JACKCON Electrolytic Capacitors

LLK Series 105℃ 低漏電型製品系列

Features

- Extremely low and stable leakage current characteristics
- Close capacitance tolerance ±20% (±10% on requested)
- For detail specifications, please refer to Engineering Bulletin No.E109

Specifications

Item	Performance Characteristics
Operating Temperature Range	-40 to +105℃
Rated voltage Range	10 to 63 VDC
Capacitance Range	0.1 to 1000 uF
Capacitance Tolerance	±20%(120Hz, +20℃)
Leakage Current(+20℃, max.)	1≦0.002 CV or 0.4 (uA) After 3minutes(90 secretary . ≦10 uF.), whichever is greater measured with rated working voltage applied.
Dissipation Factor(tanδ)	Working Voltage (VDC): 10 / 16 / 25 / 35 / 50 / 63 D.F.(%)max: 17 / 13 / 10 / 9 / *8 / *8 *8 for C ≦ 1uF (+20℃, at 120Hz)
Low Temperature Characteristics (120Hz)	Impedance radio max. Working Voltage (VDC): 6.3 / 10 / 16 / 25 / 35 / 50 / 63 Z-40℃/Z+20℃: 4 / 3 / 3 / 2 / 2 / 2 / 2
Load Life	Test conditions Duration time :2000Hrs Ambient temperature:+105℃ Applied voltage: Rated DC working voltage After test requirements at+20% Capacitance change: ≦20% of the initial measured value Dissipation Factor: ≦150% of the initial specified value Leakage current: ≦The initial specified value
Shelf Life	Test conditions Duration time :500Hrs Ambient temperature:+105℃ Applied voltage: None After test requirements at +20℃: Some limits as Load life. Pre-treatment for measurements shall be conduded after application of DC working voltage for 30 minutes.

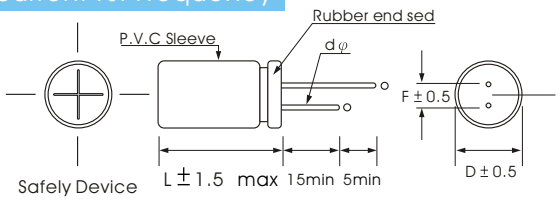
Multiplier for Ripple Current vs. Frequency

CAP(uF)\Hz		50(60)	120	400	1K	10K	50K100K
Multiplier	CAP≦10	0.8	1	1.30	1.30	1.65	1.70
	10<CAP≦100	0.8	1	1.23	1.23	1.48	1.53
	100<CAP≦1000	0.8	1	1.16	1.16	1.35	1.38

Multiplier for ripple current vs. Temperature

Temperature℃	45	60	70	85	95	105
Multiplier	1.50	1.30	1.45	1.30	1.15	1.00

Multiplier for ripple current vs. Frequency



Dφ	5	6.3	8	10	13
F	2.0	2.5	3.5	5.0	5.0
dφ	0.5			0.6	

JACKCON Electrolytic Capacitors

Case Size

φ DXL(mm)

W.V. / uF	10 (13)	16 (20)	25 (32)	35 (44)	50 (63)	63 (79)
0.1	→	→	→	→	5x11	5x11
0.22	→	→	→	→	5x11	5x11
0.33	→	→	→	→	5x11	5x11
0.47	→	→	→	→	5x11	5x11
1	→	→	→	→	5x11	5x11
2.2	→	→	→	→	5x11	5x11
3.3	→	→	→	→	5x11	5x11
4.7	→	→	→	→	5x11	5x11
10	→	→	5x11	5x11	5x11	6.3x11
22	→	5x11	5x11	5x11	6.3x11	6.3x11
33	5x11	5x11	5x11	5x11	6.3x11	8x11.5
47	5x11	6.3x11	6.3x11	6.3x11	6.3x11	8x11.5
100	5x11	6.3x11	6.3x11	8x11.5	10x12.5	10x20
220	6.3x11	8x11.5	10x12.5	10x12.5	10x20	13x20
330	8x11.5	8x11.5	10x12.5	10x20	13x20	13x25
470	8x11.5	10x12.5	10x20	13x20	13x25	-.
1000	10x16	10x20	13x20	13x25	-	-

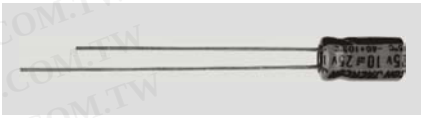
Maximum Ripple Current

(mA, rms, 120Hz at105℃)

W.V. / uF	10 (13)	16 (20)	25 (32)	35 (44)	50 (63)	63 (79)
0.1	→	→	→	→	8.8	8.8
0.22	→	→	→	→	8.8	8.8
0.33	→	→	→	→	8.8	8.8
0.47	→	→	→	→	8.8	8.8
1	→	→	→	→	13.2	13.2
2.2	→	→	→	→	22	22
3.3	→	→	→	→	28	31
4.7	→	→	→	→	33	38
10	→	→	42	46	51	55
22	→	60	63	68	75	91
33	66	70	76	83	99	110
47	77	109	116	121	138	149
100	116	138	149	187	198	248
220	193	237	253	330	380	440
330	270	286	369	440	506	594
470	319	407	484	572	671	-
1000	605	704	847	1012	-	-

JACKCON Aluminum Electrolytic Capacitors

LLM Series 105℃ 低漏電迷你型製品系列
7mm, Low Leakage Current



Features

- Low leakage current, height 7 mm
- For detail specifications, please refer to Engineering Bulletin No.E120

Specifications

Item	Performance Characteristics
Operating Temperature Range	-40 to +105℃
Rated voltage Range	6.3 to 50 VDC
Capacitance Range	0.1 to 220 uF
Capacitance Tolerance	±20%(120Hz, +20℃)
Leakage Current(+20℃, max.)	I≦0.002 CV or 0.4 (uA) After 2 minutes whichever is greater measured with rate working voltage applied.
Dissipation Factor(tanδ)	Working Voltage (VDC): 6.3 / 10 / 16 / 25 / 35 / 50 D.F.(%)max: 4 / 20 / 16 / 14 / 12 / 10 (+20℃, at 120Hz)
Low Temperature Characteristics (120Hz)	Impedance radio max. Working Voltage (VDC): 6.3 / 10 / 16 / 25 / 35 / 50 Z-40℃/Z+20℃: 8 / 6 / 4 / 4 / 3 / 3
Load Life	Duration time :1000Hrs Ambient temperature:+105℃ Applied voltage: Rated DC working voltage After test requirements at+20% Capacitance change: ±≦20% of the initial measured value Dissipation Factor: ≦200% of the initial specified value(4V:≦±30%) Leakage current: ≦The initial specified value
Shelf Life	Test conditions Duration time :500Hrs Ambient temperature:+105℃ Applied voltage: None After test requirements at +20℃: Some limits as Load life. Pre-treatment for measurements shall be conducted after application of DC working voltage for 30 minutes.

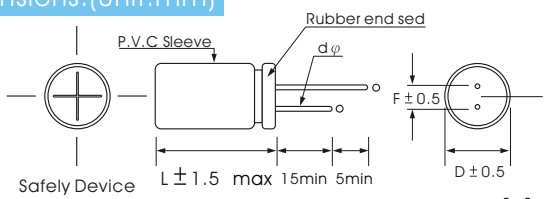
Multiplier for Ripple Current vs. Frequency

CAP(uF)\Hz		50(60)	120	400	1K	10K	50K-100K
Multiplier	CAP≦10	0.8	1	1.30	1.30	1.65	1.70
	10<CAP≦100	0.8	1	1.23	1.23	1.48	1.53
	100<CAP≦1000	0.8	1	1.16	1.16	1.35	1.38

Multiplier for ripple current vs. Temperature

Temperature℃	45	60	70	85
Multiplier	1.8	1.50	1.30	1.0

Diagram of Dimensions:(Unit:mm)



Dφ	4	5	6.3	8
F	1.5	2.0	2.5	3.5
dφ	0.45		0.6	

JACKCON Aluminum Electrolytic Capacitors

Case Size

φ DXL(mm)

W.V. / uF	6.3 (8)	10 (13)	16 (20)	25 (32)	35 (44)	50 (63)
0.1	→	→	→	→	→	4x7
0.22	→	→	→	→	→	4x7
0.33	→	→	→	→	→	4x7
0.47	→	→	→	→	→	4x7
1	→	→	→	→	→	4x7
2.2	→	→	→	→	→	4x7
3.3	→	→	→	→	→	4x7
4.7	→	→	→	→	4x7	5x7
10	→	→	4x7	5x7	5x7	6.3x7
22	4x7	5x7	5x7	6.3x7	6.3x7	8x7
33	5x7	5x7	6.3x7	6.3x7	8x7	-
47	5x7	6.3x7	6.3x7	8x7	-	-
100	6.3x7	8x7	8x7	-	-	-
220	8x7	-	-	-	-	-

Maximum Ripple Current

(mA, rms, 120Hz at 105℃)

W.V. / uF	6.3 (8)	10 (13)	16 (20)	25 (32)	35 (44)	50 (63)
0.1	→	→	→	→	→	0.8
0.22	→	→	→	→	→	2.0
0.33	→	→	→	→	→	3.1
0.47	→	→	→	→	→	4.5
1	→	→	→	→	→	8.0
2.2	→	→	→	→	→	16
3.3	→	→	→	→	→	21
4.7	→	→	→	→	21	25
10	→	→	25	30	33	40
22	31	35	40	48	525	58
33	40	44	53	59	65	-
47	48	55	60	73	-	-
100	70	90	95	-	-	-
220	110	-	-	-	-	-

JACKCON Electrolytic Capacitors

LLS Series 105℃ 低漏電超迷你型製品系列

Features

- 105℃, 1000 hours assured, 5mm height with low leakage current
- Use in very compact high temperature industrial equipment

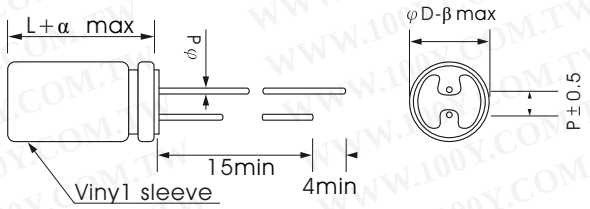
Specifications

Item	Performance
Operating Temperature Range	-40℃ to +105℃
Capacitance Tolerance	±20% (at 120Hz, 20℃)
Leakage Current(at 20℃)	I≦0.002 CV or 0.4 (uA) whichever is greater (After 2 minutes) Where, C=rated capacitance in uF. V= rated DC working voltage in V.
Dissipation Factor (tan δ at 120Hz, 20℃)	Rated Voltage: 4 / 6.3 / 10 / 16 / 25 / 35 / 50 tan δ max: 0.35 / 0.27 / 0.23 / 0.19 / 0.15 / 0.13 / 0.11
Low Temperature Characteristics (at 120Hz)	Impedance ratio shall not exceed the values given in the table below. Rated Voltage: 4 / 6.3 / 10 / 16 / 25 / 35 / 50 Impedance ratio Z-25℃/Z+20℃: 6 / 3 / 2 / 2 / 2 / 2 / 2 Impedance ratio Z-40℃/Z+20℃: 12 / 9 / 7 / 5 / 3 / 3 / 3
Load Life	Test Time: 1000 Hrs Impedance Ratio 4~6.3V: Within ± 30% of initial value Impedance Ratio 10~50V: Within ± 25% of initial value Dissipation Factor: Less than 200% of specified value Leakage Current: Within specified value *The above specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage applied for 1000 hrs at 105℃.
Shelf Life	Test Time: 500 Hrs Impedance Ratio 4~6.3V: Within ± 30% of initial value Impedance Ratio 10~50V: Within ± 25% of initial value Dissipation Factor: Less than 200% of specified value Leakage Current: Within specified value *The above specifications shall be satisfied when the capacitors are restored to 20℃ after exposing them for hrs at 105℃ without voltage applied.
Standards	Satisfies Characteristic W of JIS C 5141

JACKCON Aluminum Electrolytic Capacitors

Diagram Of Dimensions

Unit: mm



Lead Spacing And Diameter

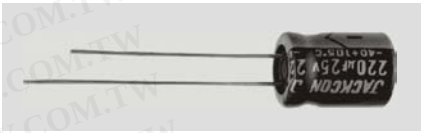
φD	4	5	6.3
P	1.5	2.0	2.5
φd	0.45		
α	1.0		
β	0.5		

Dimension & Permissible Ripple Current

V.DC / uF	4V		6.3V		10V		16V		25V		35V		50V	
	φDxL	mA	φDxL	mA	φDxL	mA	φDxL	mA	φDxL	mA	φDxL	mA	φDxL	mA
0.1													4x5	1
0.22													4x5	2
0.33													4x5	3
0.47													4x5	3.8
1													4x5	6.9
2.2													4x5	10
3.3													4x5	13
4.7									4x5	14	4x5	16	5x5	19
10							4x5	19	5x5	23	5x5	24	6.3x5	32
22			4x5	22	5x5	24	5x5	28	6.3x5	38	6.3x5	42		
33	5x5	27	5x5	28	5x5	30	6.3x5	41	6.3x5	46				
47	5x5	32	5x5	34	6.3x5	43	6.3x5	50						
100	6.3x5	54	6.3x5	60										

JACKCON Electrolytic Capacitors

LEK Series 105℃ LOW ESR 製品系列



Features

- Used in mother board, computer peripheral, etc.
- Load life 2000～5000 Hrs at105℃
- Safety vent construction design.
- For detail specifications, please refer to Engineering Bulletin No.E127

Specifications

<table>
<tr><th>Item</th><th>Performance Characteristics</th></tr>
<tr><td>Operating Temperature Range</td><td>-40 to +105℃</td></tr>
<tr><td>Rated voltage Range</td><td>6.3 to 100 VDC</td></tr>
<tr><td>Capacitance Range</td><td>4.7 to 4700 uF</td></tr>
<tr><td>Capacitance Tolerance</td><td>±20%(120Hz, +20℃)</td></tr>
<tr><td>Leakage Current(+20℃, max.)</td><td>1≦0.001 CV or 3 (uA)
After 2 minutes whichever is greater measured with rated working voltage applied.</td></tr>
<tr><td>Dissipation Factor(tanδ)</td><td>
<table>
<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>
For capacitance＞1000uF, add 2% per another 1000uF in crease.
(+20℃, at 120Hz)</td></tr>
<tr><td>Low Temperature Characteristics (120Hz)</td><td>Impedance radio max.
<table>
<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℃/Z+20℃</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℃/Z+20℃</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></td></tr>
<tr><td>Load Life</td><td>Test conditions
Duration time :2000Hrs
Ambient temperature:+105℃
Applied voltage: Rated DC working voltage
After test requirements at+20%
Capacitance change: ±≦20% of the initial measured value
Dissipation Factor: ≦200% of the initial specified value
Leakage current: ≦The initial specified value</td></tr>
<tr><td>Shelf Life</td><td>Test conditions
Duration time :500Hrs
Ambient temperature:+105℃
Applied voltage: None
After test requirements at +20℃: Some limits as Load life.
Pre-treatment for measurements shall be conducted after application of DC working voltage for 30 minutes.</td></tr>
</table>

JACKCON Electrolytic Capacitors

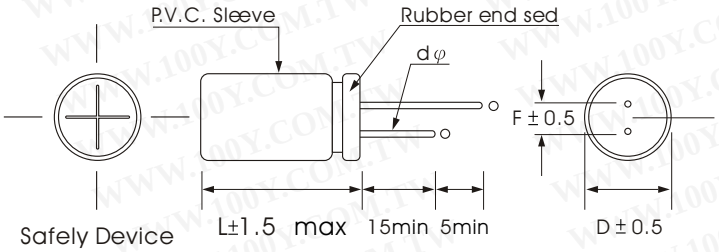
Multiplier for Ripple Current vs. Frequency

CAP(uF)\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℃	45	60	70	85	95	105
Multiplier	1.8	1.50	1.30	1.0	1.20	1.0

Diagram of Dimensions:(Unit:mm)



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

Case Size

φ DXL(mm)

W.V.(SV) / uF	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	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	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, 100KHz at+105℃)

W.V. / uF	6.3 (8)	10 (13)	16 (20)	25 (32)	35 (44)	50 (63)	63 (79)	100 (125)
4.7	-	-	-	-	-	-	-	105
10	-	-	-	-	-	-	135	170
22	-	-	-	-	-	-	200	320
33	-	-	-	-	230	-	270	400
47	-	-	200	240	340	-	400	450
100	200	242	360	410	560	200	720	890
220	360	390	575	750	1000 1060	360	1315	1420 1270
330	395	540	740	990	1400	395	1870	1650
470	600	750	990 1000	1260 1415	1850	600	2225 1970	1900 1700
1000	1000	1220 1400	1840	2340	2780	1000	2780 3230	-
2200	2160	2370	2750	3420	-	2160	-	-
3300	2290	2720	3490	-	-	2290	-	-
4700	3200	3450	-	-	-	3200	-	-

Maximum Impedance

(Ω, 100KHz at+105℃)

W.V.(SV) / uF	6.3 (8)		10 (13)		6.3 (8)		6.3 (8)		6.3 (8)		6.3 (8)		6.3 (8)		6.3 (8)	
	+20℃	-10℃	+20℃	-10℃	+20℃	-10℃	+20℃	-10℃	+20℃	-10℃	+20℃	-10℃	+20℃	-10℃	+20℃	-10℃
4.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.60	5.90
10	-	-	-	-	-	-	-	-	-	-	-	-	0.95	3.80	0.70	2.50
22	-	-	-	-	-	-	-	-	-	-	0.35	1.20	0.75	2.90	0.48	2.10
33	-	-	-	-	-	-	-	-	0.32	1.1	0.20	1.10	0.38	1.45	0.31	1.35
47	-	-	-	-	0.40	1.20	0.35	1.20	0.20	0.50	0.09	1.00	0.22	0.85	0.25	1.00
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..14	0.50	0.12	0.50
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	0.075	0.30	0.065 0.075	0.25 0.25
330	0.15	0.45	0.11	0.38	0.080	0.25	0.056 0.052	0.17 0.16	0.038	0.12	0.038	0.09	0.045	0.15	0.045	0.014
470	0.095	0.25	0.075	0.25	0.062 0.058	0.17 0.16	0.04 0.038	0.13 0.12	0.022	0.07	0.022	0.07	0.041 0.043	0.14 0.14	0.032 0.038	0.010 0.012
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	0.058	0.026 0.028	0.065 0.068	-	-
2200	0.025	0.065	0.025	0.05	0.022	0.045	0.015	0.038	-	-	-	-	0.026 0.028	-	-	-
3300	0.026	0.055	0.021	0.045	0.018	0.04	-	-	-	-	-	-	-	-	-	-
4700	0.02	0.04	0.019	0.04	-	-	-	-	-	-						

JACKCON Electrolytic Capacitors

LSE 105℃ LOW ESR 電腦主機板專用型製品系列

Features

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

Specifications

Item	Performance
Operating Temperature Range	-40℃ to +105℃
Capacitance Tolerance	±20% (at 120Hz, 20℃)
Leakage Current(at 20℃)	I≦0.01 CV or 3 (uA) whichever is greater (After 2 minutes) Where, C=rated capacitance in uF. V= rated DC working voltage in V.

Dissipation Factor (tan δ at 120Hz, 20℃)

Rated Voltage	6.3	10	16	25	35	50
tan δ max	0.22	0.19	0.16	0.14	0.12	0.10

When the capacitance exceeds 1000 uF, 0.02 shall be added every 1000uF increase.

Low Temperature Characteristics (at 120Hz)

Impedance ratio shall not exceed the values given in the table below.

Rated Voltage		6.3	10	16	25	35	50
Impedance ratio	Z-25℃/Z+20℃	3	2	2	2	2	2
	Z-40℃/Z+20℃	3	3	3	3	3	3

Load Life Test

Test Time	2000 hrs for φD=5~8mm 3000 hrs for 10φx13~16L mm 4000 hrs for 10φx20L & φD≧13mm
Capacitance Change	Within ± 25% of initial value
Dissipation Factor	Less than 200% of specified value
Leakage Current	Within specified value

*The above specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage applied for 2000 /4000 hrs at 105℃.

Shelf Life Test

Test Time	1000 Hrs
Capacitance Change	Within ± 25% of initial value
Dissipation Factor	Less than 200% of specified value
Leakage Current	Within specified value

*The above specifications shall be satisfied when the capacitors are restored to 20℃ after exposing them for 1000 hrs at 105℃ without voltage applied.

Ripple Current & Frequency Multipliers

Freq.(Hz) / Cap.(uF)	60(50)	120	1K	10K	100K
Under 33	0.45	0.55	0.75	0.90	1.0
39 to 330	0.60	0.70	0.85	0.95	1.0
470 to 1000	0.65	0.75	0.90	0.98	1.0
1200 up above	0.75	0.80	0.95	1.0	1.0

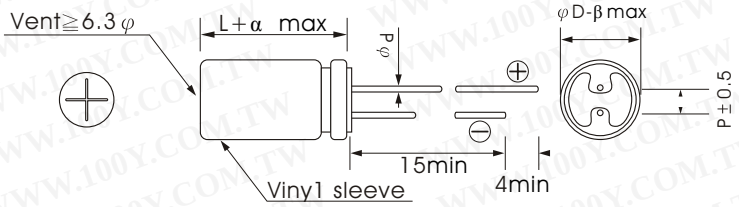
Ripple Current & Frequency Multipliers

Temperature(℃)	85	105
Multiplier	1.70	1.00

Standards	Satisfies Characteristic W of JIS C 5141

JACKCON Aluminum Electrolytic Capacitors

Diagram Of Dimensions



Lead Spacing And Diameter

Unit: mm

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

Dimension & Permissible Ripple Current

Dimension: φDxL(mm)
Ripple Current: mA /rms at 100KHz, 105℃

V.DC / Item / φDxL	6.3V					10V					16V				
	uF	Impedance (Ω,Max/100K Hz)		Ripple Current (mA/rms,105℃)		uF	Impedance (Ω,Max/100K Hz)		Ripple Current (mA/rms,105℃)		uF	Impedance (Ω,Max/100K Hz)		Ripple Current (mA/rms,105℃)	
		20℃	-10℃	120Hz	100KHz		20℃	-10℃	120Hz	100KHz		20℃	-10℃	120Hz	100KHz
5x11	150	150	1.0	175	250	100	0.3	1.0	175	250	56	0.3	1.0	175	250
6.3x11	330	330	0.41	284	405	220	0.13	0.41	284	405	120	0.13	0.41	284	405
8x11.5	560	560	0.22	570	760	470	0.07	0.22	570	760	330	0.07	0.22	532	760
8x16	820	820	0.17	746	995	680	0.056	0.17	746	995	470	0.056	0.17	746	995
8x20	1200	1200	0.13	1000	1250	1000	0.041	0.13	938	1250	680	0.041	0.13	1000	1250
10x12.5	1000	1000	0.16	773	1030	680	0.053	0.16	773	1030	470	0.053	0.16	773	1030
10x16	1200	1200	0.12	1144	1430	1000	0.038	0.12	1073	1430	680	0.038	0.12	1073	1430
10x20	1500	1500	0.069	1456	1820	1200	0.023	0.069	1456	1820	1000	0.023	0.069	1365	1820
10x20	2200	2200	0.066	1720	2150	1500	0.022	0.066	1720	2150	1200	0.022	0.066	1720	2150
10x25	3300	3300	0.053	1888	2360	2200	0.021	0.053	1888	2360	1500	0.021	0.053	1888	2360
13x25	3900	3900	0.045	2216	2770	3300	0.017	0.045	2216	2770	2200	0.018	0.045	2216	2770
13x30	4700	4700	0.041	2632	3290	3900	0.016	0.041	2632	3290	2700	0.016	0.041	2632	3290
13x35	5600	5600	0.039	2720	3400	4700	0.015	0.039	2720	3400	3300	0.015	0.039	2720	3400
16x25	6800	6800	0.043	2768	3460	5600	0.016	0.043	2768	3460	3900	0.016	0.043	2768	3460

V.DC / Item / φDxL	25V					35V					50V				
	uF	Impedance (Ω,Max/100K Hz)		Ripple Current (mA/rms,105℃)		uF	Impedance (Ω,Max/100K Hz)		Ripple Current (mA/rms,105℃)		uF	Impedance (Ω,Max/100K Hz)		Ripple Current (mA/rms,105℃)	
		20℃	-10℃	120Hz	100KHz		20℃	-10℃	120Hz	100KHz		20℃	-10℃	120Hz	100KHz
5x11	47	0.3	1.0	175	250	33	0.3	1.0	138	250	22	0.34	1.18	131	238
6.3x11	100	0.13	0.41	284	405	56	0.13	0.41	284	405	56	0.14	0.5	270	385
8x11.5	220	0.07	0.22	532	760	150	0.07	0.22	532	760	100	0.074	0.22	507	724
8x16	330	0.056	0.17	697	995	220	0.056	0.17	697	995	120	0.061	0.18	665	950
8x20	470	0.041	0.13	938	1250	270	0.041	0.13	875	1250	180	0.046	0.14	833	1190
10x12.5	330	0.053	0.16	721	1030	220	0.053	0.16	721	1030	150	.061	0.18	685	979
10x16	470	0.038	0.12	1073	1430	330	0.038	0.12	1001	1430	220	0.042	0.12	959	1370
10x20	680	0.023	0.069	1365	1820	470	0.023	0.069	1365	1820	270	0.03	0.09	1106	1580
10x20	820	0.022	0.066	1613	2150	560	0.022	0.066	1613	2150	330	0.028	0.085	1309	1870
10x25	1000	0.021	0.053	1770	2360	680	0.021	0.053	1770	2360	470	0.027	0.068	1538	2050
13x25	1500	0.018	0.045	2216	2770	1000	0.017	0.045	2078	2770	560	0.023	0.059	1808	2410
13x30	1800	0.016	0.041	2632	3290	1200	0.016	0.041	2632	3290	680	0.021	0.052	2145	2860
13x35	2200	0.015	0.039	2720	3400	1500	0.015	0.039	2720	3400	820	0.019	0.051	2220	2960
16x25	2700	0.016	0.043	2768	3460	1800	0.016	0.043	2768	3460	1000	0.021	0.056	2258	3010