

OVJ Series

Features

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

Marking color: Blue

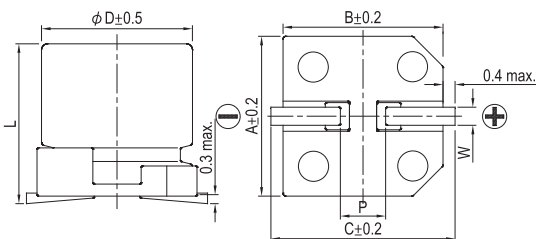
Specifications

Items	Performance										
Category Temperature Range	-55°C ~ +105°C										
Capacitance Tolerance	±20% (at 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>15,000 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	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									
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* The above specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage applied for 15,000 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 < 1k</th> <th>1k ≤ f < 10k</th> <th>10k ≤ f < 100k</th> <th>100k ≤ f < 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

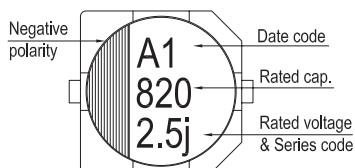


Lead Spacing and Diameter

Unit: mm

φD	L	A	B	C	W	P ± 0.2
6.3	7.7 ± 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

Marking



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

Standard Ratings

Rated Volt. (V)	Surge Voltage (V)	Capacitance (μ F)	Size $\phi D \times L$ (mm)	Tan δ (120 Hz, 20°C)	L C (μ A)	E S R (m Ω /at 100k ~ 300k Hz, 20°C max.)	Rated R. C. (mA/rms at 100k Hz, 105°C)	
2.5V (0E)	2.9	820	6.3 \times 7.7	0.12	1,020	7	5,000	
			6.3 \times 9.5		1,020			
		1,000	6.3 \times 9.5		1,250	10		4,300
		1,200	6.3 \times 9.5		1,500			
6.3V (0J)	7.2	560	6.3 \times 7.7	0.12	1,760	8	5,000	
			6.3 \times 9.5	0.12	1,760	10	4,300	
10V(1A)	12.0	390	6.3 \times 7.7	0.12	1,950	13	4,460	
			6.3 \times 9.5	0.12	1,950	13	4,000	
16V(1C)	18.0	270	6.3 \times 7.7	0.12	864	13	4,460	
			6.3 \times 9.5	0.12	864	16	3,500	
20V(1D)	23.0	150	6.3 \times 7.7	0.12	600	18	3,790	
			6.3 \times 9.5	0.12	600	18	3,200	
25V(1E)	29.0	82	6.3 \times 7.7	0.12	410	28	3,040	
			6.3 \times 9.5	0.12	410	28	3,000	

Part Numbering System

OVJ Series	820 μ F	\pm 20%	2.5V	Carrier Tape	6.3 ϕ \times 9.5L	Pb-free and PET coating case
OVJ	821	M	0E	TR	-	0610
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.

OP-CAP