

Features

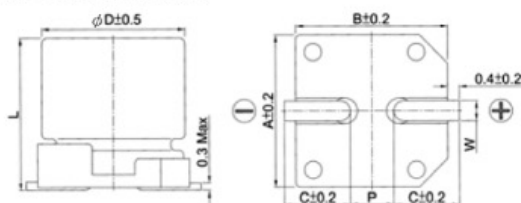
- 4 ~ 6.3 ϕ , 85°C, 2,000 hours assured
- Vertical chip type miniaturized
- Non-polar capacitors for 5.5 mm high capacitors
- Designed for surface mounting on high density PC board.
- RoHS Compliance



SPECIFICATIONS

Items	Performance																							
Operating Temperature Range	-40°C ~ +85°C																							
Capacitance Tolerance	±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 δ at 120Hz, 20°C)	<table border="1"> <thead> <tr> <th colspan="2">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 rowspan="2">Tan δ (max)</td> <td>4 φ</td> <td>0.35</td> <td>0.30</td> <td>0.25</td> <td>0.25</td> <td>0.25</td> <td>0.25</td> </tr> <tr> <td>5 ~ 6.3 φ</td> <td>0.30</td> <td>0.25</td> <td>0.20</td> <td>0.15</td> <td>0.15</td> <td>0.15</td> </tr> </tbody> </table>	Rated Voltage		6.3	10	16	25	35	50	Tan δ (max)	4 φ	0.35	0.30	0.25	0.25	0.25	0.25	5 ~ 6.3 φ	0.30	0.25	0.20	0.15	0.15	0.15
Rated Voltage		6.3	10	16	25	35	50																	
Tan δ (max)	4 φ	0.35	0.30	0.25	0.25	0.25	0.25																	
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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 colspan="2">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 rowspan="2">Impedance Ratio</td> <td>Z(-25°C)/Z(+20°C)</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>8</td> <td>5</td> <td>4</td> <td>3</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)	3	3	2	2	2	2	Z(-40°C)/Z(+20°C)	8	5	4	3	3	3
Rated Voltage		6.3	10	16	25	35	50																	
Impedance Ratio	Z(-25°C)/Z(+20°C)	3	3	2	2	2	2																	
	Z(-40°C)/Z(+20°C)	8	5	4	3	3	3																	
Load Life Test (with the polarity inverted every 250 hours)	<table border="1"> <thead> <tr> <th>Test Time</th> <th>2,000 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 for 2,000 hrs at 85°C.</p>	Test Time	2,000 hrs	Capacitance Change	Within ±20% of initial value	Dissipation Factor	Less than 200% of specified value	Leakage Current	Within specified value															
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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>V.DC(V) \ Freq.(Hz)</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>	V.DC(V) \ Freq.(Hz)	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			
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DIAGRAM OF DIMENSIONS

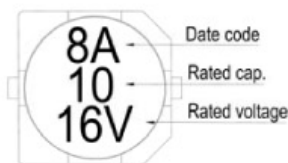


LEAD SPACING AND DIAMETER

Unit: mm

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

MARKING



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

Ripple Current: mA/rms at 120 Hz, 85°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	$\phi D \times L$	mA	$\phi D \times L$	mA	$\phi D \times L$	mA	$\phi D \times L$	mA	$\phi D \times L$	mA
0.1	0R1											4×5.3	2.3
0.22	R22											4×5.3	3.3
0.33	R33											4×5.3	4.1
0.47	R47											4×5.3	4.9
1	010											4×5.3	7.2
2.2	2R2									4×5.3	10	5×5.3	14
3.3	3R3							4×5.3	13	5×5.3	17	5×5.3	17
4.7	4R7					4×5.3	14	5×5.3	20	5×5.3	21	6.3×5.3	24
10	100			4×5.3	18	5×5.3	26	6.3×5.3	35	6.3×5.3	35		
22	220	5×5.3	27	6.3×5.3	40	6.3×5.3	45						
33	330	6.3×5.3	45	6.3×5.3	50	6.3×5.3	55						
47	470	6.3×5.3	54										