

## OVB Series

### Features

- 105°C, 20,000 hours assured
- Ultra low ESR, solid capacitors of SMD type
- RoHS Compliance

### Specifications

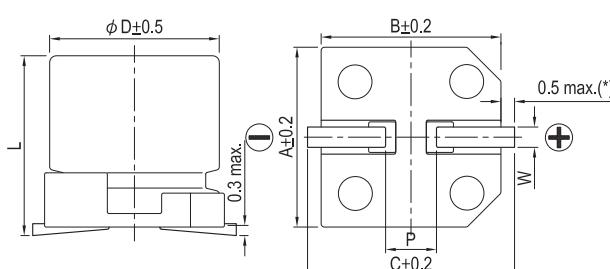
Marking color: Blue

Items	Performance										
Category Temperature Range	-55°C ~ +105°C										
Capacitance Tolerance	±20% (at 120 Hz, 20°C)										
Leakage Current (at 20°C)*	Rated voltage applied, after 2 minutes at 20°C. See Standard Ratings										
Tanδ (at 120 Hz, 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>20,000 Hrs</td></tr> <tr> <td>Capacitance Change</td><td>Within ±20% of initial value</td></tr> <tr> <td>Tanδ</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	20,000 Hrs	Capacitance Change	Within ±20% of initial value	Tanδ	Less than 150% of specified value	ESR	Less than 150% of specified value	Leakage Current	Within specified value
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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>Tanδ</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	Tanδ	Less than 150% of specified value	ESR	Less than 150% of specified value	Leakage Current	Within specified value
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Resistance to Soldering Heat * (Please refer to page 26 for reflow soldering conditions)	<table border="1"> <tr> <td>Capacitance Change</td><td>Within ±10% of initial value</td></tr> <tr> <td>Tanδ</td><td>Within specified value</td></tr> <tr> <td>ESR</td><td>Within specified value</td></tr> <tr> <td>Leakage Current</td><td>Within specified value</td></tr> </table>	Capacitance Change	Within ±10% of initial value	Tanδ	Within specified value	ESR	Within specified value	Leakage Current	Within specified value		
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Ripple Current and Frequency Multipliers	<table border="1"> <tr> <td>Frequency (Hz)</td><td>120 ≤ f &lt; 1k</td><td>1k ≤ f &lt; 10k</td><td>10k ≤ f &lt; 100k</td><td>100k ≤ f &lt; 500k</td></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: DC rated voltage is applied to the capacitors for 2 hours at 105°C.

### Diagram of Dimensions



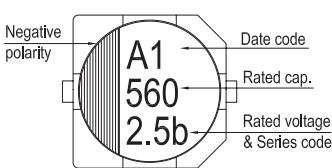
### Lead Spacing and Diameter

φ D	L	A	B	C	W	P ± 0.2
5	5.8 ± 0.3	5.3	5.3	5.9	0.5 ~ 0.8	1.5
6.3	5.8 ± 0.3	6.6	6.6	7.2	0.5 ~ 0.8	2.0
6.3	6.4 +0.1/-0.4	6.6	6.6	7.2	0.5 ~ 0.8	2.0
8	6.7 ± 0.3	8.3	8.3	9.0	0.7 ~ 1.1	3.1
8	10.0 ± 0.5	8.3	8.3	9.0	0.7 ~ 1.1	3.1
8	12.0 ± 0.5	8.3	8.3	9.0	0.7 ~ 1.1	3.1
10	10.0 ± 0.5	10.3	10.3	11.0	0.7 ~ 1.3	4.7
10	12.6 +0.1/-0.4	10.3	10.3	11.0	0.7 ~ 1.3	4.7

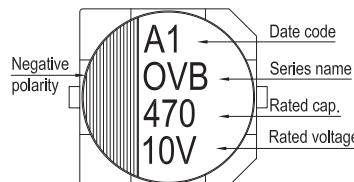
(\*): For 5 ~ 6.3 φ is 0.4 max.

### Marking

φ D = 5 ~ 6.3



φ D = 8 ~ 10





## Standard Ratings

Rated Volt. (V)	Surge Voltage (V)	Capacitance (μF)	Size $\phi D \times L$ (mm)	Tanδ (120 Hz, 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)	2.9	560	6.3 × 6.4	0.12	300	16	3,500
4V (0G)	4.6	180	5 × 5.8	0.12	120	25	2,300
		390	6.3 × 5.8		312	24	2,700
		1,200	8 × 10		960	15	5,400
		2,700	10 × 12.6		2,160	11	5,600
6.3V (0J)	7.2	330	8 × 6.7	0.12	415	14	3,900
			6.3 × 6.4		415	15	3,390
		680	8 × 10		856	12	4,600
		1,000	8 × 12		1,260	11	4,800
		1,800	10 × 12.6		2,268	10	5,500
10V(1A)	12.0	120	6.3 × 5.8	0.12	240	30	2,700
		150	8 × 6.7		300	21	2,880
		470	8 × 10		940	17	3,800
		820	10 × 10		1,640	15	4,300
		1,200	10 × 12.6		2,400	13	4,800
16V(1C)	18.4	100	6.3 × 6.4	0.12	300	24	2,490
		270	8 × 10		864	20	3,600
		390	8 × 12		1,248	18	3,900
		470	10 × 10		1,504	16	4,200
		680	10 × 12.6		2,176	14	4,700
20V(1D)	23.0	27	6.3 × 5.8	0.12	108	60	1,400
		39	8 × 6.7		156	45	2,000
		100	8 × 12		400	22	3,200
		180	10 × 12.6		720	20	4,300
25V(1E)	29.0	12	6.3 × 5.8	0.12	100	70	1,200
		33	8 × 10		165	50	2,000
		56	10 × 10		280	45	2,200
		82	10 × 12.6		410	30	3,800

## Part Numbering System

OVB Series	100μF	±20%	16V	Carrier Tape	6.3 $\phi \times 6.4L$	Pb-free and PET coating case
<b>OVB</b> Series Name	<b>101</b> Capacitance	<b>M</b> Capacitance Tolerance	<b>1C</b> Rated Voltage	<b>TR</b> Package Type	<b>-</b> Terminal Type	<b>0607</b> Case size

Note: For more details, please refer to "Part Numbering System (SMD Type)" on page 15.