ZLJ SERIES

UPGRADE

105℃ High Ripple Current, Long Life, Low Impedance



•Load Life : 105℃ 6000～10000 hours.

RoHS compliance

◆SPECIFICATIONS

Items	Characteristics
Category Temperature Range	−40～+105℃
Rated Voltage Range	6.3～100Vdc
Capacitance Tolerance	±20%(20℃,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)	(20℃,120Hz) When capacitance is over 1000μF, tanδ shall be added 0.02 to the listed value with increase of every 1000μF.
Endurance	After applying rated voltage with rated ripple current for specified time at 105℃, the capacitors shall meet the following requirements.
Low Temperature Stability Impedance Ratio(MAX)	(120Hz)

Dissipation Factor(MAX) (tanδ)

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

Capacitance Change	Within ±25% of the initial value. (6.3Vdc, 10Vdc:±30%)
Dissipation Factor	Not more than 200% of the specified value.
Leakage Current	Not more than the specified value.

Case Size	Life Time(hrs)		
	6.3Vdc	10～50Vdc	63～100Vdc
φD≦6.3	6000	7000	6000
8×11.5	8000	9000	8000
10×12.5	9000	9000	9000
8×16,8×20	9000	10000	9000
10×16,10×20,10×25 φD≧12.5	10000		

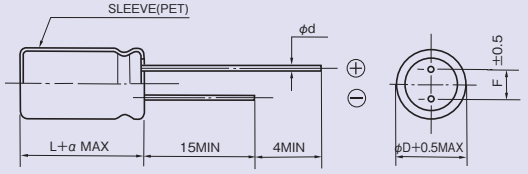
Low Temperature Stability Impedance Ratio(MAX)

Rated Voltage (Vdc)	6.3	10	16	25	35	50	63	80	100
Z(−25℃)/Z(20℃)	2	2	2	2	2	2	2	2	2
Z(−40℃)/Z(20℃)	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 (mm)



φD	5	6.3	8	10	12.5	16	18
φd	0.5		0.6			0.8	
F	2.0	2.5	3.5	5.0		7.5	
α	L≦16 : α=1.5 L≧20 : α=2.0						

◆OPTION

	Code
PET Sleeve	Blank

◆PART NUMBER

□□□	ZLJ	□□□□□	M	□□□	□□	D×L
Rated Voltage	Series	Capacitance	Capacitance Tolerance	Option	Lead Forming	Case Size

◆STANDARD SIZE

Rated Voltage (Vdc)	Capacitance (μF)	Size φD×L(mm)	Rated ripple current (mA r.m.s./105℃, 100kHz)	Impedance (Ω MAX)	
				20℃, 100kHz	−10℃, 100kHz
6.3	220	5×11	345	0.4	1.2
	470	6.3×11	540	0.17	0.51
	820	8×11.5	945	0.075	0.23
	1000	8×16	1250	0.059	0.18
	1200	10×12.5	1330	0.053	0.16
	1500	8×20	1500	0.041	0.13
	1800	10×16	1760	0.038	0.12
	2700	10×20	1960	0.028	0.084
	3300	10×25	2250	0.024	0.072
	3900	12.5×20	2480	0.025	0.075
	4700	12.5×25	2900	0.019	0.057
	5600	12.5×30	3450	0.018	0.054
	6800	12.5×35	3570	0.016	0.048
	6800	16×20	3250	0.021	0.063
	8200	16×25	3630	0.017	0.051
10	150	5×11	450	0.4	1.2
	330	6.3×11	700	0.17	0.51
	560	8×11.5	1200	0.075	0.23
	680	8×16	1600	0.059	0.18
	820	10×12.5	1700	0.053	0.16
	1000	8×20	1960	0.041	0.13
	1200	10×16	2000	0.038	0.12
	1800	10×20	2500	0.028	0.084
	2200	10×25	2900	0.024	0.072
	2700	12.5×20	2600	0.025	0.075
	3300	12.5×25	3200	0.019	0.057
	4700	12.5×30	3660	0.018	0.054
	4700	16×20	3330	0.021	0.063
	5600	12.5×35	4120	0.016	0.048
	5600	16×25	3810	0.017	0.051
16	120	5×11	450	0.4	1.2
	270	6.3×11	700	0.17	0.51
	470	8×11.5	1200	0.075	0.23
	560	8×16	1600	0.059	0.18
	680	8×16	1600	0.059	0.18
	680	10×12.5	1700	0.053	0.16
	820	8×20	1960	0.041	0.13
	1000	8×20	1960	0.041	0.13
	1000	10×16	2000	0.038	0.12
	1500	10×20	2500	0.028	0.084
	1800	10×25	2900	0.024	0.072
	2200	12.5×20	2600	0.025	0.075
	2700	12.5×25	3200	0.019	0.057
	3300	12.5×30	3660	0.018	0.054
	3300	16×20	3330	0.021	0.063
	3900	12.5×35	4120	0.016	0.048
	4700	16×25	3810	0.017	0.051
25	68	5×11	450	0.4	1.2
	150	6.3×11	700	0.17	0.51
	330	8×11.5	1200	0.075	0.23
	390	8×16	1600	0.059	0.18
	470	10×12.5	1700	0.053	0.16
	560	8×20	1960	0.041	0.13
	680	10×16	2000	0.038	0.12
	1000	10×20	2500	0.028	0.084
	1200	10×25	2900	0.024	0.072
	1500	12.5×20	2600	0.025	0.075
	1800	12.5×25	3200	0.019	0.057
	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

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

◆STANDARD SIZE

Rated Voltage (Vdc)	Capacitance (μF)	Size φD×L(mm)	Rated ripple current (mA r.m.s./105℃, 100kHz)	Impedance (Ω MAX)	
				20℃, 100kHz	−10℃, 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℃, 100kHz)	Impedance (Ω MAX)	
				20℃, 100kHz	−10℃, 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
	560	18×31.5	2860	0.03	0.09
	680	16×40	3510	0.027	0.081
	680	18×35.5	3510	0.027	0.081
	820	18×40	3860	0.026	0.076