

VEZ Series

Features

- 4φ ~ 6.3φ, 105°C, 1,000 hours assured
- Low ESR capacitors
- Designed for surface mounting on high density PC board
- RoHS compliant
- AEC-Q200 compliant parts available (replace "S" Suffix with "KS")

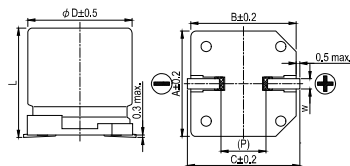


Marking color: Black

Specifications

Items	Performance																													
Category Temperature Range	-55°C ~ +105°C																													
Capacitance Tolerance	± 20% (at 120 Hz, 20°C)																													
Leakage Current (at 20°C)	I = 0.01CV or 3 (μA) whichever is greater (after 2 minutes) Where, C = rated capacitance in μF, V = rated DC working voltage in V																													
Tanδ (at 120 Hz, 20°C)	<table><tr><td>Rated Voltage</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</td></tr><tr><td>Tanδ (max.)</td><td>0.28</td><td>0.24</td><td>0.20</td><td>0.16</td><td>0.14</td><td>0.12</td></tr></table>							Rated Voltage	6.3	10	16	25	35	50	Tanδ (max.)	0.28	0.24	0.20	0.16	0.14	0.12									
Rated Voltage	6.3	10	16	25	35	50																								
Tanδ (max.)	0.28	0.24	0.20	0.16	0.14	0.12																								
Low Temperature Characteristics (at 120 Hz)	Impedance ratio shall not exceed the values given in the table below. <table><tr><td colspan="2">Rated Voltage</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</td></tr><tr><td rowspan="2">Impedance Ratio</td><td>Z(-25°C) / Z(+20°C)</td><td>4</td><td>3</td><td>2</td><td>2</td><td>2</td><td>2</td></tr><tr><td>Z(-55°C) / Z(+20°C)</td><td>10</td><td>7</td><td>5</td><td>3</td><td>3</td><td>3</td></tr></table>							Rated Voltage		6.3	10	16	25	35	50	Impedance Ratio	Z(-25°C) / Z(+20°C)	4	3	2	2	2	2	Z(-55°C) / Z(+20°C)	10	7	5	3	3	3
Rated Voltage		6.3	10	16	25	35	50																							
Impedance Ratio	Z(-25°C) / Z(+20°C)	4	3	2	2	2	2																							
	Z(-55°C) / Z(+20°C)	10	7	5	3	3	3																							
Endurance	<table><tr><td>Test Time</td><td>1,000 Hrs</td></tr><tr><td>Capacitance Change</td><td>Within ± 25% of initial value</td></tr><tr><td>Tanδ</td><td>Less than 200% of specified value</td></tr><tr><td>Leakage Current</td><td>Within specified value</td></tr></table> * The above specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage applied for 1,000 hours at 105°C.							Test Time	1,000 Hrs	Capacitance Change	Within ± 25% of initial value	Tanδ	Less than 200% of specified value	Leakage Current	Within specified value															
Test Time	1,000 Hrs																													
Capacitance Change	Within ± 25% of initial value																													
Tanδ	Less than 200% of specified value																													
Leakage Current	Within specified value																													
Shelf Life Test	Test time: 1,000 hours; other items are the same as those for the Endurance.																													
Ripple Current and Frequency Multipliers	<table><tr><td>Frequency(Hz)</td><td>50, 60</td><td>120</td><td>1k</td><td>10k up</td></tr><tr><td>Multiplier</td><td>0.64</td><td>0.8</td><td>0.93</td><td>1.0</td></tr></table>							Frequency(Hz)	50, 60	120	1k	10k up	Multiplier	0.64	0.8	0.93	1.0													
Frequency(Hz)	50, 60	120	1k	10k up																										
Multiplier	0.64	0.8	0.93	1.0																										

Diagram of Dimensions



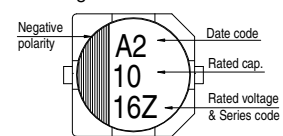
Lead Spacing and Diameter

Unit: mm

φD	L	A	B	C	W	P
4	5.3 ± 0.2	4.3	4.3	5.1	0.5 ~ 0.8	1.0
5	5.3 ± 0.2	5.3	5.3	5.9	0.5 ~ 0.8	1.5
6.3	5.3 ± 0.2	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

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

Marking



Dimension: φD × L(mm)

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

Impedance: Ω/ at 100k Hz, 20°C

Dimension and Permissible Ripple Current

Rated Volt. (Voc)	6.3V (0J)			10V (1A)			16V (1C)			25V (1E)			35V (1V)			50V (1H)			
Cap. (μF)	Contents	φ D×L	Imp.	mA	φ D×L	Imp.	mA	φ D×L	Imp.	mA	φ D×L	Imp.	mA	φ D×L	Imp.	mA	φ D×L	Imp.	mA
1.0	010																4×5.3	5.0	30
2.2	2R2																4×5.3	5.0	30
3.3	3R3																4×5.3	5.0	30
4.7	4R7										4×5.3	3.20	65	4×5.3	3.20	65	5×5.3	3.0	50
10	100				4×5.3	3.20	65	4×5.3	3.20	65	5×5.3	1.50	110	5×5.3	1.50	110	6.3×5.3	2.0	70
22	220	4×5.3	3.20	65	5×5.3	1.50	110	5×5.3	1.50	110	6.3×5.3	0.85	170	6.3×5.3	0.85	170	6.3×5.3	2.0	70
33	330	5×5.3	1.50	110	5×5.3	1.50	110	6.3×5.3	0.85	170	6.3×5.3	0.85	170	6.3×5.3	0.85	170	6.3×5.3	1.0	170
47	470	5×5.3	1.50	110	6.3×5.3	0.85	170	6.3×5.3	0.85	170	6.3×5.3	0.85	170	6.3×7.7	0.50	255			
100	101	6.3×5.3	0.85	170	6.3×5.3	0.85	170	6.3×5.3	0.85	170	6.3×7.7	0.50	255						
150	151	6.3×7.7	0.50	255	6.3×7.7	0.50	255	6.3×7.7	0.50	255									
220	221	6.3×7.7	0.50	255	6.3×7.7	0.50	255	6.3×7.7	0.50	255									

Part Numbering System

VEZ Series	10μF	± 20%	16V	Carrier Tape	4φ × 5.3L	Regional Tracking Purpose
VEZ	100	M	1C	TR	-	0405
Series Name	Capacitance	Capacitance Tolerance	Rated Voltage	Package Type	Terminal Type	Case Size
						S

Note: For more details, please refer to "Part Numbering System - SMD Type" on page 106.

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