



LGK General Purpose, 85°C

Features

- Wide CV value range.
- Load life 1000~2000hrs 85°C.
- Safety vent construction design.



Specifications

Item	Performance Characteristics																																										
Operating Temperature Range	-40 to +85°C	-25 to 85°C																																									
Rated voltage Range	6.3 to 100 VDC	160 to 450 VDC																																									
Capacitance Range	0.1 to 15000 uF	0.47 to 470 uF																																									
Capacitance Tolerance	±20%(120Hz, +20°C)																																										
Leakage Current (+20°C, max.)	I ≤ 0.01 CV or 3(uA) After 1minute whichever is greater measured with rated working voltage applied.	I ≤ 0.03 CV or 3(uA) After 1minute with rated working voltage applied..																																									
Dissipation Factor (tan δ)	<table border="1"> <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> <td>63</td> <td>100</td> </tr> <tr> <td>D.F.(%)max</td> <td>23</td> <td>20</td> <td>16</td> <td>14</td> <td>12</td> <td>10</td> <td>10</td> <td>10</td> </tr> </table>		Working Voltage (VDC)	6.3	10	16	25	35	50	63	100	D.F.(%)max	23	20	16	14	12	10	10	10																							
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	<table border="1"> <tr> <td>Working Voltage (VDC)</td> <td>160</td> <td>200</td> <td>250</td> <td>350</td> <td>400</td> <td>450</td> </tr> <tr> <td>D.F.(%)max</td> <td>16</td> <td>18</td> <td>18</td> <td>20</td> <td>20</td> <td>20</td> </tr> </table>		Working Voltage (VDC)	160	200	250	350	400	450	D.F.(%)max	16	18	18	20	20	20																											
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D.F.(%)max	16	18	18	20	20	20																																					
For Capacitance > 1000uF, add 2% per another 1000uF (+20°C, at 120Hz)																																											
Low Temperature Characteristics (120Hz)	Impedance ratio max. <table border="1"> <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> <td>63</td> <td>100</td> </tr> <tr> <td>Z-25°C/Z+20°C</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°C/Z+20°C</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> </table> <table border="1"> <tr> <td>Working Voltage (VDC)</td> <td>160</td> <td>200</td> <td>250</td> <td>350</td> <td>400</td> <td>450</td> </tr> <tr> <td>Z-25°C/Z+20°C</td> <td>3</td> <td>3</td> <td>3</td> <td>5</td> <td>15</td> <td>15</td> </tr> </table> For Capacitance Value 1000uF, add 0.5 per another 1000uF for -25°C/+20°C add 1 per another 1000uF for -40°C/+20°C		Working Voltage (VDC)	6.3	10	16	25	35	50	63	100	Z-25°C/Z+20°C	4	3	2	2	2	2	2	2	Z-40°C/Z+20°C	8	6	4	4	3	3	3	3	Working Voltage (VDC)	160	200	250	350	400	450	Z-25°C/Z+20°C	3	3	3	5	15	15
Working Voltage (VDC)	6.3	10	16	25	35	50	63	100																																			
Z-25°C/Z+20°C	4	3	2	2	2	2	2	2																																			
Z-40°C/Z+20°C	8	6	4	4	3	3	3	3																																			
Working Voltage (VDC)	160	200	250	350	400	450																																					
Z-25°C/Z+20°C	3	3	3	5	15	15																																					
Load Life	Test conditions Duration time : 50~60 1000Hrs D ≥ 80 2000Hrs Ambient temperature:+85°C Applied voltage: Rated DC working voltage After test requirements at+20°C After test requirements: ≤ ±20% of the initial measured value Dissipation Factor: ≤ 200% of the initial specified value Leakage current: ≤ The initial specified value																																										
Shelf Life	Test conditions Duration time :500Hrs Ambient temperature:+85°C Applied voltage: None After test requirements at +20°C: Some limits as Load life. Pre-treatment for measurements shall be conducted after application of DC working voltage for 30 minutes.																																										

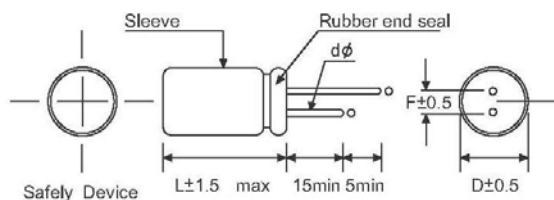
Multiplier for Ripple Current V.S Frequency

CAP(uF) \ HZ		50(60)	120	400	1K	10K	100KUP
Multiplier	CAP ≤ 10	0.8	1	1.30	1.45	1.65	1.70
	10<CAP ≤ 100	0.8	1	1.23	1.36	1.48	1.53
	100<CAP ≤ 1000	0.8	1	1.16	1.25	1.35	1.38
	1000<CAP	0.8	1	1.11	1.18	1.25	1.28

Multiplier for Ripple Current VS Temperature

Temperature (°C)	45	60	70	85
Multiplier	1.8	1.50	1.30	1.00

Diagram of Dimensions: (Unit: mm)



Dφ	5	6.3	8	10	13	16	18	22	25
F	2.0	2.5	3.5	5.0	5.0	7.5	7.5	10	12
dφ	0.5		0.6		0.8		1.0		



Case Size

Ø D x L (mm)

WV [SV] uF	6.3 {8}		10 {13}		16 {20}		25 {32}		35 {44}	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
4.7							5x11	30	5x11	40
6.8							5x11	35	5x11	45
10					5x11	50	5x11	55	5x11	60
22			5x11	70	5x11	75	5x11	90	5x11	95
33	5x11	65	5x11	75	5x11	85	5x11	95	5x11	105
47	5x11	80	5x11	95	5x11	115	5x11	125	5x11 6.3x11	130 140
68	5x11	90	5x11	105	5x11	128	6.3x11	145	6.3x11	156
100	5x11	130	5x11	156	5x11 6.3x11	160 180	6.3x11	190	6.3x11 8x11	210 230
220	5x11 6.3x11	200 240	6.3x11	250	6.3x11 8x11	260 300	8x11	320	8x11 10x12	340 370
330	6.3x11	280	6.3x11 8x11	300 330	8x11	340	8x11 10x12	420 440	10x12 10x15	480 490
470	6.3x11 8x11	320 380	6.3x11 8x11	380 400	8x11 10x12	450 470	8x14 10x12	540 580	10x17 10x20	580 640
560	8x11	410	8x11	430	10x12	520	10x15	640	10x17	750
680	8x11	460	10x12	490	10x12	590	10x15	730	10x20	810
820	8x11	510	10x12	550	10x15	640	10x15	825	10x20	930
1000	8x11	580	8x14 10x12	600 630	8x16 10x15 10x17	680 790 810	10x15 10x17 10x20	880 950 1030	10x25 13x21	970 1100
1500	10x15	725	10x17	765	10x20	960	13x21	1200	13x26	1330
2200	10x17 10x20	880 930	10x17 10x20	1000 1100	13x21 13x26	1200 1250	13x21 16x16	1550 1600	16x26 16x31	1650 1700
2700	10x20	958	10x20	1160	13x21	1380	16x26	1640	16x31	1900
3300	10x20 13x21	1050 1250	10x20 13x21	1350 1400	13x21 13x26	1600 1700	16x26 16x31	1750 1950	16x36	2200
4700	10x25 13x21	1100 1700	13x21 13x26	1800 1900	16x26	2100	16x31	2360	18x36	2380
5600	13x26	1780	16x26	1960	16x31	2150	16x36	2430	18x36	2580
6800	16x26	1860	16x26	2020	16x31	2200	18x36	2520	22x42	2790
8200	16x26	1930	16x31	2070	16x36	2280	18x36	2670	22x42	2900
10000	16x26 16x31	2000 2110	16x36 18x36	2150 2290	18x36 18x41	2350 2390	22x42	2870	25x44	3040
15000	16x36 18x36	2350 2420	18x36	2600	22x40	2900	22x42	3150	-	-

Ripple Current (mA, rms) at 85°C 120Hz



Case Size

Ø D x L (mm)

uF \ WV {SV}	50 {63}		63 {79}		100 {125}		160 {200}		200 {250}	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
0.1	5x11	1.3	5x11	1.3	5x11	1.3	-	-	-	-
0.22	5x11	2.9	5x11	2.9	5x11	2.9	-	-	-	-
0.33	5x11	5	5x11	5	5x11	5	-	-	-	-
0.47	5x11	10	5x11	10	5x11	10	5x11	12	5x11	12
1	5x11	16	5x11	16	5x11	16	5x11	17	6.3x11	17
2.2	5x11	20	5x11	24	5x11	30	6.3x11	33	6.3x11	33
3.3	5x11	35	5x11	35	5x11	38	6.3x11	40	6.3x11	40
4.7	5x11	42	5x11	45	5x11	45	6.3x11 8x11	46 48	8x11	51
6.8	5x11	47	5x11	50	6.3x11	54	8x11	56	10x12	63
10	5x11	65	5x11	70	6.3x11	78	8x11 10x12	80 82	10x12 10x15	84 90
22	5x11	100	5x11 6.3x11	105 115	6.3x11 8x11	120 125	10x15	130	10x20	135
33	5x11 6.3x11	120 125	6.3x11 8x11	130 140	8x11 10x12	170 180	10x20	200	13x21	220
47	6.3x11	150	6.3x11 8x11	170 180	10x12 10x15	190 200	13x21	220	13x21 13x26	270 280
68	8x11	168	8x11	210	10x15	225	13x26	270	16x26	340
100	8x11	250	8x11	300	10x20	390	13x26 16x26	400 450	16x26	570
220	10x12 10x15	410 440	10x17 10x20	490 520	13x26 16x26	580 600	16x36	810	18x36	860
330	10x17 10x20	520 580	13x21	680	16x26	780	18x31	1090	18x36	1200
470	10x20 13x21	730 760	13x26 16x26	880 900	16x26 16x31	1000 1100	18x41	1300	22x42	1360
560	13x21	825	16x26	980	16x36	1175	-	-	-	-
680	13x26	950	16x26	1070	16x36	1275	-	-	-	-
820	13x26	1070	16x26	1190	18x31	1290	-	-	-	-
1000	13x26 16x26	1150 1250	16x26 16x36	1300 1350	18x41	1550	-	-	-	-
1500	16x31	1700	18x31	1800	22x42	1850	-	-	-	-
2200	16x36 18x36	1900 2090	18x36	2200	25x44	2400	-	-	-	-
2700	18x36	2170	22x42	2275	-	-	-	-	-	-
3300	18x36	2280	22x42	2360	-	-	-	-	-	-
4700	22x42	2500	22x41 25x44	2560 2800	-	-	-	-	-	-
5600	25x41	2760	-	-	-	-	-	-	-	-
6800	25x44	3040	-	-	-	-	-	-	-	-
8200	25x44	3140	-	-	-	-	-	-	-	-
10000	25x44	3300	-	-	-	-	-	-	-	-

Ripple Current (mA, rms) at 85°C 120Hz



Case Size

Ø D x L (mm)

WV {SV} uF	250 {300}		350 {400}		400 {450}		450 {500}	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
0.47	5x11	12	6.3x11	15	6.3x11	15	6.3x11	15
1	6.3x11	17	6.3x11	20	8x11	22	8x11	22
2.2	8x11	36	10x12	39	10x12	39	10x12	39
3.3	8x11	43	10x12	50	10x12 10x15	51 53	10x15 10x20	53 55
4.7	10x12	51	10x12 10x15	63 66	10x15	69	10x20	75
6.8	10x12	70	10x15	79	10x15	85	10x20	88
10	10x15	90	10x20	110	13x21	115	13x21 13x26	120 130
22	10x20	160	13x26	180	16x26	195	16x26 16x31	200 220
33	13x21 13x26	230 235	16x26	250	16x26	275	16x36	285
47	13x26	300	16x31	325	16x31	350	16x36	400
68	16x26	360	16x31	395	16x36	415	18x36	430
100	16x31	600	18x36	660	18x36	800	-	-

Ripple Current (mA, rms) at 85°C 120Hz