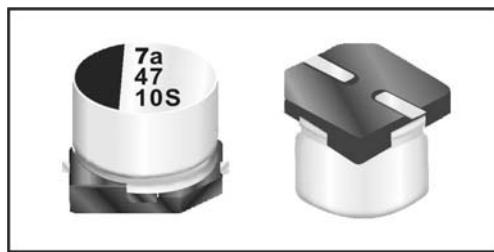


Features

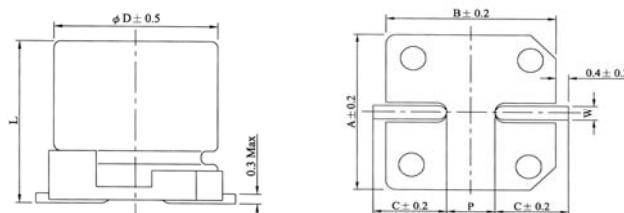
- 4~6.3 ϕ , 105°C, 1,000 hours assured
- Vertical chip type miniaturized for 5.5mm high capacitor
- Designed for surface mounting on high density PC board.
- RoHS Compliance



SPECIFICATIONS

Items	Performance																											
Operating Temperature Range	$-55^{\circ}\text{C} \sim +105^{\circ}\text{C}$																											
Capacitance Tolerance	$\pm 20\%$ (at 120Hz, 20°C)																											
Leakage Current (at 20°C)	I = 0.01CV or 3 (μA) whichever is greater (after 2 minutes) Where, C = rated capacitance in μF . V = rated DC working voltage in V.																											
Dissipation Factor ($\tan \delta$ 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>$\tan \delta$ (max)</td> <td>0.30</td> <td>0.26</td> <td>0.22</td> <td>0.16</td> <td>0.13</td> <td>0.12</td> </tr> </tbody> </table>							Rated Voltage	6.3	10	16	25	35	50	$\tan \delta$ (max)	0.30	0.26	0.22	0.16	0.13	0.12							
Rated Voltage	6.3	10	16	25	35	50																						
$\tan \delta$ (max)	0.30	0.26	0.22	0.16	0.13	0.12																						
Low Temperature Characteristics (at 120Hz)	<p>Impedance ratio shall not exceed the values given in the table below.</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>Impedance Ratio</td> <td>Z(-25°C)/Z(+20°C)</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td></td> <td>Z(-40°C)/Z(+20°C)</td> <td>8</td> <td>5</td> <td>4</td> <td>3</td> <td>3</td> </tr> </tbody> </table>							Rated Voltage	6.3	10	16	25	35	50	Impedance Ratio	Z(-25°C)/Z(+20°C)	4	3	2	2	2		Z(-40°C)/Z(+20°C)	8	5	4	3	3
Rated Voltage	6.3	10	16	25	35	50																						
Impedance Ratio	Z(-25°C)/Z(+20°C)	4	3	2	2	2																						
	Z(-40°C)/Z(+20°C)	8	5	4	3	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 $\pm 20\%$ 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 for 1,000 hrs at 105°C.</p>							Test Time	1,000 Hrs	Capacitance Change	Within $\pm 20\%$ of initial value	Dissipation Factor	Less than 200% of specified value	Leakage Current	Within specified value													
Test Time	1,000 Hrs																											
Capacitance Change	Within $\pm 20\%$ of initial value																											
Dissipation Factor	Less than 200% of specified value																											
Leakage Current	Within specified value																											
Shelf Life Test	Test time: 1,000 hrs; other items are the same as those for the load life test.																											
Ripple Current & Frequency Multipliers	<table border="1"> <thead> <tr> <th>Freq.(Hz) V.DC(V)</th> <th>50</th> <th>120</th> <th>1K</th> <th>10K up</th> </tr> </thead> <tbody> <tr> <td>Under 16</td> <td>0.8</td> <td>1.0</td> <td>1.15</td> <td>1.25</td> </tr> <tr> <td>25 ~ 35</td> <td>0.8</td> <td>1.0</td> <td>1.25</td> <td>1.40</td> </tr> <tr> <td>50</td> <td>0.8</td> <td>1.0</td> <td>1.35</td> <td>1.50</td> </tr> </tbody> </table>							Freq.(Hz) V.DC(V)	50	120	1K	10K up	Under 16	0.8	1.0	1.15	1.25	25 ~ 35	0.8	1.0	1.25	1.40	50	0.8	1.0	1.35	1.50	
Freq.(Hz) V.DC(V)	50	120	1K	10K up																								
Under 16	0.8	1.0	1.15	1.25																								
25 ~ 35	0.8	1.0	1.25	1.40																								
50	0.8	1.0	1.35	1.50																								
Other Standards	JIS C 5101-1, -18																											

DIAGRAM OF DIMENSIONS



LEAD SPACING AND DIAMETER							Unit: mm
ϕD	L	A	B	C	W	P ± 0.2	
4	5.3 ± 0.2	4.3	4.3	2.0	0.5 to 0.8	1.0	
5	5.3 ± 0.2	5.3	5.3	2.3	0.5 to 0.8	1.5	
6.3	5.3 ± 0.2	6.6	6.6	2.7	0.5 to 0.8	2.0	

Dimension: $\phi D \times L(\text{mm})$

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

DIMENSION & PERMISSIBLE RIPPLE CURRENT

μF	V.DC Contents	6.3V (0J)		10V (1A)		16V (1C)		25V (1E)		35V (1V)		50V (1H)		
		$\phi D \times L$	mA											
0.1	0R1												4x5.3	2
0.22	R22												4x5.3	3
0.33	R33												4x5.3	4
0.47	R47												4x5.3	5
1	010												4x5.3	7
2.2	2R2												4x5.3	10
3.3	3R3												4x5.3	12
4.7	4R7							4x5.3	12	4x5.3	14		5x5.3	17
10	100			4x5.3	15	4x5.3	16	5x5.3	21	5x5.3	23		6.3x5.3	26
22	220	4x5.3	21	5x5.3	25	5x5.3	28	6.3x5.3	36	6.3x5.3	50		6.3x5.3	51
33	330	5x5.3	30	5x5.3	31	6.3x5.3	40	6.3x5.3	44					
47	470	5x5.3	36	6.3x5.3	43	6.3x5.3	47	6.3x5.3	60					
100	101	6.3x5.3	61	6.3x5.3	65	6.3x5.3	70							