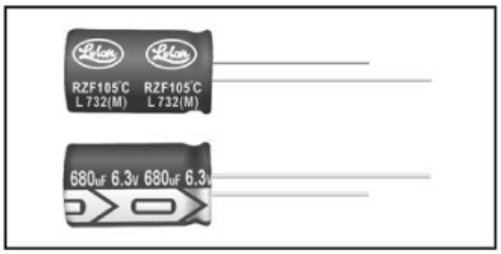
Feature

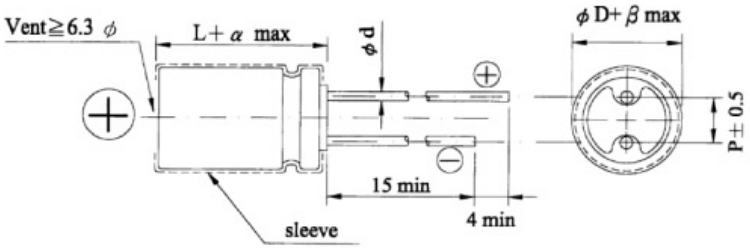
- Long life, 105℃, 3,000 ~ 10,000 hours assured
- Low impednace at 100KHz with selected materials
- RoHS Compliance



SPECIFICATIONS

Items	Performance
Operating Temperature Range	-55℃ ~ +105℃
Capacitance Tolerance	±20% (at 120Hz, 20℃)
Leakage Current (at 20℃)	I = 0.01CV or 3 (μA) whichever is greater (after 2 minutes) Where, C = rated capacitance in μF V = rated DC working voltage in V
Dissipation Factor (Tan δ at 120 Hz, 20℃)	Rated Voltage: 6.3 / 10 / 16 / 25 / 35 Tan δ (max): 0.22 / 0.19 / 0.16 / 0.14 / 0.12 When the capacitance exceeds 1,000 μF, 0.02 shall be added every 1,000 μF 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 Impedance Ratio Z(-25℃)/Z(+20℃): 4 / 3 / 2 / 2 / 2 Impedance Ratio Z(-55℃)/Z(+20℃): 8 / 6 / 4 / 3 / 3
Load Life Test	Rated voltage(V): 6.3 ~ 10 / 16 ~ 35 Test Time: 3,000 hrs for φD ≦ 6.3 mm; 6,000 hrs for φD = 8 ~ 10 mm; 8,000 hrs for φD ≧ 12.5 mm / 4,000 hrs for φD ≦ 6.3 mm; 6,000 hrs for φD = 8 mm; 8,000 hrs for φD = 10 mm; 10,000 hrs for φD ≧ 12.5 mm 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 with rated ripple current for test time at 105℃.
Shelf Life Test	Test Time: 1,000 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 1,000 hrs at 105℃ without voltage applied.
Ripple Current & Frequency Multipliers	Freq.(Hz) / Cap.(μF): 120 / 1K / 10K / 100K up Under 33: 0.55 / 0.75 / 0.90 / 1.00 39 ~ 330: 0.70 / 0.85 / 0.95 / 1.00 390 ~ 1,000: 0.80 / 0.90 / 0.98 / 1.00 1,200 up above: 0.90 / 0.95 / 1.00 / 1.00

DIAGRAM OF DIMENSIONS



LEAD SPACING AND DIAMETER Unit:mm

φD	5	6.3	8	10	12.5	16	18
P	2.0	2.5	3.5	5.0	5.0	7.5	7.5
φd	0.5		0.6			0.8	
α	1.0			1.5			
β	0.5						

Dimension: φD×L(mm)

DIMENSION & PERMISSIBLE RIPPLE CURRENT

Ripple Current: mA/rms at 100K Hz, 105℃

V. DC / Item / φD×L	6.3V (0J)					10V (1A)					16V (1C)				
	μF	Impedance (Ω, Max/100KHz)		Ripple Current (mA/rms, 105℃)		μF	Impedance (Ω, Max/100KHz)		Ripple Current (mA/rms, 105℃)		μF	Impedance (Ω, Max/100KHz)		Ripple Current (mA/rms, 105℃)	
		20℃	-10℃	120Hz	100KHz		20℃	-10℃	120Hz	100KHz		20℃	-10℃	120Hz	100KHz
5×11	120	0.72	1.8	116	165	82	0.72	1.8	116	165	56	0.72	1.8	116	165
6.3×11	220	0.38	0.95	179	255	180	0.38	0.95	179	255	120	0.38	0.95	179	255
6.3×15	330	0.27	0.68	231	330	270	0.27	0.68	231	330	180	0.27	0.68	231	330
8×11.5	390	0.20	0.50	332	415	330	0.20	0.50	291	415	270	0.20	0.50	291	415
8×15	560	0.16	0.40	396	495	470	0.16	0.40	396	495	330	0.16	0.40	347	495
8×20	820	0.11	0.28	512	640	680	0.11	0.28	512	640	470	0.11	0.28	512	640
10×12.5	470	0.12	0.30	500	625	390	0.12	0.30	500	625	270	0.12	0.30	438	625
10×16	680	0.084	0.21	660	825	680	0.084	0.21	660	825	470	0.084	0.21	660	825
10×20	1,200	0.062	0.16	936	1,040	1,000	0.062	0.16	832	1,040	680	0.062	0.16	832	1,040
10×25	1,500	0.052	0.13	1,134	1,260	1,200	0.052	0.13	1,134	1,260	820	0.052	0.13	1,008	1,260
10×30	2,200	0.044	0.11	1,296	1,440	1,500	0.044	0.11	1,296	1,440	1,200	0.044	0.11	1,296	1,440
12.5×20	2,200	0.046	0.12	1,206	1,340	1,800	0.046	0.12	1,206	1,340	1,200	0.046	0.12	1,206	1,340
12.5×25	2,700	0.034	0.085	1,521	1,690	2,200	0.034	0.085	1,521	1,690	1,500	0.034	0.080	1,521	1,690
12.5×30	3,900	0.030	0.075	1,755	1,950	2,700	0.030	0.075	1,755	1,950	2,200	0.030	0.075	1,755	1,950
12.5×35	4,700	0.027	0.068	1,980	2,200	3,300	0.027	0.068	1,980	2,200	2,700	0.027	0.068	1,980	2,200
12.5×40	5,600	0.024	0.060	2,151	2,390	3,900	0.024	0.060	2,151	2,390	3,300	0.024	0.060	2,151	2,390
16×25	5,600	0.028	0.070	1,863	2,070	3,900	0.028	0.070	1,863	2,070	2,700	0.028	0.070	1,863	2,070
16×31.5	6,800	0.025	0.063	2,115	2,350	5,600	0.025	0.063	2,115	2,350	3,900	0.025	0.063	2,115	2,350
16×35.5						6,800	0.022	0.055	2,295	2,550	4,700	0.022	0.055	2,295	2,550
16×40											5,600	0.018	0.045	2,610	2,900
18×35.5											6,800	0.021	0.053	2,394	2,660

V. DC / Item / φD×L	25V (1E)					35V (1V)				
	μF	Impedance (Ω, Max/100KHz)		Ripple Current (mA/rms, 105℃)		μF	Impedance (Ω, Max/100KHz)		Ripple Current (mA/rms, 105℃)	
		20℃	-10℃	120Hz	100KHz		20℃	-10℃	120Hz	100KHz
5×11	39	0.72	1.8	116	165	27	0.72	1.8	91	165
6.3×11	82	0.38	0.95	179	255	56	0.38	0.95	179	255
6.3×15	120	0.27	0.68	231	330	82	0.27	0.68	231	330
8×11.5	150	0.20	0.50	291	415	120	0.20	0.50	291	415
8×15	220	0.16	0.40	347	495	180	0.16	0.40	347	495
8×20	330	0.11	0.28	448	640	220	0.11	0.28	448	640
10×12.5	180	0.12	0.30	438	625	120	0.12	0.30	438	625
10×16	330	0.084	0.21	578	825	220	0.084	0.21	578	825
10×20	470	0.062	0.16	832	1,040	330	0.062	0.16	728	1,040
10×25	560	0.052	0.13	1,008	1,260	390	0.052	0.13	1,008	1,260
10×30	820	0.044	0.11	1,152	1,440	560	0.040	0.11	1,152	1,440
12.5×20	820	0.046	0.12	1,072	1,340	560	0.046	0.12	1,072	1,340
12.5×25	1,000	0.034	0.085	1,352	1,690	680	0.034	0.085	1,352	1,690
12.5×30	1,500	0.030	0.075	1,755	1,950	1,000	0.030	0.075	1,560	1,950
12.5×35	1,800	0.027	0.068	1,980	2,200	1,200	0.027	0.068	1,980	2,200
12.5×40	2,200	0.024	0.060	2,151	2,390	1,500	0.024	0.060	2,151	2,390
16×25	1,800	0.028	0.070	1,863	2,070	1,200	0.028	0.070	1,863	2,070
16×31.5	2,700	0.025	0.063	2,115	2,350	1,800	0.025	0.063	2,115	2,350
16×35.5	3,300	0.022	0.055	2,295	2,550	2,200	0.022	0.055	2,295	2,550
16×40	3,900	0.018	0.045	2,610	2,900	2,700	0.018	0.045	2,610	2,900
18×35.5	3,900	0.021	0.053	2,394	2,660	2,700	0.021	0.053	2,394	2,660
18×40	4,700	0.017	0.043	2,709	3,010	3,300	0.010	0.043	2,709	3,010