

SMD Aluminum Electrolytic Capacitors

HC Series – High Temperature Chip Type 105°C 1000hrs



Specifications

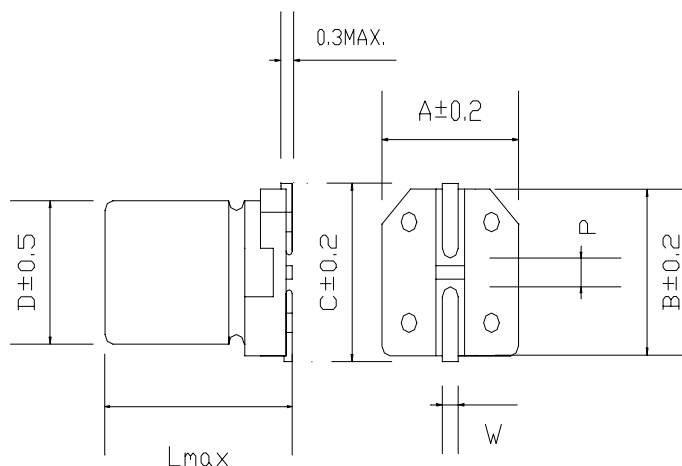
Item	Performance																					
Operating Temperature Range	-40 to+105℃																					
Rated Working Voltage Range	6.3 – 50VDC																					
Nominal Capacitance Range	0.1 – 1000μ F																					
Capacitance Tolerance	± 20% (at+20℃ ,120Hz)																					
Leakage Current	$I \leq 0.01CV$ or 3(μ A), after 2 minutes whichever is greater measured with rated working voltage applied..																					
Dissipation Factor (tanδ) (120Hz\+20℃)	<table><tr><td>VDC</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</td></tr><tr><td>D.F. (%) max.</td><td>30</td><td>24</td><td>20</td><td>18</td><td>16</td><td>14</td></tr></table>	VDC	6.3	10	16	25	35	50	D.F. (%) max.	30	24	20	18	16	14							
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Characteristics at Low Temperature (stability at 120 Hz)	<table><tr><td>Working voltage VDC</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</td></tr><tr><td>Z -25/ +20℃</td><td>4</td><td>3</td><td>2</td><td>2</td><td>2</td><td>2</td></tr><tr><td>Z -40/ +20℃</td><td>8</td><td>8</td><td>4</td><td>4</td><td>3</td><td>3</td></tr></table>	Working voltage VDC	6.3	10	16	25	35	50	Z -25/ +20℃	4	3	2	2	2	2	Z -40/ +20℃	8	8	4	4	3	3
Working voltage VDC	6.3	10	16	25	35	50																
Z -25/ +20℃	4	3	2	2	2	2																
Z -40/ +20℃	8	8	4	4	3	3																
Load life	After 1000hrs. application of DC rated working voltage at +105℃, The capacitor shall meet the following limits: Post test requirements at +20℃ . <table><tr><td>Leakage Current</td><td>the initial specified value</td></tr><tr><td>Capacitance change</td><td>±25% of initial measured value. (25V or more±20%)</td></tr><tr><td>Dissipation Factor(tanδ)</td><td>200% of initial specified value</td></tr></table>	Leakage Current	the initial specified value	Capacitance change	±25% of initial measured value. (25V or more±20%)	Dissipation Factor(tanδ)	200% of initial specified value															
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Capacitance change	±25% of initial measured value. (25V or more±20%)																					
Dissipation Factor(tanδ)	200% of initial specified value																					
Shelf Life	After storage for 1000hrs. at +105℃ with no voltage applied. Post test requirements at +20℃ , same limits as load life test. DC Rated voltage should be applied before measurement for 30 minutes.																					

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Diagram of Dimensions



ΦD	L±0.5	A	B	C	W	P
4	5.5	4.3	4.3	4.9	0.5~0.8	1.0
5	5.5	5.3	5.3	5.9	0.5~0.8	1.4
6.3	5.5	6.6	6.6	7.2	0.5~0.8	2.2
6.3	7.7	6.6	6.6	7.2	0.5~0.8	2.2
8	6.5	8.3	8.3	9.0	0.5~0.8	2.3
8	10.5	8.3	8.3	9.0	0.7~1.1	3.1
10	10.5	10.3	10.3	11.0	0.7~1.1	4.5

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Case Size

Max ripple current: mA rms at 105°C. 120Hz (DxL mm)

W.V	6.3V		10V		16V		25V		35V		50V	
μF	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
0.1											4x5.5	1.0
0.22											4x5.5	2.6
0.33											4x5.5	3.2
0.47											4x5.5	3.8
1											4x5.5	6.3
2.2											4x5.5	11
3.3											5x5.5	14
4.7							4x5.5	16	4x5.5	16	5x5.5	22
10					4x5.5	18	5x5.5	26	4x5.5	27	6.3x5.5	33
22	4x5.5	22	4x5.5	27	4x5.5	30	5x5.5	38	6.3x5.5	42	6.3x5.5	51
33	4x5.5	30	4x5.5	25	5x5.5	40	5x5.5	48	6.3x5.5	50	6.3x7.7	60
47	4x5.5	36	5x5.5	46	5x5.5	51	6.3x5.5	63	6.3x7.7	66	6.3x7.7	66
100	5x5.5	60	6.3x5.5	60	6.3x5.5	60	6.3x7.7	91	6.3x7.7	84	8x10.5	140
220	6.3x7.7	102	6.3x7.7	105	6.3x7.7	105	8x10.5	155	10x10.5	190	10x10.5	220
330	6.3x7.7	105	8x10.5	195	8x10.5	195	8x10.5	175	10x10.5	300		
470	8x10.5	210	8x10.5	210	8x10.5	210	10x10.5	300				
1,000	10x10.5	230	10x10.5	310								