



SMD Aluminum Electrolytic Capacitors

VZS

Features

- 5 ~ 8 ϕ , 105°C, 2,000 hours assured
- Low impedance 30 ~ 50% less than VZH series
- Large capacitance with ultra low impedance capacitors
- Designed for surface mounting on high density PC board
- RoHS Compliance

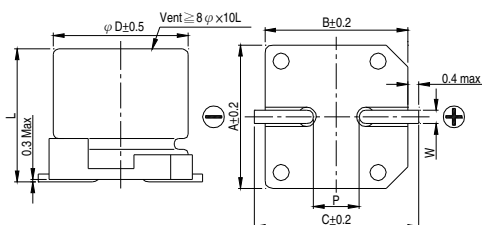


Marking color: Black

SPECIFICATIONS

Items	Performance																					
Category Temperature Range	-55℃ ~ +105℃																					
Capacitance Tolerance	±20% (at 120Hz, 20℃)																					
Leakage Current (at 20℃)	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																					
Dissipation Factor (Tan δ at 120Hz, 20℃)	<table><tr><td>Rated Voltage</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td></tr><tr><td>Tan δ (max)</td><td>0.30</td><td>0.26</td><td>0.22</td><td>0.16</td><td>0.13</td></tr></table>	Rated Voltage	6.3	10	16	25	35	Tan δ (max)	0.30	0.26	0.22	0.16	0.13									
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Low Temperature Characteristics (at 120Hz)	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></tr><tr><td>Impedance</td><td>Z(-25℃)/Z(+20℃)</td><td>4</td><td>3</td><td>2</td><td>2</td><td>2</td></tr><tr><td>Ratio</td><td>Z(-55℃)/Z(+20℃)</td><td>8</td><td>5</td><td>4</td><td>3</td><td>3</td></tr></table>	Rated Voltage		6.3	10	16	25	35	Impedance	Z(-25℃)/Z(+20℃)	4	3	2	2	2	Ratio	Z(-55℃)/Z(+20℃)	8	5	4	3	3
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Endurance	<table><tr><td>Test Time</td><td>2,000 Hrs</td></tr><tr><td>Capacitance Change</td><td>Within ±30% of initial value</td></tr><tr><td>Dissipation Factor</td><td>Less than 300% 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℃ after the rated voltage applied for 2,000 hours at 105℃.	Test Time	2,000 Hrs	Capacitance Change	Within ±30% of initial value	Dissipation Factor	Less than 300% of specified value	Leakage Current	Within specified value													
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Shelf Life Test	Test time: 1,000 hours; other items are the same as those for the Endurance.																					
Ripple Current & 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>0.60</td><td>0.70</td><td>0.85</td><td>1.0</td></tr></table>	Frequency(Hz)	50, 60	120	1k	10k up	Multiplier	0.60	0.70	0.85	1.0											
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DIAGRAM OF DIMENSIONS



LEAD SPACING AND DIAMETER

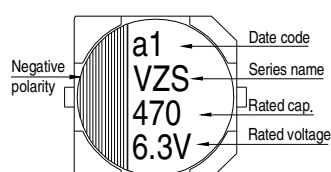
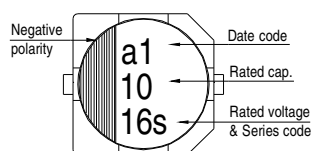
Unit: mm

φD	L	A	B	C	W	P ± 0.2
5	5.7 ± 0.3	5.3	5.3	6.1	0.5 ~ 0.8	1.5
6.3	5.7 ± 0.3	6.6	6.6	7.4	0.5 ~ 0.8	2.0
8	10 ± 0.5	8.4	8.4	9.2	0.7 ~ 1.1	3.1

MARKING

φD ≤ 6.3mm

φD = 8 mm





Dimension: $\phi D \times L$ (mm)

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

Impedance: Ω / at 100k Hz, 20°C

DIMENSION & PERMISSIBLE RIPPLE CURRENT

V. DC		6.3V (0J)			10V (1A)			16V (1C)			25V (1E)			35V (1V)		
μF	Contents	$\phi D \times L$	Imp.	mA	$\phi D \times L$	Imp.	mA	$\phi D \times L$	Imp.	mA	$\phi D \times L$	Imp.	mA	$\phi D \times L$	Imp.	mA
22	220							5x5.7	0.36	240	5x5.7	0.36	240	5x5.7	0.36	240
33	330				5x5.7	0.36	240				5x5.7	0.36	240	5x5.7	0.36	240
								6.3x5.7	0.26	300	6.3x5.7	0.26	300	6.3x5.7	0.26	300
47	470	5x5.7	0.36	240				5x5.7	0.36	240	5x5.7	0.36	240	6.3x5.7	0.26	300
								6.3x5.7	0.26	300	6.3x5.7	0.26	300	6.3x5.7	0.26	300
68	680							5x5.7	0.36	240	6.3x5.7	0.26	300	6.3x5.7	0.26	300
								6.3x5.7	0.26	300	6.3x5.7	0.26	300	6.3x5.7	0.26	300
100	101	5x5.7	0.36	240	5x5.7	0.36	240	6.3x5.7	0.26	300	6.3x5.7	0.26	300	8x10	0.08	850
		6.3x5.7	0.26	300												
150	151	5x5.7	0.36	240	6.3x5.7	0.26	300	6.3x5.7	0.26	300	8x10	0.08	850	8x10	0.08	850
220	221	6.3x5.7	0.26	300	6.3x5.7	0.26	300	8x10	0.08	850	8x10	0.08	850	8x10	0.08	850
330	331	6.3x5.7	0.26	300	8x10	0.08	850	8x10	0.08	850	8x10	0.08	850			
470	471	8x10	0.08	850	8x10	0.08	850	8x10	0.08	850						
680	681	8x10	0.08	850	8x10	0.08	850									