

OCVU Series

Features

- 125°C, 1,000 ~ 2,000 hours assured
- Ultra low ESR, solid capacitors of SMD type
- RoHS Compliance



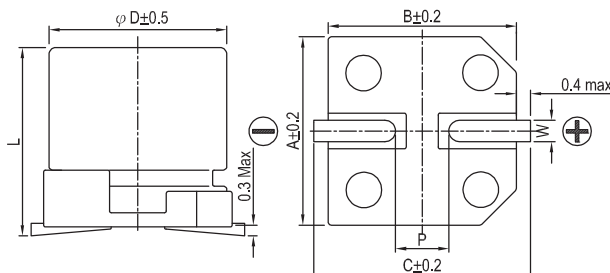
Marking color: Blue

Specifications

Items	Performance										
Category Temperature Range	-55°C ~ +125°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>1,000 Hrs for 2.5 ~ 4V; 2,000 Hrs for 6.3 ~ 16V</td> </tr> <tr> <td>Capacitance Change</td> <td>Within ±20% of initial value</td> </tr> <tr> <td>Tanδ</td> <td>Less than 200% of specified value</td> </tr> <tr> <td>ESR</td> <td>Less than 200% of specified value</td> </tr> <tr> <td>Leakage Current</td> <td>Within specified value</td> </tr> </table>	Test Time	1,000 Hrs for 2.5 ~ 4V; 2,000 Hrs for 6.3 ~ 16V	Capacitance Change	Within ±20% of initial value	Tanδ	Less than 200% of specified value	ESR	Less than 200% of specified value	Leakage Current	Within specified value
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	ESR	Less than 200% 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 specified hours at 125°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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	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>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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* 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.											
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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* 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.

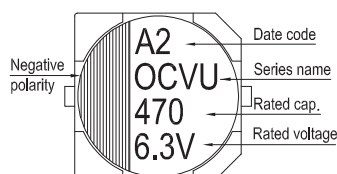
Diagram of Dimensions



Lead Spacing and Diameter

φ D	L	A	B	C	W	P ± 0.2
8	12.0 ± 0.5	8.4	8.4	9.0	0.7 ~ 1.1	3.1
10	9.9 + 0.1/-0.3	10.4	10.4	11.0	0.7 ~ 1.3	4.7
10	12.6 + 0.1/-0.4	10.4	10.4	11.0	0.7 ~ 1.3	4.7

Marking



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

Standard Ratings

W. V. (V)	Surge Voltage (V)	Capacitance (μ F)	Size $\phi D \times L$ (mm)	Tan δ (120Hz, 20°C)	L C (μ A)	ESR (m Ω /at 100k ~ 300k Hz, 20°C Max)	Rated R. C. (mA/rms at 100k Hz)	
							T \leq 105°C	105°C < T \leq 125°C
2.5V (0E)	2.9	680	8 \times 12	0.18	340	13	4,520	1,430
		1,000	10 \times 9.9	0.18	500	13	5,200	1,645
		1,500	10 \times 12.6	0.18	750	13	5,440	1,721
4V (0G)	4.6	560	8 \times 12	0.18	448	13	4,520	1,430
		820	10 \times 9.9	0.18	656	13	5,200	1,645
		1,200	10 \times 12.6	0.18	960	12	5,440	1,721
6.3V (0J)	7.2	470	8 \times 12	0.15	592	15	4,210	1,332
		560	10 \times 9.9	0.15	706	16	4,700	1,487
		820	10 \times 12.6	0.15	1,033	12	5,440	1,721
10V (1A)	12.0	330	8 \times 12	0.15	660	17	3,950	1,250
		470	10 \times 9.9	0.15	940	18	4,400	1,392
		560	10 \times 12.6	0.15	1,120	13	5,230	1,655
16V (1C)	18.0	180	8 \times 12	0.15	576	20	3,640	1,151
		220	10 \times 9.9	0.15	704	20	4,200	1,330
		330	10 \times 12.6	0.15	1,056	16	4,720	1,493

OP-CAP

Part Numbering System

OCVU Series	470 μ F	\pm 20%	6.3V	Carrier Tape		8 ϕ \times 12L	Pb-free and PET coating case
OVU	471	M	0J	IR	-	0812	
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.

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