

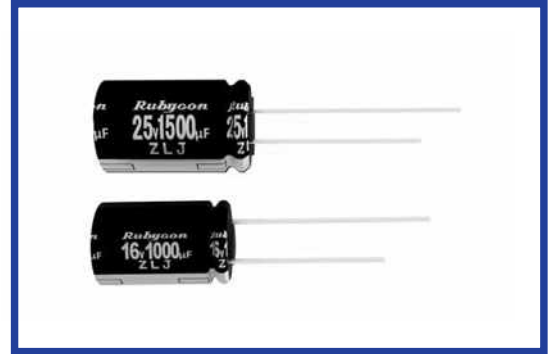
ZLJ SERIES

UPGRADE

105°C High Ripple Current, Long Life, Low Impedance

*Load Life : 105°C 6000~10000 hours.

RoHS compliance



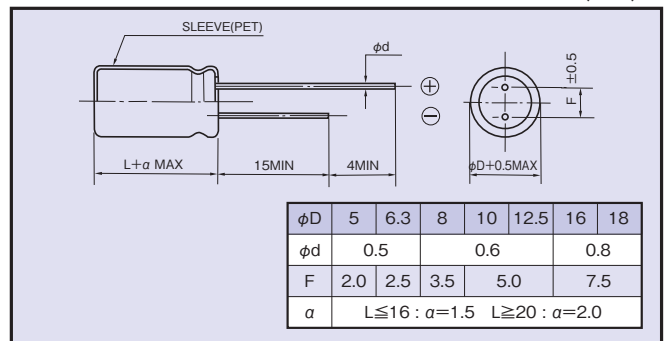
◆ SPECIFICATIONS

Items	Characteristics																														
Category Temperature Range	-40~+105°C																														
Rated Voltage Range	6.3~100Vdc																														
Capacitance Tolerance	±20% (20°C, 120Hz)																														
Leakage Current(MAX)	I=0.01CV or 3µA whichever is greater.(After 2 minutes) I=Leakage Current(µA) C=Capacitance(µF) V=Rated Voltage(Vdc)																														
Dissipation Factor(MAX) (tanδ)	<table border="1"> <thead> <tr> <th>Rated Voltage (Vdc)</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>80</th> <th>100</th> </tr> </thead> <tbody> <tr> <td>tanδ</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> <td>0.08</td> </tr> </tbody> </table> <p>(20°C, 120Hz)</p> <p>When capacitance is over 1000µF, tanδ shall be added 0.02 to the listed value with increase of every 1000µF.</p>	Rated Voltage (Vdc)	6.3	10	16	25	35	50	63	80	100	tanδ	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.08	0.08										
Rated Voltage (Vdc)	6.3	10	16	25	35	50	63	80	100																						
tanδ	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.08	0.08																						
Endurance	<p>After applying rated voltage with rated ripple current for specified time at 105°C, the capacitors shall meet the following requirements.</p> <table border="1"> <thead> <tr> <th rowspan="2">Capacitance Change</th> <th rowspan="2">Within ±25% of the initial value. (6.3Vdc, 10Vdc:±30%)</th> <th colspan="3">Life Time(hrs)</th> </tr> <tr> <th>6.3Vdc</th> <th>10~50Vdc</th> <th>63~100Vdc</th> </tr> </thead> <tbody> <tr> <td>Dissipation Factor</td> <td>Not more than 200% of the specified value.</td> <td>6000</td> <td>7000</td> <td>6000</td> </tr> <tr> <td rowspan="2">Leakage Current</td> <td rowspan="2">Not more than the specified value.</td> <td>8000</td> <td>9000</td> <td>8000</td> </tr> <tr> <td>9000</td> <td>9000</td> <td>9000</td> </tr> <tr> <td rowspan="2">Case Size</td> <td rowspan="2">Not more than the specified value.</td> <td>9000</td> <td>10000</td> <td>9000</td> </tr> <tr> <td>10000</td> <td></td> <td></td> </tr> </tbody> </table>	Capacitance Change	Within ±25% of the initial value. (6.3Vdc, 10Vdc:±30%)	Life Time(hrs)			6.3Vdc	10~50Vdc	63~100Vdc	Dissipation Factor	Not more than 200% of the specified value.	6000	7000	6000	Leakage Current	Not more than the specified value.	8000	9000	8000	9000	9000	9000	Case Size	Not more than the specified value.	9000	10000	9000	10000			
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Low Temperature Stability Impedance Ratio(MAX)	<table border="1"> <thead> <tr> <th>Rated Voltage (Vdc)</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>80</th> <th>100</th> </tr> </thead> <tbody> <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> <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> <td>3</td> </tr> </tbody> </table> <p>(120Hz)</p>	Rated Voltage (Vdc)	6.3	10	16	25	35	50	63	80	100	Z(-25°C)/Z(20°C)	2	2	2	2	2	2	2	2	2	Z(-40°C)/Z(20°C)	3	3	3	3	3	3	3	3	3
Rated Voltage (Vdc)	6.3	10	16	25	35	50	63	80	100																						
Z(-25°C)/Z(20°C)	2	2	2	2	2	2	2	2	2																						
Z(-40°C)/Z(20°C)	3	3	3	3	3	3	3	3	3																						

◆ MULTIPLIER FOR RIPPLE CURRENT

Frequency (Hz)		120	1k	10k	100k≤
Coefficient	8.2~33µF	0.42	0.70	0.90	1.00
	47~270µF	0.50	0.73	0.92	1.00
	330~680µF	0.55	0.77	0.94	1.00
	820~1800µF	0.60	0.80	0.96	1.00
	2200~8200µF	0.70	0.85	0.98	1.00

◆ DIMENSIONS



◆ OPTION

	Code
PET Sleeve	Blank

◆ PART NUMBER



◆STANDARD SIZE

Rated Voltage (Vdc)	Capacitance (μF)	Size φD×L(mm)	Rated ripple current (mA r.m.s./105°C, 100kHz)	Impedance (Ω MAX)		Rated Voltage (Vdc)	Capacitance (μF)	Size φD×L(mm)	Rated ripple current (mA r.m.s./105°C, 100kHz)	Impedance (Ω MAX)	
				20°C, 100kHz	-10°C, 100kHz					20°C, 100kHz	-10°C, 100kHz
6.3	220	5×11	345	0.4	1.2	35	47	5×11	450	0.4	1.2
	470	6.3×11	540	0.17	0.51		100	6.3×11	700	0.17	0.51
	820	8×11.5	945	0.075	0.23		180	8×11.5	1200	0.075	0.23
	1000	8×16	1250	0.059	0.18		220	8×16	1600	0.059	0.18
	1200	10×12.5	1330	0.053	0.16		270	8×16	1600	0.059	0.18
	1500	8×20	1500	0.041	0.13		270	10×12.5	1700	0.053	0.16
	1800	10×16	1760	0.038	0.12		330	8×20	1960	0.041	0.13
	2700	10×20	1960	0.028	0.084		330	10×12.5	1700	0.053	0.16
	3300	10×25	2250	0.024	0.072		390	8×20	1960	0.041	0.13
	3900	12.5×20	2480	0.025	0.075		390	10×16	2000	0.038	0.12
	4700	12.5×25	2900	0.019	0.057		470	10×16	2000	0.038	0.12
	5600	12.5×30	3450	0.018	0.054		560	10×20	2500	0.028	0.084
	6800	12.5×35	3570	0.016	0.048		680	10×25	2900	0.024	0.072
	6800	16×20	3250	0.021	0.063		820	12.5×20	2600	0.025	0.075
8200	16×25	3630	0.017	0.051	1000	12.5×20	2600	0.025	0.075		
10	150	5×11	450	0.4	1.2	1200	12.5×25	3200	0.019	0.057	
	330	6.3×11	700	0.17	0.51	1500	12.5×30	3660	0.018	0.054	
	560	8×11.5	1200	0.075	0.23	1500	16×20	3330	0.021	0.063	
	680	8×16	1600	0.059	0.18	1800	12.5×35	4120	0.016	0.048	
	820	10×12.5	1700	0.053	0.16	1800	16×25	3810	0.017	0.051	
	1000	8×20	1960	0.041	0.13	50	27	5×11	310	0.48	1.5
	1200	10×16	2000	0.038	0.12		56	6.3×11	500	0.22	0.66
	1800	10×20	2500	0.028	0.084		100	8×11.5	950	0.12	0.36
	2200	10×25	2900	0.024	0.072		120	8×11.5	1300	0.11	0.33
	2700	12.5×20	2600	0.025	0.075		120	8×16	1230	0.082	0.25
	3300	12.5×25	3200	0.019	0.057		150	10×12.5	1280	0.073	0.22
	4700	12.5×30	3660	0.018	0.054		180	8×16	1700	0.081	0.24
	4700	16×20	3330	0.021	0.063		180	8×20	1580	0.058	0.18
	5600	12.5×35	4120	0.016	0.048		220	10×12.5	1700	0.071	0.21
5600	16×25	3810	0.017	0.051	220		10×16	1650	0.053	0.16	
16	120	5×11	450	0.4	1.2		270	8×20	2100	0.058	0.17
	270	6.3×11	700	0.17	0.51		330	10×16	2100	0.052	0.16
	470	8×11.5	1200	0.075	0.23		330	10×20	2060	0.038	0.12
	560	8×16	1600	0.059	0.18		390	10×25	2420	0.032	0.1
	680	8×16	1600	0.059	0.18	470	10×20	2500	0.037	0.11	
	680	10×12.5	1700	0.053	0.16	470	12.5×16	2200	0.04	0.12	
	820	8×20	1960	0.041	0.13	470	12.5×20	2300	0.032	0.1	
	1000	8×20	1960	0.041	0.13	560	10×25	2900	0.031	0.093	
	1000	10×16	2000	0.038	0.12	680	12.5×20	2700	0.029	0.087	
	1500	10×20	2500	0.028	0.084	680	12.5×25	2800	0.025	0.08	
	1800	10×25	2900	0.024	0.072	820	12.5×30	3370	0.023	0.074	
	2200	12.5×20	2600	0.025	0.075	820	16×20	3070	0.026	0.084	
	2700	12.5×25	3200	0.019	0.057	1000	12.5×25	3000	0.022	0.066	
	3300	12.5×30	3660	0.018	0.054	1000	12.5×30	3500	0.02	0.06	
3300	16×20	3330	0.021	0.063	1000	12.5×35	3810	0.021	0.067		
3900	12.5×35	4120	0.016	0.048	1000	16×25	3510	0.022	0.07		
4700	16×25	3810	0.017	0.051	1200	12.5×35	4000	0.017	0.051		
25	68	5×11	450	0.4	1.2	1200	16×20	3100	0.023	0.069	
	150	6.3×11	700	0.17	0.51	1500	12.5×40	4500	0.019	0.057	
	330	8×11.5	1200	0.075	0.23	1500	16×25	3600	0.018	0.054	
	390	8×16	1600	0.059	0.18	1500	18×20	3200	0.029	0.087	
	470	10×12.5	1700	0.053	0.16	2200	16×31.5	4100	0.018	0.054	
	560	8×20	1960	0.041	0.13	2200	18×25	3700	0.022	0.066	
	680	10×16	2000	0.038	0.12	2700	16×35.5	4400	0.016	0.048	
	1000	10×20	2500	0.028	0.084	2700	16×40	4800	0.014	0.042	
	1200	10×25	2900	0.024	0.072	2700	18×31.5	4200	0.019	0.057	
	1500	12.5×20	2600	0.025	0.075	3300	18×35.5	4600	0.016	0.048	
	1800	12.5×25	3200	0.019	0.057	3900	18×40	5000	0.014	0.042	
	2200	12.5×30	3660	0.018	0.054						
	2200	16×20	3330	0.021	0.063						
	2700	12.5×35	4120	0.016	0.048						
3300	16×25	3810	0.017	0.051							

◆STANDARD SIZE

Rated Voltage (Vdc)	Capacitance (μF)	Size φD×L(mm)	Rated ripple current (mA r.m.s./105°C, 100kHz)	Impedance (Ω MAX)	
				20°C, 100kHz	-10°C, 100kHz
63	18	5×11	240	0.71	3.2
	47	6.3×11	420	0.28	1.3
	82	8×11.5	720	0.18	0.79
	100	8×11.5	1000	0.13	0.39
	100	8×16	990	0.13	0.58
	120	8×16	1300	0.095	0.29
	120	10×12.5	990	0.11	0.44
	150	8×20	1200	0.096	0.43
	150	10×12.5	1300	0.08	0.24
	180	8×20	1600	0.069	0.21
	180	10×16	1200	0.076	0.31
	220	10×16	1700	0.058	0.17
	270	10×20	1570	0.056	0.23
	270	12.5×16	1570	0.072	0.27
	330	10×20	2000	0.042	0.13
	330	10×25	1990	0.046	0.19
	330	12.5×16	1900	0.045	0.14
	390	10×25	2400	0.035	0.11
	390	12.5×20	1990	0.041	0.13
	470	12.5×20	2400	0.033	0.099
	470	12.5×25	2460	0.031	0.093
	560	12.5×30	2760	0.028	0.084
	560	16×20	2380	0.032	0.096
	680	12.5×25	2800	0.025	0.075
	680	12.5×35	3040	0.024	0.072
	820	12.5×30	3200	0.022	0.066
	820	16×20	2900	0.025	0.075
	820	16×25	2890	0.025	0.075
1000	12.5×35	3500	0.018	0.054	
1000	16×25	3200	0.02	0.06	
1200	12.5×40	3800	0.021	0.063	
1200	18×20	3000	0.032	0.096	
1500	16×31.5	3500	0.02	0.06	
1500	18×25	3200	0.024	0.072	
1800	16×35.5	3800	0.017	0.051	
1800	18×31.5	3700	0.02	0.06	
2200	16×40	4100	0.015	0.045	
2200	18×35.5	3900	0.017	0.051	
2700	18×40	4300	0.015	0.045	

Rated Voltage (Vdc)	Capacitance (μF)	Size φD×L(mm)	Rated ripple current (mA r.m.s./105°C, 100kHz)	Impedance (Ω MAX)		
				20°C, 100kHz	-10°C, 100kHz	
80	12	5×11	220	1.2	5.4	
	27	6.3×11	370	0.46	2.1	
	47	8×11.5	620	0.29	1.3	
	56	8×16	780	0.2	0.9	
	68	10×12.5	780	0.17	0.66	
	82	8×20	1040	0.16	0.66	
	100	10×16	1040	0.11	0.47	
	150	10×20	1430	0.084	0.34	
	150	12.5×16	1430	0.11	0.34	
	180	10×25	1620	0.069	0.28	
	220	12.5×20	1750	0.062	0.18	
	270	12.5×25	2210	0.047	0.14	
	330	12.5×30	2400	0.042	0.13	
	330	16×20	1950	0.048	0.15	
	390	12.5×35	2600	0.036	0.11	
	470	12.5×40	2860	0.032	0.095	
	470	16×25	2430	0.038	0.12	
	470	18×20	2270	0.045	0.14	
	560	16×31.5	2640	0.032	0.095	
	680	16×35.5	2860	0.029	0.086	
	680	18×25	2500	0.036	0.11	
	820	16×40	3510	0.027	0.081	
	820	18×31.5	2860	0.03	0.09	
	1000	18×35.5	3510	0.027	0.081	
	1200	18×40	3860	0.026	0.076	
	100	8.2	5×11	220	1.2	5.4
		18	6.3×11	370	0.46	2.1
		33	8×11.5	620	0.29	1.3
47		8×16	780	0.2	0.9	
56		10×12.5	780	0.17	0.66	
68		8×20	1040	0.16	0.66	
82		10×16	1040	0.11	0.47	
100		10×20	1430	0.084	0.34	
100		12.5×16	1430	0.11	0.34	
120		10×25	1620	0.069	0.28	
150		12.5×20	1750	0.062	0.18	
220		12.5×25	2210	0.047	0.14	
270		12.5×30	2400	0.042	0.13	
270		16×20	1950	0.048	0.15	
330		12.5×35	2600	0.036	0.11	
390		12.5×40	2860	0.032	0.095	
390		16×25	2430	0.038	0.12	
390		18×20	2270	0.045	0.14	
470		16×31.5	2640	0.032	0.095	
470		18×25	2500	0.036	0.11	
560		16×35.5	2860	0.029	0.086	
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680		16×40	3510	0.027	0.081	
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820		18×40	3860	0.026	0.076	