

## OCV Series

### Features

- 105°C, 2,000 hours assured
- Ultra low ESR, solid capacitors of SMD type
- RoHS Compliance



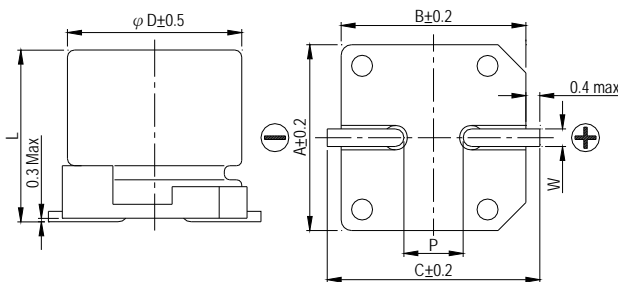
Marking color: Blue

### Specifications

Items	Performance										
Category Temperature Range	-55°C ~ +105°C										
Capacitance Tolerance	±20% (at 120Hz, 20°C)										
Leakage Current (at 20°C)*	Rated voltage applied, after 2 minutes at 20°C. See Standard Ratings										
Dissipation Factor (Tanδ at 120Hz, 20°C)	See Standard Ratings										
ESR (at 100k ~ 300k Hz, 20°C)	See Standard Ratings										
Endurance	<table border="1"> <tr> <td>Test Time</td> <td>2,000 Hrs</td> </tr> <tr> <td>Capacitance Change</td> <td>Within ±20% of initial value</td> </tr> <tr> <td>Dissipation Factor</td> <td>Less than 150% of specified value</td> </tr> <tr> <td>ESR</td> <td>Less than 150% of specified value</td> </tr> <tr> <td>Leakage Current</td> <td>Within specified value</td> </tr> </table>	Test Time	2,000 Hrs	Capacitance Change	Within ±20% of initial value	Dissipation Factor	Less than 150% of specified value	ESR	Less than 150% of specified value	Leakage Current	Within specified value
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	ESR	Less than 150% of specified value									
Leakage Current	Within specified value										
* The above Specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage applied for 2,000 hours at 105°C.											
Moisture Resistance	<table border="1"> <tr> <td>Test Time</td> <td>1,000 Hrs</td> </tr> <tr> <td>Capacitance Change</td> <td>Within ±20% of initial value</td> </tr> <tr> <td>Dissipation Factor</td> <td>Less than 150% of specified value</td> </tr> <tr> <td>ESR</td> <td>Less than 150% of specified value</td> </tr> <tr> <td>Leakage Current</td> <td>Within specified value</td> </tr> </table>	Test Time	1,000 Hrs	Capacitance Change	Within ±20% of initial value	Dissipation Factor	Less than 150% of specified value	ESR	Less than 150% of specified value	Leakage Current	Within specified value
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* The above Specifications shall be satisfied when the capacitors are restored to 20°C after subjecting them at 60°C, 90 to 95% RH for 1,000 hours. Leakage current should be tested after voltage treatment*.											
Resistance to Soldering Heat * (Please refer to page 23 for reflow soldering conditions)	<table border="1"> <tr> <td>Capacitance Change</td> <td>Within ±10% of initial value</td> </tr> <tr> <td>Dissipation Factor</td> <td>Less than 130% of specified value</td> </tr> <tr> <td>ESR</td> <td>Less than 130% of specified value</td> </tr> <tr> <td>Leakage Current</td> <td>Within specified value</td> </tr> </table>	Capacitance Change	Within ±10% of initial value	Dissipation Factor	Less than 130% of specified value	ESR	Less than 130% of specified value	Leakage Current	Within specified value		
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Ripple Current & Frequency Multipliers	<table border="1"> <tr> <th>Frequency (Hz)</th> <th>120 ≤ f &lt; 1k</th> <th>1k ≤ f &lt; 10k</th> <th>10k ≤ f &lt; 100k</th> <th>100k ≤ f &lt; 500k</th> </tr> <tr> <td>Multiplier</td> <td>0.05</td> <td>0.3</td> <td>0.7</td> <td>1.0</td> </tr> </table>	Frequency (Hz)	120 ≤ f < 1k	1k ≤ f < 10k	10k ≤ f < 100k	100k ≤ f < 500k	Multiplier	0.05	0.3	0.7	1.0
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\* For any doubt about measured values, measure the leakage current again after the following voltage treatment.  
Voltage treatment: Applying DC rated voltage to the capacitors for 2 hours at 105 °C.

### Diagram of Dimensions



### Lead Spacing and Diameter

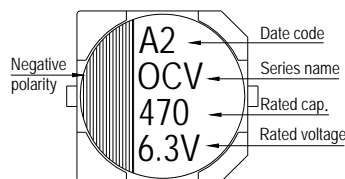
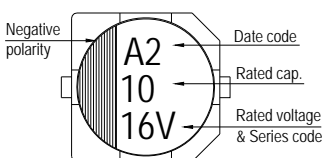
Unit: mm

φ D	L	A	B	C	W	P ± 0.2
6.3	5.9 +0.1/-0.3	6.6	6.6	7.2	0.5 ~ 0.8	2.0
6.3	7.0 ± 0.2	6.6	6.6	7.2	0.5 ~ 0.8	2.0
8	6.7 ± 0.3	8.4	8.4	9.0	0.7 ~ 1.1	3.1
8	12.0 ± 0.5	8.4	8.4	9.0	0.7 ~ 1.1	3.1
10	7.7 ± 0.3	10.4	10.4	11.0	0.7 ~ 1.3	4.7
10	9.9 +0.1/-0.3	10.4	10.4	11.0	0.7 ~ 1.3	4.7
10	12.7 ± 0.5	10.4	10.4	11.0	0.7 ~ 1.3	4.7

### Marking

φ D = 6.3

φ D = 8 ~ 10





Dimension:  $\phi$  D×L(mm)  
Ripple Current: mA/rms at 100k Hz, 105°C

Standard Ratings

W. V. (V)	Surge Voltage (V)	Capacitance (μF)	Size $\phi$ D×L(mm)	Tanδ (120Hz, 20°C)	L C (μA)	E S R (mΩ/at 100k ~ 300k Hz, 20°C Max)	Rated R. C. (mA/rms at 100k Hz, 105°C)
2.5V (0E)	2.8	220	6.3 × 5.9	0.12	110	25	2,500
		560	8 × 6.7	0.12	280	23	3,100
		680	8 × 12	0.18	340	12	4,770
		1,000	10 × 7.7	0.12	500	19	4,240
		1,200	10 × 9.9	0.18	750	13	5,200
		1,500	10 × 12.7	0.18	750	10	5,500
4V (0G)	4.6	150	6.3 × 5.9	0.12	120	26	2,450
		220	8 × 6.7	0.12	176	25	3,020
		330	8 × 6.7	0.12	264	25	3,020
		470	10 × 7.7	0.12	376	20	4,130
		560	8 × 12	0.18	448	12	4,770
		680	10 × 7.7	0.12	544	20	4,130
		820	10 × 9.9	0.18	656	13	5,200
		1,200	10 × 12.7	0.18	960	10	5,500
6.3V (0J)	7.2	82	6.3 × 5.9	0.12	103	27	2,400
		100	6.3 × 5.9	0.12	126	27	2,400
		120	6.3 × 7	0.12	151	30	2,010
		150	6.3 × 7	0.12	189	30	2,250
			8 × 6.7	0.12	189	25	3,020
		220	6.3 × 7	0.12	277	30	2,250
			8 × 6.7	0.12	277	25	3,020
		330	10 × 7.7	0.12	416	20	4,130
		470	8 × 12	0.15	592	12	4,770
		560	10 × 9.9	0.15	706	16	4,700
820	10 × 12.7	0.15	1,033	10	5,500		
10V (1A)	11.5	56	6.3 × 5.9	0.10	112	31	2,250
		150	8 × 6.7	0.10	300	27	2,800
		330	8 × 12	0.15	660	14	4,420
			10 × 7.7	0.10	660	24	3,770
		470	10 × 9.9	0.15	940	18	4,400
		560	10 × 12.7	0.15	1,120	12	5,300
16V (1C)	18.4	47	6.3 × 5.9	0.10	150	50	1,650
		82	8 × 6.7	0.10	262	30	2,700
		180	8 × 12	0.15	576	16	4,360
			10 × 7.7	0.10	576	26	3,430
		220	10 × 9.9	0.15	704	20	4,200
		330	10 × 12.7	0.15	792	14	5,050
20V (1D)	23.0	22	6.3 × 5.9	0.10	88	50	1,650
		47	8 × 6.7	0.10	188	45	2,000
		82	10 × 7.7	0.10	328	40	2,500
		100	8 × 12	0.15	400	24	3,320
			10 × 9.9	0.15	400	25	3,700
		150	10 × 12.7	0.15	600	20	4,320
330	10 × 12.7	0.12	1,320	26	2,700		
25V (1E)	28.7	6.8	6.3 × 5.9	0.10	170	80	1,200
		33	8 × 12	0.12	413	30	2,980
		56	10 × 12.7	0.12	700	28	3,800
		270	10 × 12.7	0.12	1,350	27	2,700
35V (1V)	40.0	39	8 × 12	0.12	273	31	2,100
		68	10 × 12.7	0.12	476	28	2,700