

SURFACE MOUNT ALUMINUM ELECTROLYTIC

DV Long Life Series

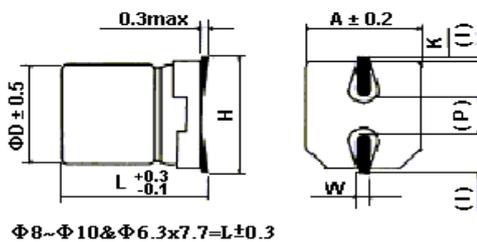
- Features : 105°C 2000 hours , Longer life than SV, Low profile vertical chip
- Recommended Applications: Suitable for AV(TV,Video,Audio),Monitor/Computer, OA/HA/Communication
- Corresponding product to RoHS



Specifications

Item	Characteristics																																				
Operating Temperature Range	-40 ~ +105°C																																				
Rated Voltage Range (WV)	6.3 ~ 100VDC																																				
Rated Capacitance Range	1 ~ 1500 μ F																																				
Capacitance Tolerance	$\pm 20\%$ at 120Hz , 20°C																																				
Leakage Current (MAX) (20°C)	$I \leq 0.01CV$ or $3(\mu A)$, whichever is greater. (After rated voltage applied for 2 minutes) I= Leakage Current (μA) C= Nominal Capacitance (μF) V= Rated Voltage (V)																																				
Dissipation Factor (MAX) (tan δ) (120Hz ,20°C)	Shown in the table of standard ratings																																				
Low Temperature Stability Impedance Ratio (MAX)	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th style="border: none;">WV</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>100</th> </tr> </thead> <tbody> <tr> <td style="border: none;">$Z(120HZ)$</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="border: none;">$Z(-25^\circ C) / Z(20^\circ C)$</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td style="border: none;">$Z(-40^\circ C) / Z(20^\circ C)$</td> <td>8</td> <td>6</td> <td>4</td> <td>4</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> </tr> </tbody> </table>	WV	6.3	10	16	25	35	50	63	100	$Z(120HZ)$									$Z(-25^\circ C) / Z(20^\circ C)$	4	3	2	2	2	2	2	2	$Z(-40^\circ C) / Z(20^\circ C)$	8	6	4	4	3	3	3	3
WV	6.3	10	16	25	35	50	63	100																													
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Endurance	<p>After applying rated voltage for 2000hrs at 105°C , the capacitors shall meet the following requirements.</p> <table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th style="border: none;">Case (ϕ)</th> <th>$\phi 4$ to $\phi 6.3$</th> <th>$\phi 8$ to $\phi 10$</th> </tr> </thead> <tbody> <tr> <td style="border: none;">Capacitance Change</td> <td>Within $\pm 25\%$ of the initial value</td> <td>Within $\pm 20\%$ of the initial value</td> </tr> <tr> <td style="border: none;">Dissipation Factor</td> <td colspan="2">Not more than 200% of the specified value</td> </tr> <tr> <td style="border: none;">Leakage Current</td> <td colspan="2">Not more than the specified value</td> </tr> </tbody> </table>	Case (ϕ)	$\phi 4$ to $\phi 6.3$	$\phi 8$ to $\phi 10$	Capacitance Change	Within $\pm 25\%$ of the initial value	Within $\pm 20\%$ of the initial value	Dissipation Factor	Not more than 200% of the specified value		Leakage Current	Not more than the specified value																									
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Shelf Life	After placed at 105°C without voltage applied for 1000 hours, the capacitor shall meet the same requirement as Endurance.																																				

Diagram of Dimensions(mm)



() : Reference size

ϕD	L	A	H	I	W	P	K
4.0	5.4	4.3	5.5 Max	1.8	0.65 \pm 0.1	1.0 \pm 0.2	0.35 +0.15 -0.20
5.0	5.4	5.3	6.5 Max	2.2	0.65 \pm 0.1	1.5 \pm 0.2	0.35 +0.15 -0.20
6.3	5.4	6.6	7.8 Max	2.6	0.65 \pm 0.1	1.8 \pm 0.2	0.35 +0.15 -0.20
6.3	7.7	6.6	7.8 Max	2.6	0.65 \pm 0.1	1.8 \pm 0.2	0.35 +0.15 -0.20
8.0	10.2	8.3	10.0 Max	3.4	0.90 \pm 0.2	3.1 \pm 0.2	0.70 \pm 0.20
10.0	10.2	10.3	12.0 Max	3.5	0.90 \pm 0.2	4.6 \pm 0.2	0.70 \pm 0.20

Multiplier for Ripple Current

Frequency coefficient

Frequency (Hz)	60	120	1K	10K
Coefficient	0.85	1.00	1.15	1.25

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■ Dimensions, Max Dissipation Factor, Max Permissible Ripple Current

Capacitance (μ F)	Rated (Surge) Voltage								
	6.3(8)			10(13)			16(20)		
	Size	$\tan \delta$	Ripple	Size	$\tan \delta$	Ripple	Size	$\tan \delta$	Ripple
10							4x5.4	0.16	28
22	4x5.4	0.3	26	4x5.4	0.22	23	4x5.4	0.16	29
							5x5.4	0.16	39
33	4x5.4	0.30	29	5x5.4	0.22	45	5x5.4	0.16	40
47	4x5.4	0.30	31	5x5.4	0.22	60	5x5.4	0.16	42
	5x5.4	0.30	46	6.3x5.4	0.22	70	6.3x5.4	0.16	70
100	6.3x5.4	0.30	71	6.3x5.4	0.30	71	6.3x5.4	0.20	71
				6.3x7.7	0.30	110	6.3x7.7	0.20	130
220	6.3x5.4	0.35	80	6.3x7.7	0.30	120	8x10.2	0.20	150
	6.3x7.7	0.35	120	8x10.2	0.26	260	10x10.2	0.20	210
330	6.3x7.7	0.35	140	8x10.2	0.30	290	10x10.2	0.20	230
	8x10.2	0.35	290						
470	8x10.2	0.35	290	8x10.2	0.30	320	8x10.2	0.20	240
	10x10.2	0.35	380	10x10.2	0.26	380	10x10.2	0.20	380
1000	10x10.2	0.35	410	10x10.2	0.26	410			
1500	10x10.2	0.35	460						

Capacitance (μ F)	Rated (Surge) Voltage								
	25(32)			35(44)			50(63)		
	Size	$\tan \delta$	Ripple	Size	$\tan \delta$	Ripple	Size	$\tan \delta$	Ripple
1							4x5.4	0.12	10
2.2							4x5.4	0.12	16
3.3							4x5.4	0.12	16
4.7	4x5.4	0.14	22	4x5.4	0.12	22	5x5.4	0.12	23
6.8	4x5.4	0.14	25	4x5.4	0.12	25	5x5.4	0.12	30
10	4x5.4	0.14	25	5x5.4	0.12	30	5x5.4	0.12	35
	5x5.4	0.14	28				6.3x5.4	0.12	40
22	5x5.4	0.14	28	6.3x5.4	0.14	60	6.3x5.4	0.12	42
	6.3x5.4	0.14	55				6.3x7.7	0.12	65
33	6.3x5.4	0.14	65	6.3x7.7	0.14	80	6.3x7.7	0.12	91
47	6.3x5.4	0.16	65	6.3x7.7	0.14	100	6.3x7.7	0.12	110
	6.3x7.7	0.16	91	8x10.2	0.14	210	8x10.2	0.12	210
100	6.3x7.7	0.16	100	8x10.2	0.14	240	8x10.2	0.12	240
	8x10.2	0.16	230	10x10.2	0.14	310	10x10.2	0.12	320
220	8x10.2	0.16	270	8x10.2	0.14	260	10x10.2	0.12	330
	10x10.2	0.16	310	10x10.2	0.14	350			
330	10x10.2	0.16	340	10x10.2	0.14	370			
470	10x10.2	0.16	380						

Capacitance (μ F)	Rated (Surge) Voltage					
	63(79)			100(125)		
	Size	$\tan \delta$	Ripple	Size	$\tan \delta$	Ripple
10						
22				8x10.2	0.18	100
33	8x10.2	0.18	140	8x10.2	0.18	120
				10x10.2	0.18	150
47	8x10.2	0.18	170	10x10.2	0.18	170
100	10x10.2	0.18	340			
150	10x10.2	0.18	360			

☆Size: D ϕ x L (mm). ☆ $\tan \delta$: 20°C, 120Hz. ☆Ripple Current: 105°C, 120Hz, (mA/rms).