



## Features

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



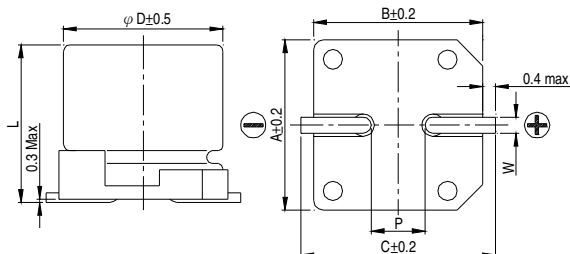
Marking color: Blue

## 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 (Tan δ 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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* 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

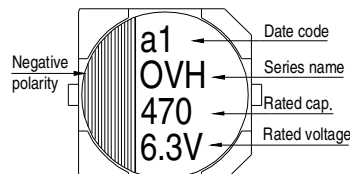
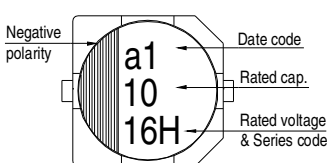
Unit: mm

φ D	L	A	B	C	W	P ± 0.2
6.3	5.9 +0.1 / -0.3	6.6	6.6	7.4	0.5 ~ 0.8	2.0
8	6.7 ± 0.3	8.4	8.4	9.2	0.7 ~ 1.1	3.1
10	7.7 ± 0.3	10.4	10.4	11.2	0.7 ~ 1.1	4.7
10	9.9 +0.1 / -0.3	10.4	10.4	11.2	0.7 ~ 1.1	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)	Capacitance (μF)	Size $\phi$ D×L(mm)	Tan $\delta$ (120Hz, 20°C)	LC (μA)	ESR (mΩ/at 100k ~ 300k Hz, 20°C Max)	Rated R. C. (mA/rms at 100k Hz, 105°C)
2.5V (0E)	390	6.3×5.9	0.12	293	10	3,900
	560	6.3×5.9	0.12	420	10	3,900
		8×6.7	0.12	420	9	4,200
	680	8×6.7	0.12	510	9	4,500
	1,200	10×7.7	0.12	900	9	5,000
	2,200	10×9.9	0.12	1,650	8	6,000
4V (0G)	330	6.3×5.9	0.12	396	10	3,900
	470	8×6.7	0.12	564	9	4,500
	560	8×6.7	0.12	894	9	4,500
	1,000	10×7.7	0.12	1,200	9	5,000
	1,800	10×9.9	0.12	2,160	8	6,000
6.3V (0J)	220	6.3×5.9	0.12	416	10	3,900
	330	8×6.7	0.12	624	9	4,500
	390	8×6.7	0.12	737	9	4,500
	820	10×7.7	0.12	1,550	9	5,000
	1,500	10×9.9	0.12	2,835	8	6,000