OCVZ Series

Features

- 105℃, 2,000 hours assured
- Ultra low ESR with large permissible ripple current
- RoHS Compliant

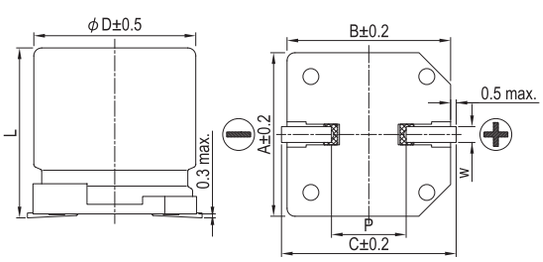
Marking color: Blue

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	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 * 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	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 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

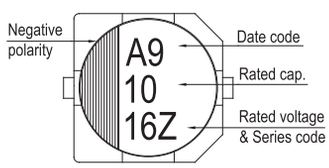


Lead Spacing and Diameter Unit: mm

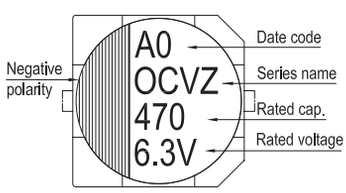
ϕD	L	A	B	C	W	P ± 0.2
5	5.7 ± 0.3	5.3	5.3	5.9	0.5 ~ 0.8	1.5
6.3	4.4 ± 0.2	6.6	6.6	7.2	0.5 ~ 0.8	2.0
6.3	5.9 +0.1/-0.3	6.6	6.6	7.2	0.5 ~ 0.8	2.0
6.3	7.7 ± 0.3	6.6	6.6	7.2	0.5 ~ 0.8	2.0
8	6.7 ± 0.3	8.3	8.3	9.0	0.7 ~ 1.1	3.1
8	10.0 ± 0.5	8.3	8.3	9.0	0.7 ~ 1.1	3.1
8	12.0 ± 0.5	8.3	8.3	9.0	0.7 ~ 1.1	3.1
10	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
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)

Standard Ratings

Ripple Current: mA/rms at 100k Hz, 105℃

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℃)
		180	5 × 5.7		300	19	2,800
		330	6.3 × 4.4		500	16	3,180
		390	6.3 × 5.9		300	14	3,160
		560	6.3 × 5.9	0.12	300	16	3,500
			6.3 × 7.7		420	9	4,200
2.5V (0E)	2.9	680	8 × 6.7		500	20	3,370
		820	8 × 12	0.15	500	9	5,380
		1,200	10 × 7.7	0.12	600	13	4,450
		1,500	8 × 12	0.15	750	12	5,150
		2,200	10 × 9.9	0.12	1,100	10	5,500
		2,700	10 × 12.6	0.15	1,350	9	5,600
		150	5 × 5.7		300	20	2,730
		270	6.3 × 5.9			15	3,160
		330	6.3 × 5.9	0.12		15	3,160
		390	6.3 × 7.7		468	9	4,200
		560	8 × 6.7		500	22	3,220
			8 × 12	0.15	500	9	5,380
4V (0G)	4.6	1,000	10 × 7.7	0.12	800	14	4,300
		1,200	8 × 12	0.15	960	12	4,700
			10 × 9.9	0.12	960	10	5,500
		1,500	8 × 12	0.15	1,200	12	4,700
			10 × 9.9	0.12	1,200	10	5,500
		1,800	10 × 9.9		1,440	10	5,500
			10 × 12.6		1,440	9	5,600
		2,200	10 × 12.6	0.15	1,760	9	5,700
		120	5 × 5.7		300	21	2,660
		220	6.3 × 4.4		500	18	3,000
			6.3 × 5.9		300	15	3,160
		330	6.3 × 5.9	0.12	415	17	3,390
			6.3 × 7.7		623	9	4,200
6.3V (0J)	7.2	390	8 × 6.7		491	22	3,220
		820	8 × 12	0.15	1,033	13	4,700
			10 × 7.7		1,033	14	4,300
		1,200	10 × 9.9	0.12	1,512	12	5,025
		1,500	10 × 9.9		1,890	12	5,025
			10 × 12.6	0.15	1,890	10	5,560
		1,800	10 × 12.6	0.15	2,268	11	5,200
		68	5 × 5.7		300	23	2,540
		120	6.3 × 5.9		300	22	2,600
		150	6.3 × 7.7		450	15	3,400
		220	8 × 6.7		440	22	3,220
10V (1A)	12.0	270	8 × 6.7	0.12	500	22	3,220
		390	8 × 10		780	17	4,000
		470	10 × 7.7		940	19	3,800
		680	10 × 9.9		1,056	13	4,820

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 × 5.7	0.12	300	27	2,350
			6.3 × 5.9			24	2,460
		68	6.3 × 5.9			25	2,440
		82	6.3 × 7.7		262	24	2,700
		100	6.3 × 5.9		320	24	2,490
			6.3 × 7.7				2,700
			8 × 6.7				3,010
		120			384	24	3,010
		150			500	22	3,220
		180	8 × 10		576	18	3,890
		220	8 × 10		704	18	3,890
			10 × 7.7		704	22	3,450
		270	8 × 12	0.15	864	12	4,850
		330	10 × 9.9	0.12	1,056	16	4,350
			10 × 12.6	0.15	1,056	12	5,300
		470		0.15	1,504	10	6,100
		820		0.12	2,624	12	5,400
		1,000		0.12	3,200	12	5,400
20V (1D)	23.0	120	6.3 × 5.9	0.12	480	25	3,200
		390	8 × 12		1,560	14	4,950
		560	10 × 9.9		2,240	18	4,100
			10 × 12.6		2,240	12	5,600
25V (1E)	29.0	56	6.3 × 5.9	0.12	280	30	2,800
		180	8 × 12		900	16	4,650
		220	10 × 9.9		1,100	20	3,800
		330	10 × 12.6		1,650	14	5,000
35V (1V)	40.0	22	6.3 × 5.9	0.12	154	35	2,600
		82	8 × 12		574	20	4,000
		120	10 × 12.6		840	18	4,400

Part Numbering System

OCVZ Series	820μF	±20%	6.3V	Carrier Tape		10φ×7.7L	General Purpose
OVZ	**821**	**M**	**0J**	**TR**	**-**	**1008**	
Series Name	Capacitance	Capacitance Tolerance	Rated Voltage	Package Type	Terminal Type	Case Size	Application

Note: For more details, please refer to “Part Numbering System” on page 20.