

## LHS Series 焊片/焊针型铝电解电容器105°C标准品

Standard of 105°C Aluminum Electrolytic Capacitor of Lug / Snap-in Type

- 高可靠性, 耐高纹波 ● 105°C 2000 小时
- High-Reliability, High-Ripple Current ● 105°C 2000hours

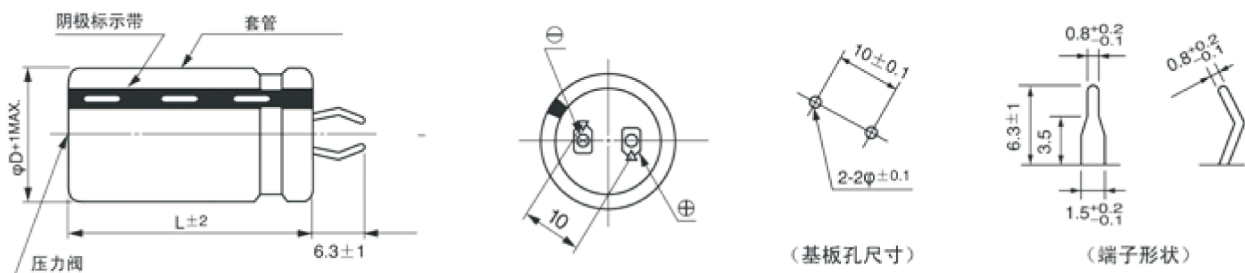


### 主要技术性能 Specifications

使用温度范围 Operating Temperature Range	-40 ~ +105°C	-25 ~ +105°C																
额定电压范围 Rated Voltage Range	16 ~ 100V DC	160 ~ 450V DC																
标称电容量允许偏差 Capacitance Tolerance (120Hz, 20°C)	± 20% (120Hz, 20°C)																	
漏电流 Leakage Current	$I \leq 3\sqrt{CV} (\mu A)$ 或 $1.5mA$ 取较大值 (20 °C, 施加额定电压5 分钟后) $I \leq 3\sqrt{CV} (\mu A)$ or $1.5mA$ Whichever is greater (20 °C, after 5 minutes application of rated voltage )																	
损耗角正切值 Dissipation Factor (120Hz, 20°C)	<table border="1"> <thead> <tr> <th>W.V.</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63-100</th> <th>160-250</th> <th>400-450</th> </tr> </thead> <tbody> <tr> <td>tg δ</td> <td>0.50</td> <td>0.40</td> <td>0.35</td> <td>0.30</td> <td>0.20</td> <td>0.15</td> <td>0.20</td> </tr> </tbody> </table> <p>容量大于 1000 μ F 者, 每增加 1000 μ F, 其损耗角正切值增加 0.02 For capacitance exceeding 1000 μ F, add 0.02 per increment of 1000 μ F</p>		W.V.	16	25	35	50	63-100	160-250	400-450	tg δ	0.50	0.40	0.35	0.30	0.20	0.15	0.20
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tg δ	0.50	0.40	0.35	0.30	0.20	0.15	0.20											
耐久性 Load Life	<p>+105 °C施加额定电压2000 小时, 恢复24 小时后, 电容器应满足要求 After applying rated voltage for 2000 hours at +105 °C and then resumed 24 hours. The capacitor shall meet the following limits.</p> <table border="1"> <tr> <td>电容量变化率 Capacitance Change</td> <td>≤ ± 20% 初始测量值 ≤ ± 20% of Initial value</td> </tr> <tr> <td>漏电流值 Leakage</td> <td>≤ 规定值 ≤ The specified value</td> </tr> <tr> <td>损耗角正切值 Dissipation Factor</td> <td>≤ 2 倍规定值 ≤ 200% of the specified value</td> </tr> </table>		电容量变化率 Capacitance Change	≤ ± 20% 初始测量值 ≤ ± 20% of Initial value	漏电流值 Leakage	≤ 规定值 ≤ The specified value	损耗角正切值 Dissipation Factor	≤ 2 倍规定值 ≤ 200% of the specified value										
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高温放置 Shelf Life	<p>+105°C, 1000 小时, 然后加额定电压按照 JISC 5101-4 第 4.1 项规定预处理后测量。 After storage for 1000 hours at +105°C, the capacitor shall be preconditioned by applying voltage according to Item 4.1 of JISC 5101-4.</p> <table border="1"> <tr> <td>电容量变化率 Capacitance Change</td> <td>≤ ± 15% 初始测量值 ≤ ± 15% of Initial measured value</td> </tr> <tr> <td>漏电流值 Leakage</td> <td>≤ 规定值 ≤ The specified value</td> </tr> <tr> <td>损耗角正切值 Dissipation Factor</td> <td>≤ 1.5 倍规定值 ≤ 150% of the specified value</td> </tr> </table>		电容量变化率 Capacitance Change	≤ ± 15% 初始测量值 ≤ ± 15% of Initial measured value	漏电流值 Leakage	≤ 规定值 ≤ The specified value	损耗角正切值 Dissipation Factor	≤ 1.5 倍规定值 ≤ 150% of the specified value										
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### 外形图及尺寸 Case size table

单位: mm



### LHS Series

■ 标称电容量、额定电压、额定纹波电流及外形尺寸对应表

Nominal capacitance, rated voltage, rated ripple current and case size table

WV Parameter ΦD×L(mm)	16V			25V			35V			50V			63V		
	μF	I~	ESR	μF	I~	ESR	μF	I~	ESR	μF	I~	ESR	μF	I~	ESR
22×25	6800	1.60	0.122	4700	1.55	0.141	3300	1.43	0.176	1800	1.31	0.184	1200	1.25	0.207
22×30	10000	1.99	0.083	6800	1.91	0.098	3900	1.65	0.149	2700	1.70	0.123	1800	1.52	0.138
22×35	12000	2.28	0.069	8200	2.14	0.081	5600	2.02	0.104	3300	1.98	0.101	2200	1.73	0.113
22×40	15000	2.64	0.055	10000	2.40	0.066	6800	2.28	0.085	3900	2.25	0.085	2700	1.97	0.092
22×45	18000	2.98	0.046	12000	2.69	0.055	-	-	-	4700	2.56	0.071	-	-	-
22×50	-	-	-	-	-	-	8200	2.67	0.071	5600	2.89	0.059	3300	2.32	0.075
25×25	10000	1.99	0.083	6800	1.91	0.098	4700	1.78	0.124	2700	1.70	0.123	1800	1.52	0.138
25×30	12000	2.30	0.069	8200	2.16	0.081	5600	2.04	0.104	3300	2.00	0.101	2200	1.75	0.113
25×35	15000	2.68	0.055	10000	2.44	0.066	6800	2.31	0.085	3900	2.28	0.085	2700	1.99	0.092
25×40	18000	3.04	0.046	12000	2.74	0.055	8200	2.60	0.071	5600	2.81	0.059	3300	2.27	0.075
25×45	22000	3.40	0.038	15000	3.15	0.044	10000	2.92	0.058	-	-	-	3900	2.54	0.064
25×50	27000	3.81	0.031	18000	3.54	0.037	12000	3.26	0.048	6800	3.37	0.049	4700	2.88	0.053
30×25	12000	2.38	0.069	8200	2.25	0.081	5600	2.12	0.104	3900	2.22	0.085	2700	1.93	0.092
30×30	18000	3.00	0.046	12000	2.70	0.055	8200	2.56	0.071	4700	2.58	0.071	3300	2.24	0.075
30×35	22000	3.39	0.038	15000	3.13	0.044	10000	2.92	0.058	5600	2.95	0.059	3900	2.55	0.064
30×40	27000	3.83	0.031	18000	3.54	0.037	12000	3.28	0.048	6800	3.39	0.049	4700	2.90	0.053
30×45	33000	4.30	0.025	22000	4.24	0.030	15000	3.74	0.039	8200	3.71	0.040	5600	3.28	0.044
30×50	39000	4.74	0.021	-	-	-	-	-	-	10000	4.09	0.033	6800	3.73	0.037
35×25	18000	3.10	0.046	12000	2.80	0.055	8200	2.78	0.071	4700	2.67	0.071	3300	2.41	0.075
35×30	27000	3.74	0.031	15000	3.22	0.044	12000	3.20	0.048	6800	3.31	0.049	4700	2.83	0.053
35×35	33000	4.24	0.025	22000	3.96	0.030	15000	3.69	0.039	8200	3.66	0.040	5600	3.24	0.044
35×40	39000	4.72	0.021	-	-	-	18000	4.16	0.032	10000	4.07	0.033	6800	3.71	0.037
35×45	47000	5.27	0.018	27000	4.75	0.025	-	-	-	12000	4.50	0.028	8200	4.16	0.030
35×50	-	-	-	33000	5.39	0.020	22000	4.92	0.026	-	-	-	10000	4.69	0.025

I~ 额定纹波电流 Rated ripple current: (mA, 105°C, 120HZ)  
等效串联电阻 ESR: (Ω, 105°C, 120HZ)

## LHS Series

## ■ 标称电容量、额定电压、额定纹波电流及外形尺寸对应表

Nominal capacitance, rated voltage, rated ripple current and case size table

WV Parameter ΦD × L(mm)	80V			100V			160V			180V		
	μF	I~	ESR	μF	I~	ESR	μF	I~	ESR	μF	I~	ESR
22×25	820	1.11	0.303	560	1.07	0.444	330	1.16	0.754	270	1.08	0.922
22×30	1200	1.39	0.207	820	1.35	0.303	390	1.43	0.638	330	1.30	0.754
22×35	1500	1.61	0.166	1000	1.54	0.249	470	1.52	0.529	470	1.50	0.529
22×40	1800	1.83	0.138	1200	1.74	0.207	560	1.62	0.444	560	1.62	0.444
22×45	2200	2.09	0.113	1500	1.99	0.166	680	1.70	0.366	0-	-	-
22×50	-	-	-	-	-	-	820	1.81	0.303	680	1.76	0.366
25×25	1200	1.39	0.207	820	1.35	0.303	470	1.55	0.529	390	1.35	0.638
25×30	1500	1.62	0.166	1000	1.56	0.249	560	1.73	0.444	470	1.62	0.529
25×35	2200	2.01	0.113	1200	1.76	0.207	680	1.81	0.366	560	1.69	0.444
25×40	-	-	-	1500	2.03	0.166	820	1.98	0.303	680	1.72	0.366
25×45	2700	2.43	0.092	1800	2.28	0.138	1000	2.04	0.249	820	1.78	0.303
25×50	3300	2.76	0.075	2200	2.57	0.113	1200	2.12	0.207	1000	1.91	0.249
30×25	1800	1.81	0.138	1200	1.71	0.207	680	1.82	0.366	560	1.67	0.444
30×30	2200	2.10	0.113	1500	2.00	0.166	820	1.98	0.303	680	1.74	0.366
30×35	2700	2.43	0.092	1800	2.27	0.138	1000	2.14	0.249	820	1.85	0.303
30×40	3300	2.78	0.075	2200	2.59	0.113	1200	2.22	0.207	1000	2.01	0.249
30×45	3900	3.12	0.064	2700	2.94	0.092	1500	2.46	0.166	1200	2.19	0.207
30×50	4700	3.56	0.053	3300	3.32	0.075	-	-	-	1500	2.36	0.166
35×25	2200	2.17	0.113	1500	2.07	0.166	820	1.93	0.303	680	1.92	0.366
35×30	3300	2.71	0.075	2200	2.52	0.113	1200	2.40	0.249	1000	2.16	0.249
35×35	3900	3.07	0.064	2700	2.90	0.092	1500	2.53	0.166	1200	2.34	0.207
35×40	4700	3.50	0.053	3300	3.31	0.075	0-	-	-	1500	2.56	0.166
35×45	5600	3.87	0.044	3900	3.69	0.064	1800	2.98	0.138	1800	2.67	0.138
35×50	6800	4.19	0.037	4700	4.14	0.053	2200	3.10	0.113	0-	-	-

I~ 额定纹波电流 Rated ripple current: (mA, 105°C, 120HZ)  
 等效串联电阻 ESR: (Ω, 105°C, 120HZ)

### LHS Series

■ 标称电容量、额定电压、额定纹波电流及外形尺寸对应表

Nominal capacitance, rated voltage, rated ripple current and case size table

WV Parameter ΦD × L(mm)	200V			250V			400V			450V		
	μF	I~	ESR	μF	I~	ESR	μF	I~	ESR	μF	I~	ESR
22×25	220	1.08	1.131	180	0.94	1.382	68	0.47	4.879	56	0.47	5.924
22×30	330	1.30	0.754	220	1.10	1.131	82	0.56	4.046	68	0.56	4.879
22×35	390	1.41	0.638	270	1.13	0.922	120	0.64	2.765	82	0.64	4.046
22×40	470	1.50	0.529	330	1.20	0.754	150	0.70	2.212	100	0.70	3.317
22×45	560	1.58	0.444	390	1.26	0.638	-	-	-	120	0.73	2.765
22×50	680	1.68	0.366	470	1.37	0.529	180	0.78	1.843	150	0.78	2.212
25×25	330	1.35	0.754	220	1.15	1.131	82	0.65	4.046	68	0.65	4.879
25×30	470	1.47	0.529	330	1.30	0.754	120	0.70	2.765	100	0.70	3.317
25×35	560	1.65	0.444	390	1.41	0.638	150	0.73	2.212	120	0.73	2.765
25×40	680	1.80	0.366	470	1.52	0.529	180	0.82	1.843	150	0.82	2.212
25×45	-	-	-	560	1.59	0.444	220	0.87	1.508	180	0.87	1.843
25×50	820	1.87	0.303	680	1.66	0.366	270	0.94	1.229	220	0.94	1.508
30×25	470	1.56	0.529	330	1.30	0.754	120	0.78	2.765	100	0.78	3.317
30×30	680	1.82	0.366	470	1.36	0.529	180	0.83	1.843	150	0.83	2.212
30×35	820	1.99	0.303	560	1.57	0.444	220	0.86	1.508	180	0.83	1.843
30×40	-	-	-	680	1.76	0.366	270	0.95	1.229	220	0.95	1.508
30×45	1000	2.17	0.249	820	1.83	0.303	330	1.11	1.005	270	1.11	1.229
30×50	1200	2.22	0.207	1000	1.87	0.249	390	1.15	0.851	330	1.15	1.005
35×25	680	1.96	0.366	470	1.40	0.529	180	0.86	1.843	150	0.86	2.212
35×30	820	2.07	0.303	560	1.56	0.444	270	0.91	1.229	220	0.91	1.508
35×35	1000	2.22	0.249	820	1.82	0.303	330	1.13	1.005	270	1.13	1.229
35×40	1200	2.42	0.207	1000	1.9	0.249	390	1.26	0.851	330	1.26	1.005
35×45	1500	2.59	0.166	1200	2.10	0.207	470	1.31	0.706	390	1.31	0.851
35×50	1800	2.70	0.138	-	-	-	560	1.50	0.592	470	1.50	0.706

I~ 额定纹波电流 Rated ripple current: (mA, 105°C, 120HZ)  
等效串联电阻 ESR: (Ω, 105°C, 120HZ)