OVB Series

Features

- 105℃, 20,000 hours assured
- Ultra low ESR, solid capacitors of SMD type
- 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: 20,000 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 20,000 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 26 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

Endurance:

Test Time	20,000 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

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

Resistance to Soldering Heat:

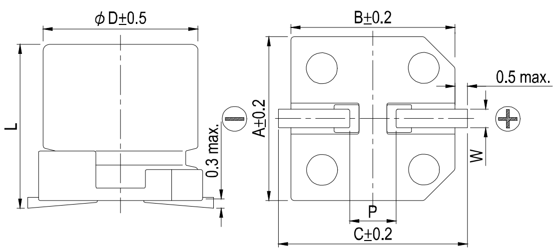
Capacitance Change	Within ±10% of initial value
Tanδ	Within specified value
ESR	Within specified value
Leakage Current	Within specified value

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

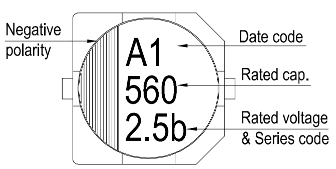


Lead Spacing and Diameter — Unit: mm

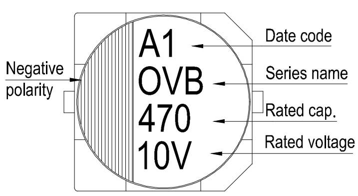
ϕD	L	A	B	C	W	P ± 0.2
5	5.8 ± 0.3	5.3	5.3	5.9	0.5 ~ 0.8	1.5
6.3	5.8 ± 0.3	6.6	6.6	7.2	0.5 ~ 0.8	2.0
6.3	6.4 +0.1/-0.4	6.6	6.6	7.2	0.5 ~ 0.8	2.0
8	6.7 ± 0.3	8.3	8.3	9.0	0.7 ~ 1.1	3.1
8	10.0 ± 0.5	8.3	8.3	9.0	0.7 ~ 1.1	3.1
8	12.0 ± 0.5	8.3	8.3	9.0	0.7 ~ 1.1	3.1
10	10.0 ± 0.5	10.3	10.3	11.0	0.7 ~ 1.3	4.7
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



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℃)
2.5V(0E)	2.9	560	6.3 × 6.4	0.12	300	16	3,500
4V (0G)	4.6	180	5 × 5.8	0.12	120	25	2,300
		390	6.3 × 5.8		312	24	2,700
		1,200	8 × 10		960	15	5,400
		2,700	10 × 12.6		2,160	11	5,600
6.3V (0J)	7.2	330	8 × 6.7	0.12	415	14	3,900
			6.3 × 6.4		415	15	3,390
		680	8 × 10		856	12	4,600
		1,000	8 × 12		1,260	11	4,800
		1,800	10 × 12.6		2,268	10	5,500
10V(1A)	12.0	120	6.3 × 5.8	0.12	240	30	2,700
		150	8 × 6.7		300	21	2,880
		470	8 × 10		940	17	3,800
		820	10 × 10		1,640	15	4,300
		1,200	10 × 12.6		2,400	13	4,800
16V(1C)	18.4	100	6.3 × 6.4	0.12	300	24	2,490
		270	8 × 10		864	20	3,600
		390	8 × 12		1,248	18	3,900
		470	10 × 10		1,504	16	4,200
		680	10 × 12.6		2,176	14	4,700
20V(1D)	23.0	27	6.3 × 5.8	0.12	108	60	1,400
		39	8 × 6.7		156	45	2,000
		100	8 × 12		400	22	3,200
		180	10 × 12.6		720	20	4,300
25V(1E)	29.0	12	6.3 × 5.8	0.12	100	70	1,200
		33	8 ×10		165	50	2,000
		56	10 × 10		280	45	2,200
		82	10 × 12.6		410	30	3,800

Part Numbering System

OVB Series	100μF	±20%	16V	Carrier Tape		6.3ϕ ×6.4L	Pb-free and Coated Case
OVB	**101**	**M**	**1C**	**TR**	**-**	**0607**	
Series Name	Capacitance	Capacitance Tolerance	Rated Voltage	Package Type	Terminal Type	Case Size	Lead Wire and Case Type

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

Mouser Electronics

Authorized Distributor

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Lelon:

OVB101M1CTR-0607 OVB101M1DTR-0812 OVB102M0JTR-0812 OVB120M1ETR-0606 OVB121M1ATR-0606 OVB122M0GTR-0810 OVB681M0JTR-0810 OVB681M1CTR-1013 OVB820M1ETR-1013 OVB821M1ATR-1010 OVB391M0GTR-0606 OVB391M1CTR-0812 OVB471M1ATR-0810 OVB471M1CTR-1010 OVB560M1ETR-1010 OVB561M0ETR-0607 OVB271M1CTR-0810 OVB272M0GTR-1013 OVB330M1ETR-0810 OVB331M0JTR-0607 OVB331M0JTR-0807 OVB390M1DTR-0807 OVB122M1ATR-1013 OVB151M1ATR-0807 OVB181M0GTR-0506 OVB181M1DTR-1013 OVB182M0JTR-1013 OVB270M1DTR-0606