OVG Series

Features

- 105℃, 15,000 hours assured
- Ultra low ESR with large permissible ripple current
- RoHS Compliance

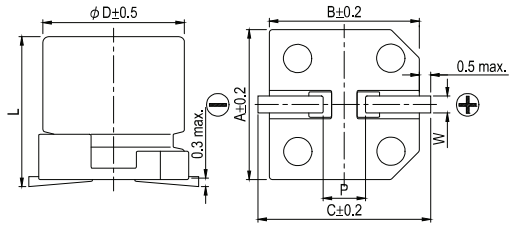
Marking color: Blue

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 (at120 Hz, 20℃)	See Standard Ratings
ESR (at 100k ~ 300k Hz, 20℃)	See Standard Ratings
Endurance	Test Time: 15,000 Hrs (For 5 ~ 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 * The above specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage applied for 15,000 hours at 105℃.
Moisture Resistance	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℃ after subjecting them at 60℃, 90 ~ 95% RH for 1,000 hours. Leakage current should be tested after voltage treatment*.
Resistance to Soldering Heat * (Please refer to page 15 for reflow soldering conditions)	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	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℃.

Diagram of Dimensions

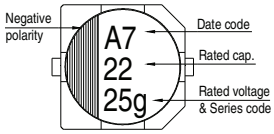


Lead Spacing and Diameter — Unit: mm

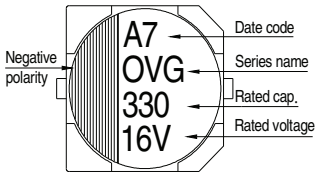
ϕD	L	A	B	C	W	P ± 0.2
5	4.4 ± 0.2	5.3	5.3	5.9	0.5 ~ 0.8	1.5
5	5.8 ± 0.3	5.3	5.3	5.9	0.5 ~ 0.8	1.5
6.3	4.4 ± 0.2	6.6	6.6	7.2	0.5 ~ 0.8	2.0
6.3	5.8 ± 0.3	6.6	6.6	7.2	0.5 ~ 0.8	2.0
6.3	7.7 ± 0.3	6.6	6.6	7.2	0.5 ~ 0.8	2.0
8	6.7 ± 0.3	8.3	8.3	9.0	0.7 ~ 1.1	3.1
8	7.7 ± 0.3	8.3	8.3	9.0	0.7 ~ 1.1	3.1
8	10.0 ± 0.5	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	10.0 ± 0.5	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

ϕD = 5 ~ 6.3



ϕD = 8 ~ 10



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OVG Series

Dimension: φD×L(mm)
Ripple Current: mA/rms at 100k Hz, 105℃

Standard Ratings

Rated Volt. (V)	Surge Voltage (V)	Capacitance (μF)	Size φD×L(mm)	Tanδ (120 Hz, 20℃)	L C (μA)	E S R (mΩ/at 100k ~ 300k Hz, 20℃ max.)	Rated R. C. (mA/rms at 100k Hz, 105℃)
16V (1C)	18.0	39	5 × 4.4	0.12	312	50	1,840
		47	5 × 4.4		376	50	1,840
		68	6.3 × 4.4		544	40	2,450
		100	5 × 5.8		320	27	3,000
		180	6.3 × 5.8		576	22	3,300
		220	6.3 × 7.7		704		
		270	8 × 6.7		864		
		330	8 × 7.7		1,050	21	3,400
			8 × 10		1,050	21	3,400
		560	8 × 10		1,790	18	3,900
		820	10 × 10		2,620	16	4,200
			10 × 12.6		2,620	12	5,400
		1,000	10 × 10		3,200	18	4,100
			10 × 12.6		3,200	12	5,400
20V(1D)	23.0	27	5 × 4.4	0.12	270	55	1,770
		33	5 × 4.4		330	55	1,770
		47	5 × 5.8		188	30	2,800
			6.3 × 4.4		470	42	2,400
		56	5 × 5.8		224	30	2,800
		120	6.3 × 5.8		480	25	3,200
		150	6.3 × 7.7		600		
		180	8 × 6.7		720		
		220	8 × 7.7		880	23	3,300
			8 × 10		880	23	3,400
		390	8 × 10		1,560	20	3,700
		560	10 × 10		2,240	18	4,100
25V(1E)	29.0	10	5 × 4.4	0.12	125	60	1,700
		22	5 × 5.8		110	40	2,450
			6.3 × 4.4		275	45	2,350
		27	5 × 5.8		135	40	2,450
		39	6.3 × 5.8		195	30	2,800
		47			235		
		56			280		
			6.3 × 7.7		280	28	2,800
		68	8 × 6.7		340	28	3,000
		82	8 × 7.7		410	26	3,100
		100	8 × 10		500	24	3,300
		120	8 × 10		600	22	3,500
		150	10 × 7.7		750	25	3,400
		220	10 × 10		1,100	20	3,800

Part Numbering System

OVG Series	150μF	±20%	25V	Carrier Tape		10φ×7.7L	
OVG	**151**	**M**	**1E**	**TR**	**-**	**1008**	**XX**
Series Name	Capacitance	Capacitance Tolerance	Rated Voltage	Package Type	Terminal Type	Case Size	

S = Standard
KS = AEC-Q200 Qualified, Safety Critical Application
LS = AEC-Q200 Qualified, Non-Safety Critical Application

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