

OVH Series

Features

- 105°C, 2,000 hours assured
- Ultra low ESR, solid capacitors of SMD type
- RoHS Compliance
- AEC-Q200 Parts Available: Replace "S" Suffix with "KS" or "LS" Suffix



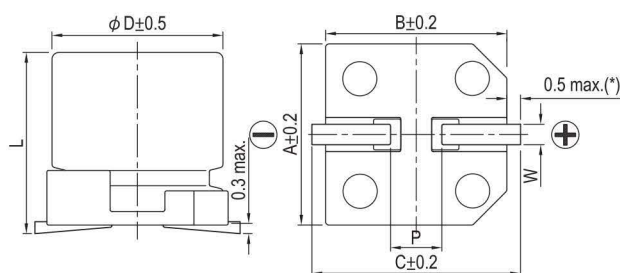
Marking color: Blue

Specifications

Items	Performance																							
Category Temperature Range	-55℃ ~ +105℃																							
Capacitance Tolerance	±20% (at 120 Hz, 20℃)																							
Leakage Current (at 20℃)*	Rated voltage applied, after 2 minutes at 20℃. See Standard Ratings																							
Tanδ (at 120 Hz, 20℃)	See Standard Ratings																							
ESR (at 100k ~ 300k Hz, 20℃)	See Standard Ratings																							
Endurance	<table><tr><td>Test Time</td><td colspan="3">2,000 Hrs</td></tr><tr><td>Capacitance Change</td><td colspan="3">Within ±20% of initial value</td></tr><tr><td>Tanδ</td><td colspan="3">Less than 150% of specified value</td></tr><tr><td>ESR</td><td colspan="3">Less than 150% of specified value</td></tr><tr><td>Leakage Current</td><td colspan="3">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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	* The above specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage applied for 2,000 hours at 105℃.																							
Moisture Resistance	<table><tr><td>Test Time</td><td colspan="3">1,000 Hrs</td></tr><tr><td>Capacitance Change</td><td colspan="3">Within ±20% of initial value</td></tr><tr><td>Tanδ</td><td colspan="3">Less than 150% of specified value</td></tr><tr><td>ESR</td><td colspan="3">Less than 150% of specified value</td></tr><tr><td>Leakage Current</td><td colspan="3">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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Resistance to Soldering Heat * (Please refer to page 26 for reflow soldering conditions)	<table><tr><td>Capacitance Change</td><td colspan="3">Within ±10% of initial value</td></tr><tr><td>Tanδ</td><td colspan="3">Within specified value</td></tr><tr><td>ESR</td><td colspan="3">Within specified value</td></tr><tr><td>Leakage Current</td><td colspan="3">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><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										
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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

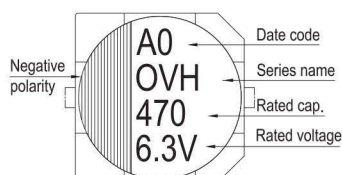
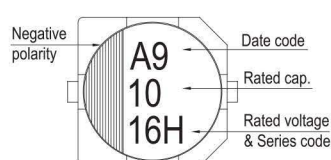
φD	L	A	B	C	W	P ± 0.2
5	5.8 ± 0.3	5.3	5.3	5.9	0.5 ~ 0.8	1.5
6.3	4.4 ± 0.2	6.6	6.6	7.2	0.5 ~ 0.8	2.0
6.3	5.9 ± 0.1 / -0.3	6.6	6.6	7.2	0.5 ~ 0.8	2.0
6.3	9.5 ± 0.5	6.6	6.6	7.2	0.5 ~ 0.8	2.0
8	6.7 ± 0.3	8.3	8.3	9.0	0.7 ~ 1.1	3.1
10	7.7 ± 0.3	10.3	10.3	11.0	0.7 ~ 1.3	4.7
10	9.9 ± 0.1 / -0.3	10.3	10.3	11.0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

(*) : For 5 ~ 6.3 φ 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 (μ F)	Size ϕ D×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)
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
		330	5 × 5.8			10	3,860
			6.3 × 4.4			14	3,180
		390	5 × 5.8			700	10
			6.3 × 5.9		293	3,900	
		560	6.3 × 5.9		700	3,900	
			8 × 6.7		420	9	4,200
			8 × 6.7		510		4,500
		1,200	10 × 7.7		900		5,000
		2,200	10 × 9.9		1,650	8	6,000
	4.6	330	6.3 × 5.9	0.12	396	10	3,900
470		8 × 6.7	564		9	4,500	
560		8 × 6.7	894			4,500	
1,000		10 × 7.7	1,200			5,000	
1,800		10 × 9.9			2,160	8	6,000
6.3V (0J)	7.2	150	5 × 5.8	0.12	500	12	3,520
		180	5 × 5.8			15	3,150
		220	5 × 5.8				3,150
			6.3 × 4.4				3,180
		220	6.3 × 5.9		416	10	3,900
		330	8 × 6.7		624	9	4,500
		390	8 × 6.7		737		4,500
		820	10 × 7.7		1,550		5,000
		1,500	10 × 9.9		2,835	8	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 μ F	$\pm 20\%$	6.3V	Carrier Tape	10 $\phi \times 7.7L$		
OVH	821	M	0J	TR	-	1008	S
Series Name	Capacitance	Capacitance Tolerance	Rated Voltage	Package Type	Terminal Type	Case size	Regional Code

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