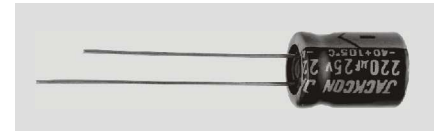


JACKCON Electrolytic Capacitors

LEK Series 105°C LOW ESR 製品系列

Features

- Used in mother board, computer peripheral, etc.
- Load life 2000~5000 Hrs at 105°C
- Safety vent construction design.



Specifications

Item	Performance Characteristics																											
Operating Temperature Range	-40 to +105°C																											
Rated voltage Range	6.3 to 100 VDC																											
Capacitance Range	4.7 to 4700 uF																											
Capacitance Tolerance	±20%(120Hz, +20°C)																											
Leakage Current(+20°C, max.)	$I \leq 0.01 CV$ or 3 (uA) After 2 minutes whichever is greater measured with rated working voltage applied.																											
Dissipation Factor(tanδ)	<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>22</td> <td>19</td> <td>16</td> <td>14</td> <td>12</td> <td>10</td> <td>9</td> <td>8</td> </tr> </table> <p>For capacitance > 1000uF, add 2% per another 1000uF in crease. (+20°C, at 120Hz)</p>	Working Voltage (VDC)	6.3	10	16	25	35	50	63	100	D.F.(%)max	22	19	16	14	12	10	9	8									
Working Voltage (VDC)	6.3	10	16	25	35	50	63	100																				
D.F.(%)max	22	19	16	14	12	10	9	8																				
Low Temperature Characteristics (120Hz)	<p>Impedance ratio max.</p> <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>2</td> <td>2</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> <td>3</td> <td>3</td> </tr> </table>	Working Voltage (VDC)	6.3	10	16	25	35	50	63	100	Z-25°C/Z+20°C	2	2	2	2	2	2	2	2	Z-40°C/Z+20°C	3	3	3	3	3	3	3	3
Working Voltage (VDC)	6.3	10	16	25	35	50	63	100																				
Z-25°C/Z+20°C	2	2	2	2	2	2	2	2																				
Z-40°C/Z+20°C	3	3	3	3	3	3	3	3																				
Load Life	<p>Test conditions</p> <p>Duration time :2000Hrs</p> <p>Ambient temperature:+105°C</p> <p>Applied voltage: Rated DC working voltage</p> <p>After test requirements at +20%</p> <p>Capacitance change: $\pm \leq 20\%$ of the initial measured value</p> <p>Dissipation Factor: $\leq 200\%$ of the initial specified value</p> <p>Leakage current: \leqThe initial specified value</p>																											
Shelf Life	<p>Test conditions</p> <p>Duration time :500Hrs</p> <p>Ambient temperature:+105°C</p> <p>Applied voltage: None</p> <p>After test requirements at +20°C: Some limits as Load life.</p> <p>Pre-treatment for measurements shall be conducted after application of DC working voltage for 30 minutes.</p>																											

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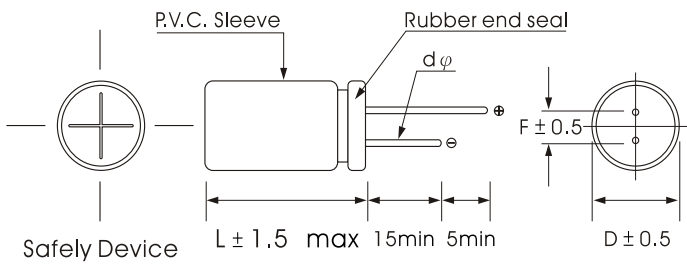
Multiplier for Ripple Current vs. Frequency

CAP(μF)\Hz		50(60)	120	400	1K	10K	50K-100K
Multiplier	CAP ≤ 10	0.47	0.59	0.76	0.85	0.97	1.0
	10 < CAP ≤ 100	0.52	0.62	0.80	0.89	0.97	1.0
	100 < CAP ≤ 1000	0.58	0.72	0.84	0.90	0.98	1.0
	1000 < CAP	0.63	0.78	0.87	0.91	0.98	1.0

Multiplier for ripple current vs. Temperature

Temperature°C	45	60	70	85	95	105
Multiplier	1.8	1.50	1.30	1.0	1.20	1.0

Diagram of Dimensions:(Unit:mm)



D φ	5	6.3	8	10	13	16	18
F	2.0	2.5	3.5	5.0	5.0	7.5	7.5
d φ	0.5		0.6		0.8		

Case Size

W.V.(SV) μF	φ DXL(mm)							
	6.3 (8)	10 (13)	16 (20)	25 (32)	35 (44)	50 (63)	63 (79)	100 (125)
4.7							5X11	5X11
10							5X11	6.3X11
22						5X11	6.3X11	8X11.5
33					5X11	6.3X11	6.3X11	8X16
47			5X11	5X11	6.3X11	8X11.5	8X11.5	10X12.5
100	5X11	5X11	6.3X11	6.3X11	8X11.5	8X11.5	10X12.5	10X25
220	6.3X11	6.3X11	8X11.5	8X11.5	8X16 10X12.5	10X16	10X25	13X30 16X20
330	6.3X11	8X11.5	8X11.5	8X16 10X12.5	10X16	10X25	13X25	16X31 13X40
470	8X11.5	8X11.5	8X16 10X12.5	8X20 10X16	10X20	13X20	13X30 16X20	16X35.5 18X31.5
1000	10X12.5	8X20 10X16	10X20	13X20	13X25	16X25	16X35.5 18X31.5	-
2200	10X25	13X20	13X25	13X25	-	-	-	-
3300	13X20	13X25	13X25	-	-	-	-	-
4700	13X30	13X35	-	-	-	-	-	-

JACKCON Electrolytic Capacitors

Maximum Ripple Current

(mA, 100K Hz at +105°C)

W.V. uF	6.3 (8)	10 (13)	16 (20)	25 (32)	35 (44)	50 (63)	63 (79)	100 (125)
4.7	→						100	105
10	→						135	170
22	→					160	200	320
33	→				230	280	270	400
47	→		200	240	340	360	400	450
100	200	242	360	410	560	680	720	890
220	360	390	575	750	1000 1060	1280	1315	1420 1620
330	395	540	740	850 990	1400	1800	1870	1920
470	600	750	990 1000	1260 1415	1850	2000	1970 2225	2100 2350
1000	1000	1220 1400	1840	2340	2780	3000	2780 3230	-
2200	2160	2370	2750	3420	-	-	-	-
3300	2290	2720	3490	-	-	-	-	-
4700	3200	3450	-	-	-	-	-	-

Maximum Impedance

(Ω, 100K Hz at +105°C)

W.V.(SV) uF	6.3 (8)		10 (13)		16 (20)		25 (32)		35 (44)		50 (63)		63 (79)		100 (125)	
	+20°C	-10°C	+20°C	-10°C	+20°C	-10°C	+20°C	-10°C	+20°C	-10°C	+20°C	-10°C	+20°C	-10°C	+20°C	-10°C
4.7	→										2.00	6.80	1.60	5.90		
10	→										0.95	3.80	0.70	2.50		
22	→								0.85	3.20	0.75	2.90	0.48	2.10		
33	→						0.40	1.70	0.38	1.60	0.38	1.45	0.31	1.35		
47	→				0.40	1.20	0.35	1.20	0.30	1.00	0.28	1.00	0.22	0.85	0.20	0.80
100	0.40	1.30	0.28	1.10	0.25	0.55	0.15	0.45	0.09	0.26	0.056	0.22	0.050	0.20	0.048	0.20
220	0.25	0.90	0.15	0.45	0.14	0.40	0.075	0.25	0.056 0.052	0.17 0.16	0.052	0.12	0.048	0.12	0.048 0.046	0.10 0.10
330	0.15	0.45	0.11	0.38	0.080	0.25	0.056 0.052	0.17 0.16	0.050	0.12	0.048	0.09	0.045	0.090	0.045	0.085
470	0.095	0.25	0.075	0.25	0.062 0.058	0.17 0.16	0.042 0.038	0.13 0.12	0.042	0.07	0.042	0.07	0.041 0.043	0.060 0.065	0.032 0.038	0.040 0.042
1000	0.055	0.15	0.050 0.042	0.15 0.13	0.035	0.07	0.02	0.055	0.019	0.044	0.019	0.042	0.017 0.016	0.040 0.040	-	-
2200	0.025	0.065	0.025	0.05	0.022	0.045	0.015	0.038	-	-	-	-	-	-	-	-
3300	0.026	0.055	0.021	0.045	0.018	0.04	-	-	-	-	-	-	-	-	-	-
4700	0.02	0.04	0.019	0.04	-	-	-	-	-	-	-	-	-	-	-	-