

OCVU Series

Features

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



Marking color: Blue

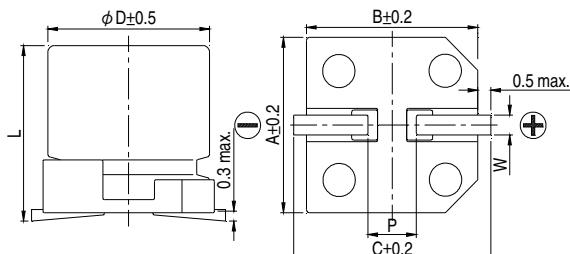
Specifications

Items	Performance											
Category Temperature Range	-55°C ~ +125°C											
Capacitance Tolerance	±20%	(at 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>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
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											
* 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
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											
* 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		
Capacitance Change	Within ±10% of initial value											
Tanδ	Within specified value											
ESR	Within specified value											
Leakage Current	Within specified value											
Ripple Current and Frequency Multipliers	<table border="1"> <tr> <td>Frequency (Hz)</td><td>120 ≤ f < 1k</td><td>1k ≤ f < 10k</td><td>10k ≤ f < 100k</td><td>100k ≤ f < 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
Frequency (Hz)	120 ≤ f < 1k	1k ≤ f < 10k	10k ≤ f < 100k	100k ≤ f < 500k								
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.

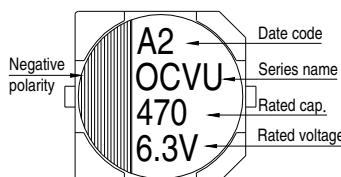
Voltage treatment: DC rated voltage is applied to the capacitors for 2 hours at 105°C.

Diagram of Dimensions



Lead Spacing and Diameter						
φ D	L	A	B	C	W	P ± 0.2
8	12.0 ± 0.5	8.3	8.3	9.0	0.7 ~ 1.1	3.1
10	9.9 + 0.1/-0.3	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

Marking



Dimension: ϕ D×L(mm)

Ripple Current: mA/rms at 100k Hz

Standard Ratings

Rated Volt. (V)	Surge Voltage (V)	Capacitance (μ F)	Size ϕ D×L(mm)	Tan δ (120 Hz, 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 × 12	0.18	340	13	4,520	1,430
		1,000	10 × 9.9		500		5,200	1,645
		1,500	10 × 12.6		750		5,440	1,721
4V (0G)	4.6	560	8 × 12	0.18	448	12	4,520	1,430
		820	10 × 9.9		656		5,200	1,645
		1,200	10 × 12.6		960		5,440	1,721
6.3V (0J)	7.2	470	8 × 12	0.15	592	15	4,210	1,332
		560	10 × 9.9		706	16	4,700	1,487
		820	10 × 12.6		1,033	12	5,440	1,721
10V (1A)	12.0	330	8 × 12	0.15	660	17	3,950	1,250
		470	10 × 9.9		940	18	4,400	1,392
		560	10 × 12.6		1,120	13	5,230	1,655
16V (1C)	18.0	180	8 × 12	0.15	576	20	3,640	1,151
		220	10 × 9.9		704	20	4,200	1,330
		330	10 × 12.6		1,056	16	4,720	1,493

Part Numbering System

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