

## OVD Series

### Features

- 105°C, 15,000 hours assured
- Ultra low ESR, solid capacitors of SMD type
- RoHS Compliance



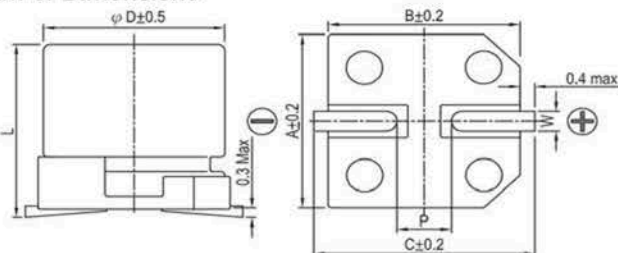
Marking color: Blue

### 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										
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>15,000 Hrs (6.3×4.4: 3,000 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	15,000 Hrs (6.3×4.4: 3,000 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 the rated voltage applied for 15,000 / 3,000 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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	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										
* 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 25 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>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	Tanδ	Less than 130% of specified value	ESR	Less than 130% of 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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Multiplier	0.05	0.3	0.7	1.0							

\* 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

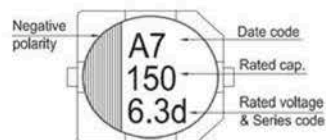


### Lead Spacing and Diameter

φD	L	A	B	C	W	P ± 0.2	Unit: mm
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	5.8 ± 0.3	6.6	6.6	7.2	0.5 ~ 0.8	2.0	

### Marking

φ D = 5 ~ 6.3



All product specifications in the catalog are subject to change without notice. (CAT. 2017E1)

Dimension:  $\phi D \times L$ (mm)

Ripple Current: mA/rms at 100k Hz, 105°C

## Standard Ratings

W. V. (V)	Surge Voltage (V)	Capacitance ( $\mu$ F)	Size $\phi D \times L$ (mm)	Tan $\delta$ (120Hz, 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)
2.5V (0E)	2.9	220	6.3 $\times$ 4.4	0.12	300	19	2,780
		330	6.3 $\times$ 4.4	0.12	700	16	3,500
		560	6.3 $\times$ 5.8	0.12	700	16	3,500
4V (0G)	4.6	180	6.3 $\times$ 4.4	0.12	360	19	2,780
		220	5 $\times$ 5.8	0.12	440	17	3,390
		390	6.3 $\times$ 5.8	0.12	780	17	3,390
6.3V (0J)	7.2	150	6.3 $\times$ 4.4	0.12	472	19	2,780
		180	5 $\times$ 5.8	0.12	567	17	3,390
		220	6.3 $\times$ 4.4	0.12	700	18	3,200
		330	6.3 $\times$ 5.8	0.12	1,040	17	3,390
16V(1C)	18.4	100	6.3 $\times$ 5.8	0.12	320	24	2,490

## Part Numbering System

OVD Series	100 $\mu$ F	$\pm$ 20%	16V	Carrier Tape		6.3 $\phi$ $\times$ 5.8L	Pb-free and PET coating case	
<b>OVD</b>	<b>101</b>	<b>M</b>	<b>1C</b>	<b>TR</b>	-	<b>0606</b>		<b>S</b>
Series Name	Capacitance	Capacitance Tolerance	Rated Voltage	Package Type	Terminal Type	Case size	Lead Wire and Coating Type	Supplement Code

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