

## OVH Series

### Features

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



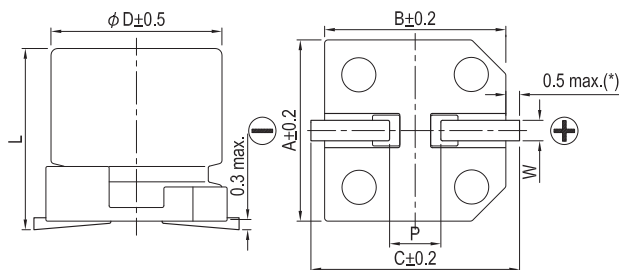
Marking color: Blue

### Specifications

Items	Performance										
Category Temperature Range	-55°C ~ +105°C										
Capacitance Tolerance	±20% (at 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>2,000 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	2,000 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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	Tanδ	Less than 150% of specified value									
	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>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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	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 subjecting them at 60°C, 90 ~ 95% RH for 1,000 hours. Leakage current should be tested after voltage treatment*.											
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> <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: DC rated voltage is applied to the capacitors for 2 hours at 105 °C.

### Diagram of Dimensions



### Lead Spacing and Diameter

Unit: mm

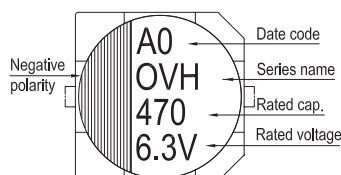
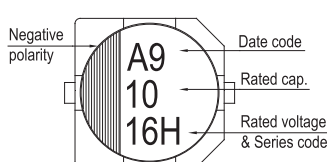
φD	L	A	B	C	W	P ± 0.2
5	5.8 ± 0.3	5.3	5.3	5.9	0.5 ~ 0.8	1.5
6.3	4.4 ± 0.2	6.6	6.6	7.2	0.5 ~ 0.8	2.0
6.3	5.9 + 0.1 / -0.3	6.6	6.6	7.2	0.5 ~ 0.8	2.0
6.3	9.5 ± 0.5	6.6	6.6	7.2	0.5 ~ 0.8	2.0
8	6.7 ± 0.3	8.3	8.3	9.0	0.7 ~ 1.1	3.1
10	7.7 ± 0.3	10.3	10.3	11.0	0.7 ~ 1.3	4.7
10	9.9 + 0.1 / -0.3	10.3	10.3	11.0	0.7 ~ 1.3	4.7

(\*): For 5 ~ 6.3φ is 0.4 max.

### Marking

φD = 5 ~ 6.3

φD = 8 ~ 10



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

### Standard Ratings

Rated Volt. (V)	Surge Voltage (V)	Capacitance ( $\mu$ F)	Size $\phi D \times L$ (mm)	Tan $\delta$ (120 Hz, 20°C)	L C ( $\mu$ A)	E S R (m $\Omega$ /at 100k ~ 300k Hz, 20°C max.)	Rated R. C. (mA/rms at 100k Hz, 105°C)
2V (0D)	2.3	1,200	6.3 × 5.9	0.12	500	8	5,230
2.5V (0E)	2.9	270	5 × 5.8	0.12	500	10	3,860
			5 × 5.8			10	3,860
		330	6.3 × 4.4			14	3,180
			5 × 5.8			700	10
		390	6.3 × 5.9		293		3,900
			6.3 × 5.9		700	3,900	
		560	8 × 6.7		420	4,200	
			8 × 6.7		510	4,500	
		1,200	10 × 7.7		900	5,000	
		2,200	10 × 9.9		1,650	6,000	
4V (0G)	4.6	330	6.3 × 5.9	0.12	396	10	3,900
			8 × 6.7			564	4,500
		560	8 × 6.7		894	4,500	
			10 × 7.7		1,200	5,000	
		1,800	10 × 9.9		2,160	6,000	
6.3V (0J)	7.2	150	5 × 5.8	0.12	500	12	3,520
			5 × 5.8			15	3,150
		220	5 × 5.8				3,150
			6.3 × 4.4		3,180		
		330	6.3 × 5.9		416	3,900	
			8 × 6.7		624	4,500	
		390	8 × 6.7		737	4,500	
			10 × 7.7		1,550	5,000	
		1,500	10 × 9.9		2,835	6,000	
10V (1A)	12.8	220	6.3 × 5.9	0.12	500	20	2,700
16V (1C)	18.0	180	6.3 × 9.5	0.12	576	11	4,460

### Part Numbering System

OVH Series	820 $\mu$ F	$\pm$ 20%	6.3V	Carrier Tape	10 $\phi$ × 7.7L	Pb-free and PET coating case
<b>OVH</b>	<b>821</b>	<b>M</b>	<b>0J</b>	<b>TR</b>	<b>-</b>	<b>1008</b>
Series Name	Capacitance	Capacitance Tolerance	Rated Voltage	Package Type	Terminal Type	Case size
						Lead Wire and Coating Type

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