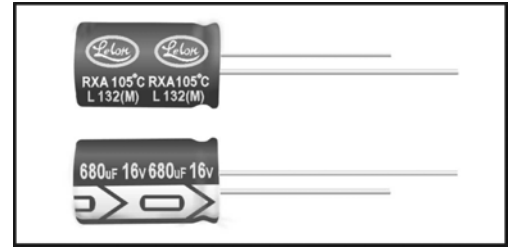


CE04 Type
Features

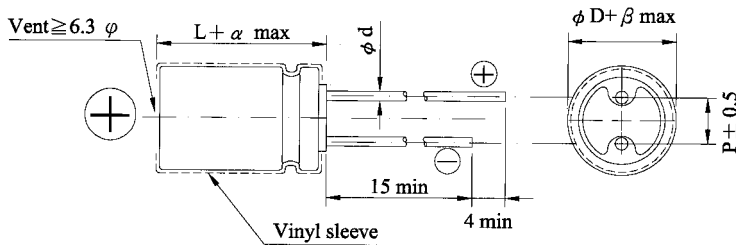
- 105°C, 2000 ~ 4000 hours assured
- Low ESR, suitable for computer mainboard
- Smaller size with large permissible ripple current


SPECIFICATIONS

Items	Performance																														
Operating Temperature Range	-40°C ~ +105°C																														
Capacitance Tolerance	±20% (at 120Hz, 20°C)																														
Leakage Current (at 20°C)	I = 0.01CV or 3 (µA) whichever is greater (after 2 minutes) Where, C= rated capacitance in µF. V = rated DC working voltage in V.																														
Dissipation Factor (Tan δ at 120Hz, 20°C)	<table border="1"> <thead> <tr> <th>Rated Voltage</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> </tr> </thead> <tbody> <tr> <td>Tan δ (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> </tr> </tbody> </table> <p>When the capacitance exceeds 1000 µF, 0.02 shall be added every 1000 µF increase.</p>	Rated Voltage	6.3	10	16	25	35	50	Tan δ (max)	0.22	0.19	0.16	0.14	0.12	0.10																
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Low Temperature Characteristics (at 120Hz)	<p>Impedance ratio shall not exceed the values given in the table below.</p> <table border="1"> <thead> <tr> <th colspan="2">Rated Voltage</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Impedance Ratio</td> <td>Z(-25°C)/Z(+20°C)</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z(-40°C)/Z(+20°C)</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> </tr> </tbody> </table>	Rated Voltage		6.3	10	16	25	35	50	Impedance Ratio	Z(-25°C)/Z(+20°C)	2	2	2	2	2	2	Z(-40°C)/Z(+20°C)	3	3	3	3	3	3							
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Load Life Test	<table border="1"> <tbody> <tr> <td>Test Time</td> <td>2000 hrs for φ D = 5 ~ 8 mm 3000 hrs for 10 φ × 12.5~16L mm 4000 hrs for 10 φ × 20L & φ D ≥ 13 mm</td> </tr> <tr> <td>Capacitance Change</td> <td>Within ±25% of initial value</td> </tr> <tr> <td>Dissipation Factor</td> <td>Less than 200% of specified value</td> </tr> <tr> <td>Leakage Current</td> <td>Within specified value</td> </tr> </tbody> </table> <p>* The above specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage applied for 2000/4000 hrs at 105°C.</p>	Test Time	2000 hrs for φ D = 5 ~ 8 mm 3000 hrs for 10 φ × 12.5~16L mm 4000 hrs for 10 φ × 20L & φ D ≥ 13 mm	Capacitance Change	Within ±25% of initial value	Dissipation Factor	Less than 200% of specified value	Leakage Current	Within specified value																						
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Standards	Satisfies Characteristic W of JIS C 5141																														

CE04 Type

DIAGRAM OF DIMENSIONS



Unit: mm

LEAD SPACING AND DIAMETER

ϕD	5	6.3	8	10	13	16	18
P	2.0	2.5	3.5	5.0	5.0	7.5	7.5
ϕd	0.5		0.6			0.8	
α	1.0			1.5			
β	0.5						

Dimension: $\phi D \times L$ (mm)

Ripple Current: mA/rms at 100KHz, 105°C

DIMENSION & PERMISSIBLE RIPPLE CURRENT

V.DC Item $\phi D \times L$	6.3V (0J)					10V (1A)					16V (1C)				
	μF	Impedance (Ω , Max/100K Hz)		Ripple Current (mA/rms, 105°C)		μF	Impedance (Ω , Max/100K Hz)		Ripple Current (mA/rms, 105°C)		μF	Impedance (Ω , Max/100K Hz)		Ripple Current (mA/rms, 105°C)	
		20°C	-10°C	120Hz	100KHz		20°C	-10°C	120Hz	100KHz		20°C	-10°C	120Hz	100KHz
5×11	150	0.3	1.0	175	250	100	0.3	1.0	175	250	56	0.3	1.0	175	250
6.3×11	330	0.13	0.41	284	405	220	0.13	0.41	284	405	120	0.13	0.41	284	405
8×11.5	560	0.07	0.22	570	760	470	0.07	0.22	570	760	330	0.07	0.22	532	760
8×15	820	0.056	0.17	746	995	680	0.056	0.17	746	995	470	0.056	0.17	746	995
8×20	1,200	0.041	0.13	1,000	1,250	1,000	0.041	0.13	938	1,250	680	0.041	0.13	938	1,250
10×12.5	1,000	0.053	0.16	773	1,030	680	0.053	0.16	773	1,030	470	0.053	0.16	773	1,030
10×16	1,200	0.038	0.12	1,144	1,430	1,000	0.038	0.12	1,073	1,430	680	0.038	0.12	1,073	1,430
10×20	1,500	0.023	0.069	1,456	1,820	1,200	0.023	0.069	1,456	1,820	1,000	0.023	0.069	1,365	1,820
10×25	2,200	0.022	0.066	1,720	2,150	1,500	0.022	0.066	1,720	2,150	1,200	0.022	0.066	1,720	2,150
13×20	3,300	0.021	0.053	1,888	2,360	2,200	0.021	0.053	1,888	2,360	1,500	0.021	0.053	1,888	2,360
13×25	3,900	0.018	0.045	2,216	2,770	3,300	0.018	0.045	2,216	2,770	2,200	0.018	0.045	2,216	2,770
13×30	4,700	0.016	0.041	2,632	3,290	3,900	0.016	0.041	2,632	3,290	2,700	0.016	0.041	2,632	3,290
13×35	5,600	0.015	0.039	2,720	3,400	4,700	0.015	0.039	2,720	3,400	3,300	0.015	0.039	2,720	3,400
16×25	6,800	0.016	0.043	2,768	3,460	5,600	0.016	0.043	2,768	3,460	3,900	0.016	0.043	2,768	3,460

V.DC Item $\phi D \times L$	25V (1E)					35V (1V)					50V (1H)				
	μF	Impedance (Ω , Max/100K Hz)		Ripple Current (mA/rms, 105°C)		μF	Impedance (Ω , Max/100K Hz)		Ripple Current (mA/rms, 105°C)		μF	Impedance (Ω , Max/100K Hz)		Ripple Current (mA/rms, 105°C)	
		20°C	-10°C	120Hz	100KHz		20°C	-10°C	120Hz	100KHz		20°C	-10°C	120Hz	100KHz
5×11	47	0.3	1.0	175	250	33	0.3	1.0	138	250	22	0.34	1.18	131	238
6.3×11	100	0.13	0.41	284	405	56	0.13	0.41	284	405	56	0.14	0.5	270	385
8×11.5	220	0.07	0.22	532	760	150	0.07	0.22	532	760	100	0.074	0.22	507	724
8×15	330	0.056	0.17	697	995	220	0.056	0.17	697	995	120	0.061	0.18	665	950
8×20	470	0.041	0.13	938	1,250	270	0.041	0.13	875	1,250	180	0.046	0.14	833	1,190
10×12.5	330	0.053	0.16	721	1,030	220	0.053	0.16	721	1,030	150	0.061	0.18	685	979
10×16	470	0.038	0.12	1,073	1,430	330	0.038	0.12	1,001	1,430	220	0.042	0.12	959	1,370
10×20	680	0.023	0.069	1,365	1,820	470	0.023	0.069	1,365	1,820	270	0.03	0.09	1,106	1,580
10×25	820	0.022	0.066	1,613	2,150	560	0.022	0.066	1,613	2,150	330	0.028	0.085	1,309	1,870
13×20	1,000	0.021	0.053	1,770	2,360	680	0.021	0.053	1,770	2,360	470	0.027	0.068	1,538	2,050
13×25	1,500	0.018	0.045	2,216	2,770	1,000	0.018	0.045	2,078	2,770	560	0.023	0.059	1,808	2,410
13×30	1,800	0.016	0.041	2,632	3,290	1,200	0.016	0.041	2,632	3,290	680	0.021	0.052	2,145	2,860
13×35	2,200	0.015	0.039	2,720	3,400	1,500	0.015	0.039	2,720	3,400	820	0.019	0.051	2,220	2,960
16×25	2,700	0.016	0.043	2,768	3,460	1,800	0.016	0.043	2,768	3,460	1,000	0.021	0.056	2,258	3,010