1"> <tr> <td>VDC</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> </tr> <tr> <td>D.F. max.</td> <td>0.28</td> <td>0.24</td> <td>0.20</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> </tr> </table>	VDC	6.3	10	16	25	35	50	D.F. max.	0.28	0.24	0.20	0.16	0.14	0.12							
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Characteristics at Low Temperature (stability at 120 Hz)	<table border="1"> <tr> <td>Working voltage VDC</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> </tr> <tr> <td>Z -25/ +20°C</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z -55/ +20°C</td> <td>10</td> <td>7</td> <td>5</td> <td>3</td> <td>3</td> <td>3</td> </tr> </table>	Working voltage VDC	6.3	10	16	25	35	50	Z -25/ +20°C	4	3	2	2	2	2	Z -55/ +20°C	10	7	5	3	3	3
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Z -25/ +20°C	4	3	2	2	2	2																
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Load life	<p>After 1000hrs. application of DC rated working voltage at +105°C, The capacitor shall meet the following limits: Post test requirements at +20°C .</p> <table border="1"> <tr> <td>Leakage Current</td> <td>the initial specified value</td> </tr> <tr> <td>Capacitance change</td> <td>±25% of initial measured value.</td> </tr> <tr> <td>Dissipation Factor(tanδ)</td> <td>200% of initial specified value</td> </tr> </table>	Leakage Current	the initial specified value	Capacitance change	±25% of initial measured value.	Dissipation Factor(tanδ)	200% of initial specified value															
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Shelf Life	<p>After storage for 1000hrs. at +105°C with no voltage applied. Post test requirements at +20°C, same limits as load life test. DC Rated voltage should be applied before measurement for 30 minutes.</p>																					
Ripple Current & Frequency Multipliers	<table border="1"> <tr> <td>Frequency (Hz)</td> <td>50, 60</td> <td>120</td> <td>1K</td> <td>10K up</td> </tr> <tr> <td>Multiplier</td> <td>0.64</td> <td>0.8</td> <td>0.93</td> <td>1.0</td> </tr> </table>	Frequency (Hz)	50, 60	120	1K	10K up	Multiplier	0.64	0.8	0.93	1.0											
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Diagram of Dimensions



ΦD	L±0.3	A	B	C	W	P±0.2
4	5.3	4.3	4.3	2.0	0.5~0.8	1.0
5	5.3	5.3	5.3	2.3	0.5~0.8	1.5
6.3	5.3	6.6	6.6	2.7	0.5~0.8	2.0
6.3	7.7	6.6	6.6	2.7	0.5~0.8	2.0

Case Size

Max ripple current: mA rms at 105°C. 100KHz (DxL mm)

Impedance : Ω / at 100KHz, 20°C

W.V	6.3V			10V			16V			25V			35V			50V		
μF	DxL	Imp	mA	DxL	Imp	mA												
1.0																4x5.3	5.0	30
2.2																4x5.3	5.0	30
3.3																4x5.3	5.0	30
4.7										4x5.3	3.20	6.5	4x5.3	3.20	65	5x5.3	1.5	85
10				4x5.3	3.20	65	4x5.3	3.20	65	5x5.3	1.50	110	5x5.3	1.50	110	6.3x5.3	0.9	165
22	4x5.3	3.20	65	5x5.3	1.50	110	5x5.3	1.50	110	6.3x5.3	0.85	170	6.3x5.3	0.85	170	6.3x5.3	0.9	165
33	5x5.3	1.50	110	5x5.3	1.50	110	6.3x5.3	0.85	170	6.3x5.3	0.85	170	6.3x5.3	0.85	170	6.3x7.7	0.7	185
47	5x5.3	1.50	110	6.3x5.3	0.85	170	6.3x5.3	0.85	170	6.3x5.3	0.85	170	6.3x7.7	0.50	255	6.3x7.7	0.7	185
100	6.3x5.3	0.85	170	6.3x5.3	0.85	170	6.3x5.3	0.85	170	6.3x7.7	0.50	255						
150	6.3x7.7	0.50	255	6.3x7.7	0.50	255	6.3x7.7	0.50	255	8x10.2	0.17	450						
220	6.3x7.7	0.50	255	6.3x7.7	0.50	255	6.3x7.7	0.50	255									