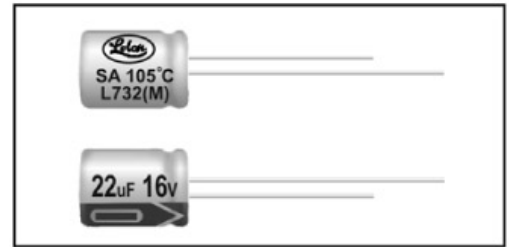


Feature

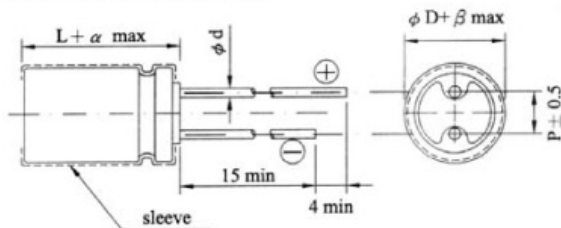
- 105°C, 1,000 hours assured, 7mm height with low leakage current
- Use in very compact high temperature industrial equipment
- RoHS Compliance



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 120Hz, 20°C)	<table border="1"> <thead> <tr> <th>Rated Voltage</th> <th>4</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> </tr> </thead> <tbody> <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> </tbody> </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											
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																						
Low Temperature Characteristics (at 120 Hz)	<p>Impedance ratio shall not exceed the values given in the table below.</p> <table border="1"> <thead> <tr> <th colspan="2">Rated Voltage</th> <th>4</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Impedance Ratio</td> <td>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>Z(-40°C)/Z(+20°C)</td> <td>12</td> <td>10</td> <td>8</td> <td>6</td> <td>5</td> <td>4</td> <td>4</td> <td>3</td> </tr> </tbody> </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	Z(-40°C)/Z(+20°C)	12	10	8	6	5	4	4	3
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																					
	Z(-40°C)/Z(+20°C)	12	10	8	6	5	4	4	3																					
Load Life Test	<table border="1"> <thead> <tr> <th>Test Time</th> <th>1,000 hrs</th> </tr> </thead> <tbody> <tr> <td>Capacitance Change</td> <td>Within ±20% of initial value</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> </tbody> </table> <p>* The above specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage applied with rated ripple current for 1,000 hrs at 105°C.</p>	Test Time	1,000 hrs	Capacitance Change	Within ±20% of initial value	Dissipation Factor	Less than 200% of specified value	Leakage Current	Within specified value																					
Test Time	1,000 hrs																													
Capacitance Change	Within ±20% of initial value																													
Dissipation Factor	Less than 200% of specified value																													
Leakage Current	Within specified value																													
Shelf Life Test	Test time: 500 hrs; other items are the same as those for the load life test.																													
Ripple Current & Frequency Multipliers	<table border="1"> <thead> <tr> <th rowspan="2">Cap.(μF)</th> <th colspan="5">Freq.(Hz)</th> </tr> <tr> <th>60 (50)</th> <th>120</th> <th>500</th> <th>1K</th> <th>10K up</th> </tr> </thead> <tbody> <tr> <td>Under 47</td> <td>0.70</td> <td>1.00</td> <td>1.20</td> <td>1.30</td> <td>1.45</td> </tr> <tr> <td>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>	Cap.(μF)	Freq.(Hz)					60 (50)	120	500	1K	10K up	Under 47	0.70	1.00	1.20	1.30	1.45	100	0.80	1.00	1.10	1.15	1.20						
Cap.(μF)	Freq.(Hz)																													
	60 (50)	120	500	1K	10K up																									
Under 47	0.70	1.00	1.20	1.30	1.45																									
100	0.80	1.00	1.10	1.15	1.20																									

DIAGRAM OF DIMENSIONS



LEAD SPACING AND DIAMETER Unit: mm

φ D	4	5	6.3	8
P	1.5	2.0	2.5	3.5
φ d	0.45	0.5		
α	1.0			
β	0.5			

DIMENSION & PERMISSIBLE RIPPLE CURRENT

Dimension: φ D × L(mm)
Ripple Current: mA/rms at 120 Hz, 105°C

μF	V. DC Contents	4V (0G)		6.3V (0J)		10V (1A)		16V (1C)		25V (1E)		35V (1V)		50V (1H)		63V (1J)	
		φ D×L	mA	φ D×L	mA	φ D×L	mA	φ D×L	mA	φ D×L	mA	φ D×L	mA	φ D×L	mA	φ D×L	mA
0.1	0R1													4×7	3	4×7	3
0.22	R22													4×7	5	4×7	5
0.33	R33													4×7	6	4×7	6
0.47	R47													4×7	7	4×7	7
1	010													4×7	10	4×7	10
2.2	2R2													4×7	16	5×7	19
3.3	3R3											4×7	18	4×7	20	6.3×7	29
4.7	4R7									4×7	19	5×7	21	6.3×7	24	6.3×7	36
10	100							4×7	27	5×7	29	6.3×7	32	8×7	40		
22	220					4×7	36	4×7	40	6.3×7	44	6.3×7	49				
33	330	4×7	33	4×7	41	5×7	44	5×7	50	6.3×7	55	8×7	67				
47	470	4×7	39	5×7	49	6.3×7	54	6.3×7	62	8×7	74						
100	101	6.3×7	59	6.3×7	75	8×7	90										