

LEH series 小型化高頻率低 E.S.R 品

- 高頻率低 ESR，壽命 1000~3000 小時，105⁰C
Low ESR for high frequency , Life time:1000 ~3000hours at 105⁰C
- 適用於電腦主機板，高保真音箱，高分辨數碼彩電等電子線路中
Used in main board , hi-fi acoustics ,numeral color-TV circuits etc.

Specifications

No.	Item	Performance																											
1	使用溫度範圍 Operating Temperature Range	-40 to +105 ⁰ C																											
2	定格電壓範圍 Rated Working Voltage Range	6.3-100V.DC																											
3	靜電容量範圍 Capacitance Tolerance	6.8-4700μF																											
4	靜電容量容許差 Capacitance Tolerance	±20%(at+20 ⁰ C,120Hz)																											
5	洩漏電流 Leakage Current	I ≤0.01CV or 3 minimum(μA) after three minutes Application of rated working voltage +20 ⁰ C																											
6	損失角 Dissipation Factor(tanδ) (120Hz\+20 ⁰ C)	<table><tr><td>Working Voltage(V)</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</td><td>63</td><td>100</td></tr><tr><td>tanδ max.</td><td>0.22</td><td>0.19</td><td>0.16</td><td>0.14</td><td>0.12</td><td>0.10</td><td>0.09</td><td>0.08</td></tr></table> For capacitance value > 1000μF, add 0.02 per another 1000μF	Working Voltage(V)	6.3	10	16	25	35	50	63	100	tanδ max.	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.08									
Working Voltage(V)	6.3	10	16	25	35	50	63	100																					
tanδ max.	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.08																					
7	低溫度特性 (at 120 Hz) Characteristics at low temperature (Impedance ratio at 120Hz)	<table><tr><td>Working Voltage (V)</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</td><td>63</td><td>100</td></tr><tr><td>Z-25 00±2</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>Z-40/ 00±2</td><td>8</td><td>4</td><td>3</td><td>3</td><td>3</td><td>3</td><td>4</td><td>4</td></tr></table>	Working Voltage (V)	6.3	10	16	25	35	50	63	100	Z-25 00±2	4	3	2	2	2	2	2	2	Z-40/ 00±2	8	4	3	3	3	3	4	4
Working Voltage (V)	6.3	10	16	25	35	50	63	100																					
Z-25 00±2	4	3	2	2	2	2	2	2																					
Z-40/ 00±2	8	4	3	3	3	3	4	4																					
8	高溫負荷特性 High Temperature Loading	Application of DC rated working voltage at +105 ⁰ C, The capacitor shall meet the following limits: Post test requirements at + 20 ⁰ C <table><tr><td>Leakage current</td><td>≤ the Initial specified value</td></tr><tr><td>Capacitance change</td><td>≤±25% of initial measured value</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	Dissipation Factor(tanδ)	≤200% of initial specified value																					
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9	高溫無負荷特性 Shelf Life	After 1000hrs. Application of DC no rated working voltage at +105 ⁰ C,The capacitor shall meet the following limits: Post test requirements at + 20 ⁰ C <table><tr><td>Leakage current</td><td>≤200% of initial specified value</td></tr><tr><td>Capacitance change</td><td>≤±20% of initial measured value</td></tr><tr><td>Dissipation Factor(tanδ)</td><td>≤200% of initial specified value</td></tr></table>	Leakage current	≤200% of initial specified value	Capacitance change	≤±20% of initial measured value	Dissipation Factor(tanδ)	≤200% of initial specified value																					
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Multiplier for ripple current 紋波電流補正係數

Frequency Coefficient 周波數係數

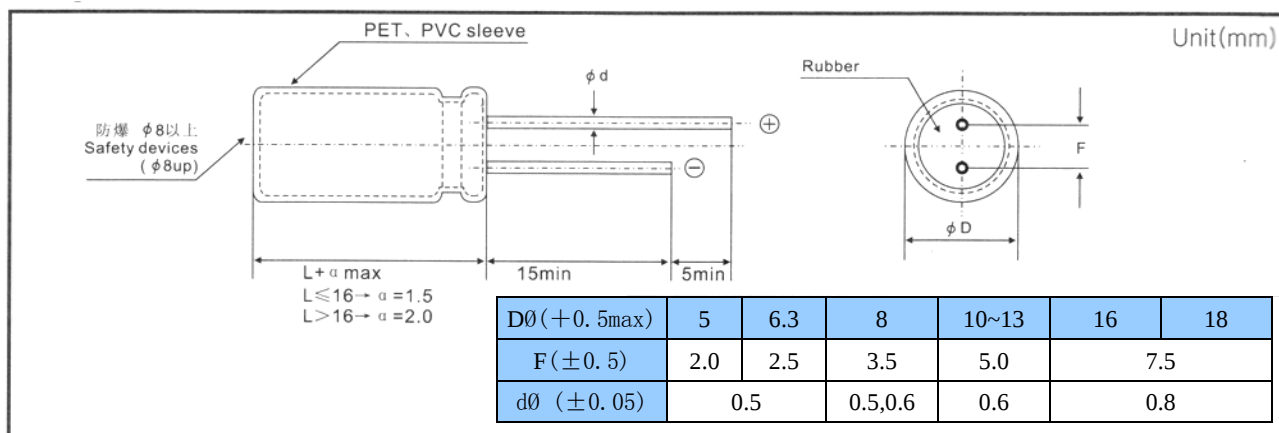
μF \ Frequency	60 (50) Hz	120 Hz	400Hz	1K Hz	10K Hz	50~100K Hz
0.1~47	0.47	0.59	0.76	0.85	0.97	1.00
68~680	0.58	0.72	0.84	0.90	0.98	1.00
1000~4700	0.63	0.78	0.87	0.91	0.98	1.00

Temperature Coefficient 周圍溫度係數

Coefficient \ temperature (°C)	105	85	≤65
coefficient	1.0	1.7	2.1

LEH Series

Diagram of Dimensions



DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT 規格尺寸及最大允許紋波電流

WV (SV) uF Item	6.3 (8)			10 (13)			16 (20)			25 (32)		
	Case Size	Ripple Current	Impedance MAX	Case Size	Ripple Current	Impedance MAX	Case Size	Ripple Current	Impedance MAX	Case Size	Ripple Current	Impedance MAX
10										5×11	250	0.300
22							5×7	150	0.800	5×7	150	0.800
33				5×7	150	0.800				6.3×11	405	0.130
47										6.3×7	210	0.410
56							5×11	250	0.300	8×11	760	0.072
68							5×11	210	0.410			
82	5×7	210	0.410									
100				5×11	250	0.300	6.3×7	300	0.320	8×7	400	0.200
120							8×7	350	0.300	8×12	995	0.056
150	6.3×7	400	0.200				6.3×7	400	0.200			
180	5×11	250	0.300	6.3×7	400	0.200	6.3×11	415	0.130	8×12	550	0.150
220				6.3×11	405	0.130				8×16	1250	0.041
270	8×7	550	0.150				8×9	550	0.150	8×9	650	0.120
330	6.3×11	405	0.130	8×7	550	0.150	8×9	650	0.120	10×16	1430	0.038
390							8×11	760	0.072	8×12	730	0.100
470	8×9	650	0.120							10×21	1820	0.023
560				8×9	650	0.120	8×11	625	0.100	10×12	820	0.068
680				8×11	760	0.072	8×14	880	0.080	10×16	1030	0.053
820	8×9	730	0.100				10×14	990	0.056	13×21	2360	0.021
1000	8×11	760	0.072				10×13	820	0.068	13×25	2770	0.018
1200				8×12	730	0.100						
1500				8×16	995	0.056	10×13	1030	0.053	13×31	3290	0.016
2200							10×16	1250	0.041			
2700							10×16	1430	0.038			
3300	10×12	820	0.068	10×12	820	0.068						
3900	10×16	995	0.056									
4700	10×13	1030	0.053	8×11	900	0.07	10×21	1820	0.023	13×16	1300	0.035
				10×13	1030	0.053				16×21	3140	0.018
				8×16	1250	0.041				16×26	3460	0.016
				10×16	1430	0.038						
	10×16	1250	0.041	10×21	1820	0.023	13×16	1300	0.035	13×16	1850	0.023
	10×21	1300	0.035	10×25	2150	0.022	13×21	1850	0.023	16×21	2200	0.021
	10×25	2150	0.022	13×21	1300	0.035	13×25	2200	0.021	16×21	2350	0.020
				13×16	1850	0.023	13×31	3290	0.016	16×26	2350	0.020
							16×21	3140	0.018			
	16×21	2200	0.021	13×26	2770	0.018	16×21	2350	0.020	16×26	2650	0.018
	13×25	2770	0.018	16×21	2200	0.021	16×21	2150	0.025			
				13×31	3140	0.018	16×26	3460	0.016			
	16×21	2350	0.020	16×21	2350	0.020	16×26	2650	0.018			

Case Size: ØD×L (mm; Ripple current (mA rms) at 105°C, 100KHz Impedance[Ω] (25°C\100KHz)

LEH Series

Diagram of Dimensions

DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT 規格尺寸及最大允許紋波電流

W.V. (SV) Item μF	35 (44)			50 (63)			63 (79)			100 (125)		
	Case Size	Ripple Current	Impedance MAX	Case Size	Ripple Current	Impedance MAX	Case Size	Ripple Current	Impedance MAX	Case Size	Ripple Current	Impedance MAX
6.8										8×12	125	1.400
10	5×7	150	0.800	5×7	150	0.800						
15							6.3×11	165	0.880	8×12	205	0.570
22	6.3×7	210	0.410	6.3×11	238	0.340						
27										10×12	355	0.360
33	6.3×11	250	0.300				8×12	265	0.350			
39										10×16	450	0.250
47										10×16	450	0.240
56	6.3×11	405	0.130	6.3×11	385	0.140	8×12	500	0.220			
				8×12	500	0.220						
82							10×13	685	0.150	10×21	750	0.130
100	6.3×11	550	0.400	10×13	724	0.074				10×25	880	0.120
	8×7	650	0.350									
120				10×13	950	0.061	10×16	945	0.11	13×21	1045	0.094
150	8×9	650	0.120	10×13	979	0.061						
	8×11	760	0.072									
180				10×16	1190	0.046	10×21	1100	0.080	13×26	1195	0.071
220	8×14	780	0.070	10×16	1370	0.042	10×25	1300	0.073	13×31	1410	0.063
270	8×14	820	0.068	10×21	1580	0.030	13×21	1495	0.060	16×26	1600	0.053
330	8×16	700	0.080	10×25	1870	0.028	13×26	1850	0.043			
	10×13	1030	0.053									
390										16×32	1750	0.041
470	10×20	1820	0.028	13×21	2050	0.027	13×26	2250	0.039	18×32	1775	0.039
560				13×26	2410	0.023	16×26	2550	0.032	18×36	2060	0.031
680	13×16	1850	0.023	13×31	2860	0.021	18×21	2450	0.038			
820				13×36	2960	0.019	16×32	2810	0.026			
1000	16×21	2200	0.021	16×26	3010	0.021	18×32	3270	0.025			
1200							18×36	3310	0.020			
1500	16×21	2350	0.020									
1800	16×26	2350	0.020									
2200	16×26	2650	0.018									

Case Size: ØD×L (mm; Ripple current (mA rms) at 105℃, 100KHz Impedance[Ω] (25℃\100KHz)