

VEJ Series

Features

- 4φ ~ 18φ, 105°C, 2,000 hours assured
- Designed for surface mounting on high density PC board
- RoHS compliant
- AEC-Q200 compliant parts available (replace "S" Suffix with "KS")



Marking color: Black

Specifications

Items	Performance														
Category	6.3 ~ 100V				160 ~ 400V				450V						
Temperature Range	-55°C ~ +105°C				-40°C ~ +105°C				-25°C ~ +105°C						
Capacitance Tolerance	± 20% (at 120 Hz, 20°C)														
Leakage Current (at 20°C)	Rated voltage		6.3 ~ 100V						160 ~ 450V						
	Time		after 2 minutes						after 5 minutes						
	Case size		4 ~ 10 ϕ				12.5 ~ 18 ϕ								
	Leakage Current		I = 0.01CV or 3μA, whichever is greater				I = 0.03CV or 4μA, whichever is greater			I = 0.04CV + 100μA					
Where, C = rated capacitance in μF, V = rated DC working voltage in V															
Tanδ (at 120 Hz, 20°C)	Rated Voltage		6.3	10	16	25	35	50	63	100	160 ~ 250	400 ~ 450			
	4 ~ 10 ϕ		0.45	0.35	0.28	0.18	0.16	0.14	0.12	0.12	-	-			
	12.5 ~ 18 ϕ		0.40	0.38	0.34	0.26	0.22	0.18	0.14	0.10	0.20	0.25			
When the capacitance exceeds 1,000μF, 0.02 shall be added every 1,000μF increase.															
Low Temperature Characteristics (at 120 Hz)	Impedance ratio shall not exceed the values given in the table below.														
	Rated Voltage		6.3	10	16	25	35	50	63	100	160	200	250	400	450
	Impedance Ratio	Z/(-25°C)	ϕ D < 12.5	4	4	3	2	2	2	2	3	-	-	-	-
		/ Z/(+20°C)	ϕ D ≥ 12.5	5	4	3	2	2	2	2	3	3	3	6	6
		Z/(-55/-40°C)	ϕ D < 12.5	12	8	6	4	3	3	3	4	-	-	-	-
/ Z/(+20°C)		ϕ D ≥ 12.5	10	8	6	4	3	3	3	3	6	6	6	10	-
Note: The ratio value with " - " is only available for 400V.															
Endurance	Test Time		2,000 Hrs												
	Capacitance Change		Within ± 25% of initial value for ϕ D ≤ 6.3 mm; Within ± 20% of initial value for ϕ D ≥ 8 mm												
	Tanδ		Less than 300% of specified value for ϕ D ≤ 6.3 mm; Less than 200% of specified value for ϕ D ≥ 8 mm												
	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 2,000 hours at 105°C.															
Shelf Life Test	Test time: 1,000 hours; other items are the same as those for the Endurance. The rated voltage shall be applied to the capacitors before the measurements for 160 ~ 450V (Refer to JIS C 5101-4 4.1).														
Ripple Current and Frequency Multipliers	Freq. (Hz)		50				120		1k		10k up				
	Cap. (μF)		50				120		1k		10k up				
	≤ 1,000		0.80				1.00		1.25		1.40				
1,000 < C ≤ 8,200		0.85				1.00		1.15		1.25					

Diagram of Dimensions

Fig. 1

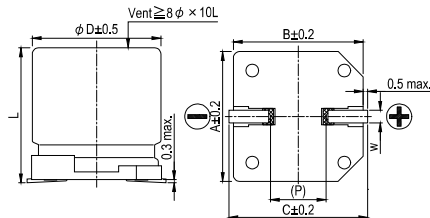
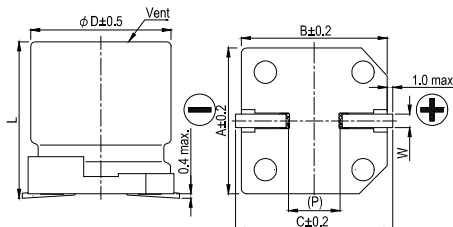


Fig. 2



Lead Spacing and Diameter

Unit: mm

φ D	L	A	B	C	W	P	Fig. No.
4	5.7 ± 0.3	4.3	4.3	5.1	0.5 ~ 0.8	1.0	1
5	5.7 ± 0.3	5.3	5.3	5.9	0.5 ~ 0.8	1.5	1
6.3	5.7 ± 0.3	6.6	6.6	7.2	0.5 ~ 0.8	2.0	1
6.3	7.7 ± 0.3	6.6	6.6	7.2	0.5 ~ 0.8	2.0	1
8	6.5 ± 0.3	8.3	8.3	9.0	0.5 ~ 0.8	2.3	1
8	10 ± 0.5	8.3	8.3	9.0	0.7 ~ 1.1	3.1	1
10	7.7 ± 0.3	10.3	10.3	11.0	0.7 ~ 1.1	4.7	1
10	10 ± 0.5	10.3	10.3	11.0	0.7 ~ 1.1	4.7	1
12.5	13.5 ± 0.5	13.0	13.0	13.7	1.1 ~ 1.4	4.4	2
12.5	16 ± 0.5	13.0	13.0	13.7	1.1 ~ 1.4	4.4	2
16	16.5 ± 0.5	17.0	17.0	18.0	1.1 ~ 1.4	6.4	2
16	21.5 ± 0.5	17.0	17.0	18.0	1.1 ~ 1.4	6.4	2
18	16.5 ± 0.5	19.0	19.0	20.0	1.1 ~ 1.4	6.4	2
18	21.5 ± 0.5	19.0	19.0	20.0	1.1 ~ 1.4	6.4	2

The diagram is marking " () " for reference dimension.

All product specifications in the catalog are subject to change without notice. (Cat. 2025E3)

