



Features

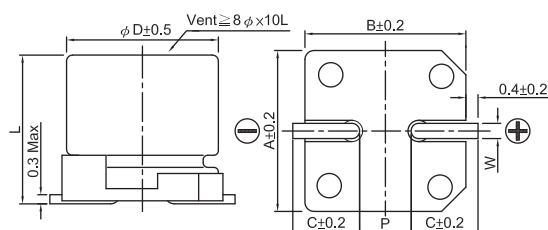
- 4 ~ 10 ϕ , 105°C, 3,000 hours assured.
- Long life assured.
- Designed for surface mounting on high density PC board.
- RoHS Compliance



SPECIFICATIONS

Items	Performance																														
Operating Temperature Range	-40℃ ~ +105℃																														
Capacitance Tolerance	±20% (at 120Hz, 20℃)																														
Leakage Current (at 20℃)	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℃)	<table><tr><td>Rated Voltage</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</td></tr><tr><td>Tan δ (max)</td><td>0.30</td><td>0.24</td><td>0.20</td><td>0.16</td><td>0.13</td><td>0.12</td></tr></table>							Rated Voltage	6.3	10	16	25	35	50	Tan δ (max)	0.30	0.24	0.20	0.16	0.13	0.12										
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Low Temperature Characteristics (at 120Hz)	Impedance ratio shall not exceed the values given in the table below. <table><tr><td colspan="2">Rated Voltage</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</td></tr><tr><td>Impedance</td><td>Z(-25℃)/Z(+20℃)</td><td>4</td><td>3</td><td>2</td><td>2</td><td>2</td><td>2</td></tr><tr><td>Ratio</td><td>Z(-40℃)/Z(+20℃)</td><td>10</td><td>7</td><td>5</td><td>3</td><td>3</td><td>3</td></tr></table>							Rated Voltage		6.3	10	16	25	35	50	Impedance	Z(-25℃)/Z(+20℃)	4	3	2	2	2	2	Ratio	Z(-40℃)/Z(+20℃)	10	7	5	3	3	3
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Load Life Test	<table><tr><td>Test Time</td><td>3,000 Hrs</td></tr><tr><td>Capacitance Change</td><td>Within ±30% of initial value</td></tr><tr><td>Dissipation Factor</td><td>Less than 300% of specified value</td></tr><tr><td>Leakage Current</td><td>Within specified value</td></tr></table> * The above specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage applied for 3,000 hours at 105℃.							Test Time	3,000 Hrs	Capacitance Change	Within ±30% of initial value	Dissipation Factor	Less than 300% of specified value	Leakage Current	Within specified value																
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Shelf Life Test	<table><tr><td>Test Time</td><td>1,000 Hrs</td></tr><tr><td>Capacitance Change</td><td>Within ±30% of initial value</td></tr><tr><td>Dissipation Factor</td><td>Less than 300% of specified value</td></tr><tr><td>Leakage Current</td><td>Within specified value</td></tr></table> * The above specifications shall be satisfied when the capacitors are restored to 20℃ after exposing them for 1,000 hours at 105℃ without voltage applied.							Test Time	1,000 Hrs	Capacitance Change	Within ±30% of initial value	Dissipation Factor	Less than 300% of specified value	Leakage Current	Within specified value																
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Ripple Current & Frequency Multipliers	<table><tr><td>Frequency (Hz)</td><td>50</td><td>120</td><td>1K</td><td>10K up</td></tr><tr><td>Multiplier</td><td>0.7</td><td>1.0</td><td>1.30</td><td>1.4</td></tr></table>							Frequency (Hz)	50	120	1K	10K up	Multiplier	0.7	1.0	1.30	1.4														
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DIAGRAM OF DIMENSIONS



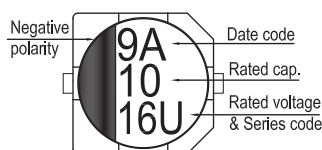
LEAD SPACING AND DIAMETER

Unit: mm

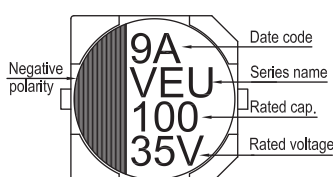
φ D	L	A	B	C	W	P±0.2
4	5.7±0.3	4.3	4.3	2.0	0.5 ~ 0.8	1.0
5	5.7±0.3	5.3	5.3	2.3	0.5 ~ 0.8	1.5
6.3	5.7±0.3	6.6	6.6	2.7	0.5 ~ 0.8	2.0
6.3	7.7±0.3	6.6	6.6	2.7	0.5 ~ 0.8	2.0
8	10±0.5	8.4	8.4	3.0	0.7 ~ 1.1	3.1
10	10±0.5	10.4	10.4	3.3	0.7 ~ 1.1	4.7

MARKING

φ D ≤ 6.3mm



φ D = 8 ~ 10 mm





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	$\phi D \times L$	mA	$\phi D \times L$	mA	$\phi D \times L$	mA	$\phi D \times L$	mA	$\phi D \times L$	mA
0.1	0R1											4×5.7	1
0.22	R22											4×5.7	2.6
0.33	R33											4×5.7	3.2
0.47	R47											4×5.7	5
1	010											4×5.7	8
2.2	2R2											4×5.7	12
3.3	3R3											4×5.7	17
4.7	4R7									4×5.7	16	5×5.7	22
10	100					4×5.7	18	5×5.7	27	5×5.7	27	6.3×5.7	32
22	220	4×5.7	22	4×5.7	30	5×5.7	30	6.3×5.7	44	6.3×5.7	44	6.3×7.7	58
33	330	5×5.7	35	5×5.7	35	6.3×5.7	48	6.3×5.7	50	6.3×7.7	57	8×10	130
47	470	5×5.7	38	6.3×5.7	50	6.3×5.7	50	6.3×7.7	63	8×10	141	8×10	141
100	101	6.3×5.7	69	6.3×7.7	81	6.3×7.7	81	8×10	141	10×10	290	10×10	310
220	221	6.3×7.7	120	8×10	141	8×10	141	10×10	290	10×10	320		
330	331	8×10	290	10×10	290	10×10	290	10×10	320				
470	471	10×10	320	10×10	320	10×10	320						
1,000	102	10×10	410										