

SURFACE MOUNT ALUMINUM ELECTROLYTIC

>GV General purpose
Series

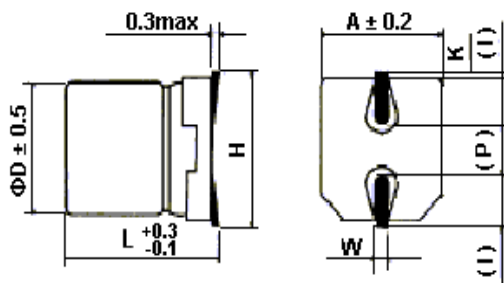
- Features : 85°C 2000 hours & Low profile vertical chip
- Recommended Applications: Suitable for AV(TV,Video,Audio),Monitor/Computer, Home appliance, OA/HA/Communication
- Corresponding product to RoHS



Specifications

Item	Characteristics																																								
Operating Temperature Range	-40 ~ +85°C																																								
Rated Voltage Range (WV)	4 ~ 100VDC																																								
Capacitance Range	0.1 ~ 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) ($\tan \delta$) (120Hz, 20°C)	Shown in the table of standard rating																																								
Low Temperature Stability Impedance Ratio (MAX)	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th style="border: none;">WV</th> <th>4</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> <td></td> </tr> <tr> <td style="border: none;">$Z(-25^\circ C) / Z(20^\circ C)$</td> <td>7</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>15</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	4	6.3	10	16	25	35	50	63	100	$Z(120Hz)$										$Z(-25^\circ C) / Z(20^\circ C)$	7	4	3	2	2	2	2	2	2	$Z(-40^\circ C) / Z(20^\circ C)$	15	8	6	4	4	3	3	3	3
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Endurance	<p>After applying rated voltage for 2000hrs at 85°C, the capacitors shall meet the following requirements.</p> <table border="1" style="width: 100%;"> <tbody> <tr> <td>Capacitance Change</td> <td>Within $\pm 20\%$ of the initial value</td> </tr> <tr> <td>Dissipation Factor</td> <td>Not more than 200% of the specified value</td> </tr> <tr> <td>Leakage Current</td> <td>Not more than the specified value</td> </tr> </tbody> </table>	Capacitance Change	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 85°C without voltage applied for 1000 hours, the capacitor shall meet the same requirement as Endurance.																																								

Diagram of Dimensions(mm)



$\Phi 8 \sim \Phi 10$ & $\Phi 6.3 \times 7.7 = L \pm 0.3$

() : 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	6.2	8.3	9.5 Max	3.4	0.65 \pm 0.1	2.2 \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	0.80	1.00	1.15	1.25

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■ Dimensions, Max Dissipation Factor, Max Permissible Ripple Current

Capacitance (μ F)	Rated (Surge) Voltage											
	4(5)			6.3(8)			10(13)			16(20)		
	Size	$\tan \delta$	Ripple	Size	$\tan \delta$	Ripple	Size	$\tan \delta$	Ripple	Size	$\tan \delta$	Ripple
4.7										4x5.4	0.16	20
10										4x5.4	0.16	28
22				4x5.4	0.26	20	4x5.4	0.30	28	4x5.4	0.26	28
										5x5.4	0.16	39
33	4x5.4	0.35	26	4x5.4	0.26	22	4x5.4	0.30	29	5x5.4	0.26	45
							5x5.4	0.20	43	6.3x5.4	0.16	66
47	4x5.4	0.35	34	4x5.4	0.26	36	5x5.4	0.30	43	5x5.4	0.16	45
				5x5.4	0.26	46				6.3x5.4	0.16	70
100	5x5.4	0.35	61	5x5.4	0.26	47	6.3x5.4	0.26	70	6.3x5.4	0.20	70
				6.3x5.4	0.26	71				6.3x7.7	0.20	85
220	6.3x5.4	0.35	82	6.3x5.4	0.35	74	6.3x5.4	0.26	105	6.3x7.7	0.20	162
				6.3x7.7	0.35	235	6.3x7.7	0.26	250	8x10.2	0.20	280
330	6.3x5.4	0.35	80	6.3x7.7	0.35	280	8x10.2	0.26	330	8x10.2	0.20	320
										10x10.2	0.20	380
470	6.3x7.7	0.35	200	8x10.2	0.35	380	8x10.2	0.26	390	8x10.2	0.20	350
							10x10.2	0.26	400	10x10.2	0.20	420
1000				8x10.2	0.35	500	10x10.2	0.26	580			
				10x10.2	0.35	700						
1500				10x10.2	0.35	750						

Capacitance (μ F)	Rated (Surge) Voltage								
	25(32)			35(44)			50(63)		
	Size	$\tan \delta$	Ripple	Size	$\tan \delta$	Ripple	Size	$\tan \delta$	Ripple
0.1							4x5.4	0.12	1
0.22							4x5.4	0.12	2
0.33							4x5.4	0.12	3
0.47							4x5.4	0.12	5
1							4x5.4	0.12	10
2.2				4x5.4	0.12	8	4x5.4	0.12	16
3.3				4x5.4	0.12	10	4x5.4	0.12	16
4.7	4x5.4	0.14	22	4x5.4	0.12	22	4x5.4	0.14	18
							5x5.4	0.12	23
10	4x5.4	0.20	24	4x5.4	0.16	24	5x5.4	0.14	27
	5x5.4	0.14	28	5x5.4	0.12	30	6.3x5.4	0.12	35
22	5x5.4	0.20	35	5x5.4	0.16	36	6.3x5.4	0.14	40
	6.3x5.4	0.14	55	6.3x5.4	0.12	60	6.3x7.7	0.12	90
33	5x5.4	0.20	42	6.3x5.4	0.16	60	6.3x7.7	0.12	90
	6.3x5.4	0.14	65	6.3x7.7	0.14	130	8x10.2	0.12	120
47	6.3x5.4	0.20	70	6.3x5.4	0.16	70	6.3x7.7	0.12	63
	6.3x7.7	0.16	96	6.3x7.7	0.14	165	8x10.2	0.12	120
100	6.3x7.7	0.16	143	6.3x7.7	0.14	140	8x10.2	0.12	200
	8x10.2	0.16	180	8x10.2	0.14	180	10x10.2	0.12	250
220	8x10.2	0.16	230	8x10.2	0.14	200	10x10.2	0.12	300
	10x10.2	0.16	310	10x10.2	0.14	310			
330	8x10.2	0.16	270	10x10.2	0.14	350			
	10x10.2	0.16	340						
470	10x10.2	0.16	380						

Capacitance (μ F)	Rated (Surge) Voltage					
	63(79)			100(125)		
	Size	$\tan \delta$	Ripple	Size	$\tan \delta$	Ripple
3.3				6.3x7.7	0.18	50
4.7	6.3x5.4	0.18	20	6.3x7.7	0.18	50
10	6.3x5.4	0.18	20	6.3x7.7	0.18	50
				8x10.2	0.18	55
22	6.3x7.7	0.18	40	8x10.2	0.18	55
	8x10.2	0.18	40	10x10.2	0.18	85
33	8x10.2	0.18	45	10x10.2	0.18	90
47	8x10.2	0.18	45			
100	10x10.2	0.18	60			

☆Size: D ϕ x L (mm), ☆ $\tan \delta$: 20°C, 120Hz, ☆Ripple Current: 85°C, 120Hz, (mA/rms).