

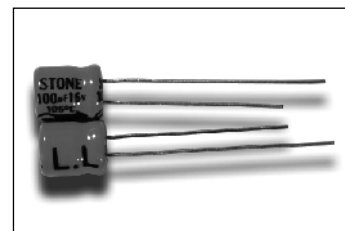


Aluminum Electrolytic Capacitors

SL Series

Features

- 105°C, 7mm height with Low Leakage Current
- RoHS Compliance



Specification

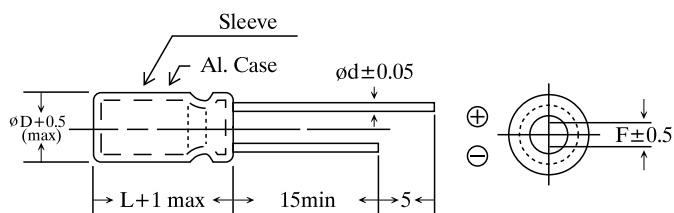
Items	Performance																					
Capacitance Tolerance	±20% (at 120Hz, 20°C)																					
Rated Voltage Range	6.3 to 50 VDC																					
Capacitance Range	0.1 to 100 μF																					
Operating Temperature Range	-40 to + 105°C																					
Leakage Current (at 20°C)	<p>$I \leq 0.002 CV$ or $1 (\mu A)$, whichever is greater. After 3 minutes application of working voltage. I = Leakage current (μA), C = Rated capacitance (μF), V = Rated voltage (V)</p>																					
Dissipation Factor (Tan δ at 120Hz, 20°C)	<table border="1"> <thead> <tr> <th>Rated Voltage</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> </tr> </thead> <tbody> <tr> <td>Tan δ (max)</td> <td>0.24</td> <td>0.20</td> <td>0.17</td> <td>0.15</td> <td>0.12</td> <td>0.10</td> </tr> </tbody> </table>	Rated Voltage	6.3	10	16	25	35	50	Tan δ (max)	0.24	0.20	0.17	0.15	0.12	0.10							
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Low Temperature Characteristics (at 120Hz)	<p>Impedance ratio max.</p> <table border="1"> <thead> <tr> <th>Rated Voltage</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> </tr> </thead> <tbody> <tr> <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> </tr> <tr> <td>Z-40°C/Z+20°C</td> <td>10</td> <td>8</td> <td>6</td> <td>4</td> <td>3</td> <td>3</td> </tr> </tbody> </table>	Rated Voltage	6.3	10	16	25	35	50	Z-25°C/Z+20°C	4	3	2	2	2	2	Z-40°C/Z+20°C	10	8	6	4	3	3
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Load Life	<p>After 1000 hours application of W.V. at 105°C, the capacitor shall meet the following limits.</p> <p>Capacitance change : $\leq \pm 25\%$ of initial value Dissipation factor : $\leq 200\%$ of initial specified value Leakage Current : \leq Initial specified value</p>																					
Shelf Life	<p>After storage for 500 hours at 105°C, with no voltage applied and being stabilized at + 20°C, Capacitor shall meet the limit specified in load life.</p>																					
Ripple Current & Frequency Multiplier	<table border="1"> <thead> <tr> <th>Freq.(Hz) \ Cap.(μF)</th> <th>60 (50)</th> <th>120</th> <th>500</th> <th>1K</th> <th>10K up</th> </tr> </thead> <tbody> <tr> <td>Under 10</td> <td>0.80</td> <td>1.00</td> <td>1.20</td> <td>1.30</td> <td>1.40</td> </tr> <tr> <td>10 to 100</td> <td>0.80</td> <td>1.00</td> <td>1.10</td> <td>1.15</td> <td>1.20</td> </tr> </tbody> </table>	Freq.(Hz) \ Cap.(μF)	60 (50)	120	500	1K	10K up	Under 10	0.80	1.00	1.20	1.30	1.40	10 to 100	0.80	1.00	1.10	1.15	1.20			
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DIAGRAM OF DIMENSIONS



LEAD SPACING AND DIAMETER Unit: mm

D	4	5	6.3	8
F	1.5	2.0	2.5	3.5
d	0.45			0.5

DIMENSION & PERMISSIBLE RIPPLE CURRENT

Dimension : $\phi D \times L$ (mm)

Ripple Current : mA/rms at 120Hz, 105°C

μF \ VDC	10V		16V		25V		35V		50V		63V	
	$\phi D \times L$	mA	$\phi D \times L$	mA	$\phi D \times L$	mA	$\phi D \times L$	mA	$\phi D \times L$	mA	$\phi D \times L$	mA
0.1											4x7	2
0.22											4x7	2
0.33											4x7	3
0.47											4x7	5
1											4x7	8
2.2											4x7	12
3.3											4x7	15
4.7											4x7	19
10							4x7	20	5x7	30	6.3x7	35
22					5x7	35	5x7	38	6.3x7	45	8x7	48
33			5x7	38	5x7	44	6.3x7	50	8x7	58		
47			5x7	48	6.3x7	55	6.3x7	60				
100	5x7	59	6.3x7	78	6.3x7	78						