

RLB Series



RLB Series - Radial Type

High temperature 105°C and high reliability

Specifications

- Operation Temperature Range :**
-55 ~ +105°C -40 ~ +105°C -25 ~ +105°C

- Rated Working Voltage:**
6.3 ~ 100VDC 160 ~ 450VDC 450VDC

- Capacitance Tolerance (120Hz 20°C) : ±20%(M)**

- Leakage Current (20°C)**
6.3 ~ 100VDC $I \leq 0.01CV$ or 4 (µA)
160 ~ 450VDC $I \leq 0.03CV$ or 40(µA) max

*Whichever is greater after 3 min

zI : Leakage Current (µA) C : Rated Capacitance (µA)

V : Working Voltage(V)

- Surge Voltage (20°C)**

W.V.	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450
S.V.	8	13	20	32	44	63	79	125	200	250	300	400	450	500

- Dissipation Factor (tan δ) (120Hz 20°C)**

W.V.	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450
tan δ	0.24	0.20	0.17	0.15	0.12	0.10	0.10	0.08	0.15	0.15	0.15	0.20	0.20	0.20

- Low Temperature Stability**

Impedance ratio at 120Hz

Rated Voltage (V)	6.3	10	16	25	35~100	160~250	350~400	450
-25°C/ +20°C	4	3	2	2	2	3	6	15
-40°C/ +20°C	10	8	6	4	3	4	10	-

- Load Life**

After 2000 hours application of W. V. at +85°C, the capacitor shall meet the following limits.

Capacitance Change	$\leq \pm 25\%$ of initial value for 6.3 ~ 16 W. V. , $\leq \pm 20\%$ of initial value for 25 ~ 450 W. V.
Dissipation Factor	$\leq 200\%$ of initial specified value
Leakage Current	\leq initial specified value

- Shelf Life**

At +105°C, no voltage application after 1000 hours, the capacitor shall meet the limits for load life characteristics. (With voltage treatment)

- Ripple Current Coefficients**

Temperature (°C)	65	85	105
Multiplier	1.75	1.40	1.00

Frequency (Hz)	60	120	1K	$\geq 10K$
W.V.	Multiplier			
6.3~25V	0.85	1.00	1.10	1.20
35~100V	0.80	1.00	1.15	1.25
160~250V	0.75	1.00	1.25	1.40
350~450V	0.70	1.00	1.30	1.80

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Case Size & Max Ripple Current

V(DC)	6.3		10		16	
μF / Item	D x L	R.C.	D x L	R.C.	D x L	R.C.
47				→	5 x 11	90
100	5 x 11	110	5 x 11	120	5 x 11	130
220	5 x 11	160	5 x 11	180	6.3 x 11	220
330	6.3 x 11	220	6.3 x 11	250	6.3 x 11	270
					8 x 11	310
470	6.3 x 11	270	6.3 x 11	290	8 x 11	370
					10 x 12.5	600
1000	8 x 11	460	10 x 12.5	560	10 x 16	670
					12.5 x 20	1180
2200	10 x 16	810	10 x 16	880	12.5 x 20	1180
			10 x 20	970		
3300	10 x 20	1050	12.5 x 20	1280	12.5 x 25	1510
4700	12.5 x 20	1350	12.5 x 25	1590	16 x 25	1830
6800	12.5 x 25	1680	16 x 25	1940	16 x 25	2040
					16 x 32	2120
10000	16 x 25	2020	16 x 32	2210	16 x 36	2430
			16 x 36	2330	18 x 36	2590
15000	16 x 32	2200	16 x 36	2540	18 x 40	2960
	16 x 36	2320	18 x 36	2710	20 x 40	3040
22000	18 x 36	2660	18 x 40	3050	22 x 40	3390
	18 x 40	2810	20 x 40	3130	22 x 50	3740
33000	22 x 40	3230	22 x 50	3840	25 x 50	4200
	22 x 50	3560				
47000	22 x 50	3700	25 x 50	4260		
68000	22 x 50	3820				

Case size : D x L (mm)

Max ripple current : A(rms) 105°C 120Hz

All blank voltage on sleeve marking is the same voltage as " _ " point to.

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Case Size & Max Ripple Current

V(DC)	25		35		50	
μF / Item	D x L	R.C.	D x L	R.C.	D x L	R.C.
1				→	5 x 11	17
2.2				→	5 x 11	25
3.3				→	5 x 11	31
4.7				→	5 x 11	36
10	5 x 11	43	5 x 11	49	5 x 11	55
22	5 x 11	65	5 x 11	70	5 x 11	80
33	5 x 11	80	5 x 11	90	5 x 11	95
47	5 x 11	95	5 x 11	110	6.3 x 11	130
68	5 x 11	110	6.3 x 11	140	6.3 x 11	160
100	5 x 11	140	6.3 x 11	170	8 x 11	220
	6.3 x 11	160				
220	6.3 x 11	230	8 x 11	300	10 x 12.5	370
	8 x 11	270				
330	8 x 11	330	10 x 12.5	410	10 x 16	500
470	10 x 12.5	440	10 x 16	550	10 x 20	660
1000	10 x 16	710	12.5 x 20	1000	12.5 x 25	1210
	10 x 20	790				
2200	12.5 x 25	1370	16 x 25	1640	16 x 32	1850
					16 x 36	1950
3300	16 x 25	1730	16 x 32	1960	18 x 36	2360
			16 x 36	2070		
4700	16 x 32	1990	16 x 36	2260		
			18 x 36	2410		
6800	16 x 36	2330	18 x 40	2780	22 x 50	3490
	18 x 36	2480				
10000	18 x 40	2820	22 x 50	3540	25 x 50	3930
	20 x 40	2890				
15000	22 x 50	3620	22 x 50	3750		
22000	25 x 50	4080				

Case size : D x L (mm)

Max ripple current : A(rms) 105°C 120Hz

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Case Size & Max Ripple Current

V(DC) μF / Item	63		100	
	D x L	R.C.	D x L	R.C.
10	5 x 11	55	5 x 11	60
			6.3 x 11	65
22	5 x 11	80	6.3 x 11	100
33	6.3 x 11	110	8 x 11	140
47	6.3 x 11	130	8 x 15	190
			10 x 12.5	190
68	8 x 11	180	10 x 12.5	230
100	8 x 11	220	10 x 16	310
	10 x 12.5	250	10 x 20	340
220	10 x 16	410	12.5 x 20	570
			12.5 x 25	630
330	10 x 20	550	12.5 x 25	780
470	12.5 x 20	750	16 x 25	950
			18 x 36	1630
1000	16 x 25	1310	18 x 40	1720
			22 x 50	2730
2200	18 x 36	2080	22 x 50	2730
4700	22 x 50	3220		
6800	25 x 50	3740		

Case size : D x L (mm)

Max ripple current : A(rms) 105°C 120Hz

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Case Size & Max Ripple Current

V(DC)	160		200		250	
μF / Item	D x L	R.C.	D x L	R.C.	D x L	R.C.
1	6.3 x 11	18	6.3 x 11	19	6.3 x 11	21
2.2	6.3 x 11	26	6.3 x 11	28	6.3 x 11	31
3.3	6.3 x 11	32	6.3 x 11	34	6.3 x 11	37
					8 x 11	44
4.7	6.3 x 11	38	6.3 x 11	41	8 x 11	50
			8 x 11	48		
10	8 x 11	65	8 x 11	70	10 x 12.5	85
			10 x 12.5	80	10 x 16	95
22	10 x 12.5	110	10 x 16	130	10 x 20	150
	10 x 16	120	10 x 20	140	12.5 x 20	170
33	10 x 16	150	10 x 20	170	10 x 25	210
	10 x 20	160	12.5 x 20	200	12.5 x 20	210
47	10 x 20	190	12.5 x 20	240	12.5 x 20	260
	12.5 x 20	220			12.5 x 25	280
68	12.5 x 20	260	12.5 x 25	310	16 x 25	350
100	12.5 x 25	350	16 x 25	390	16 x 25	420
					16 x 32	440
220	16 x 32	560	16 x 36	640	18 x 36	740
	16 x 36	590	18 x 40	720		
330	18 x 36	770	18 x 40	880	20 x 40	980
	18 x 40	820				
470	18 x 40	970	22 x 40	1130	22 x 50	1360
	22 x 40	1050				
1000	25 x 50	1820				

Case size : D x L (mm)

Max ripple current : A(rms) 105°C 120Hz

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Case Size & Max Ripple Current

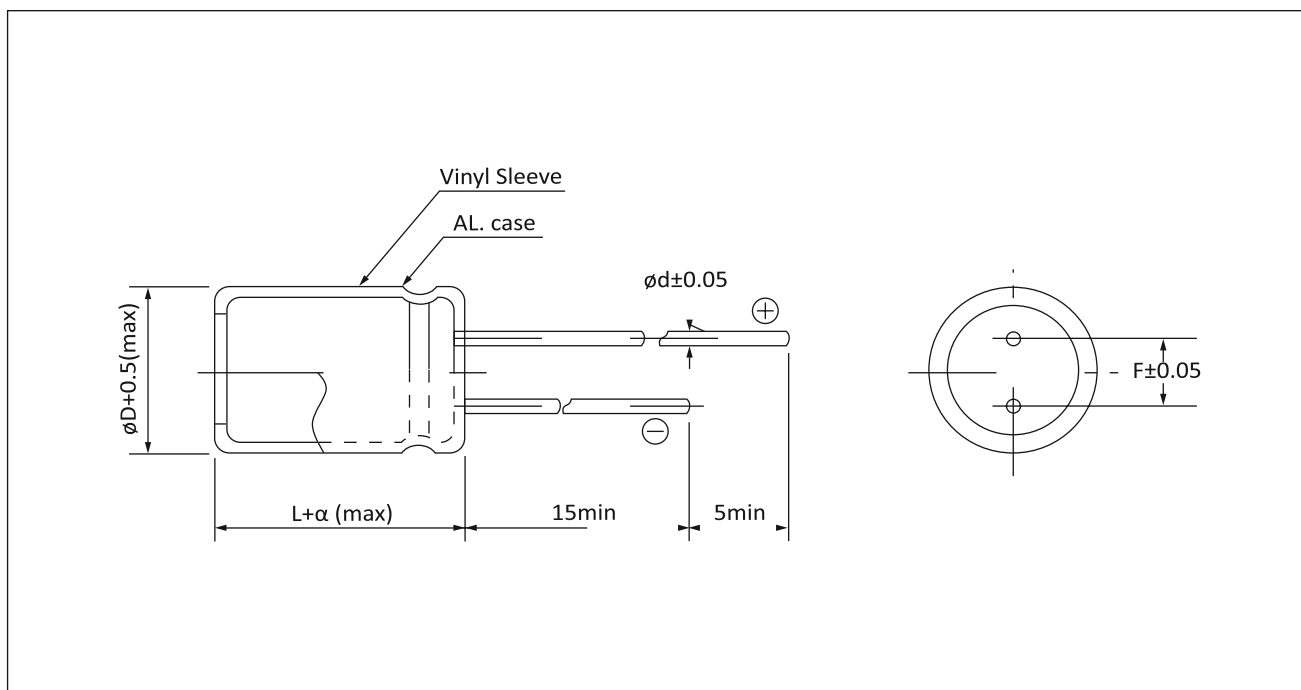
V(DC)	350		400		450	
μF / Item	D x L	R.C.	D x L	R.C.	D x L	R.C.
1	8 x 11	21	8 x 11	21	10 x 12.5	22
2.2	8 x 11	31	8 x 11	32	8 x 11	29
			10 x 12.5	35	10 x 20	39
3.3	8 x 11	37	8 x 11	39	10 x 16	44
	10 x 12.5	42	10 x 12.5	43	12.5 x 16	55
4.7	8 x 11	45	8 x 11	46	10 x 16	50
	8 x 11	50	10 x 16	55	12.5 x 20	65
10	10 x 16	80	10 x 16	85	10 x 20	85
	10 x 20	90	12.5 x 20	100	16 x 25	110
22	12.5 x 20	150	12.5 x 25	170	12.5 x 25	160
	12.5 x 25	170			16. x 32	170
33	12.5 x 20	180	16 x 25	220	16 x 32	200
	16 x 25	210	16 x 32	220	18 x 36	230
47	16 x 25	250	16 x 25	270	16 x 36	260
	16 x 36	270	16 x 36	300		
68	16 x 32	310	16 x 32	320	18 x 36	330
100	18 x 36	430	18 x 36	440	18 x 40	420
	18 x 40	450	20 x 40	480		
220	22 x 50	820	25 x 50	880	25 x 50	800
330	25 x 50	1080				

Case size : D x L (mm)

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Wide Temperature Range



Dimension in mm.

ϕD	F	d	α
5	2.0	0.5	1.5
6.3	2.5	0.5	1.5
8	3.5	0.6	1.5
10	5.0	0.6	1.5
12.5	5.0	0.6	1.5
16	7.5	0.8	1.5
18	7.5	0.8	1.5
22	10.0	1.0	2.0
25	12.5	1.0	2.0

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The specification shown herein (page 1 to 7) pertain to the current manufacturing range of the Company. The Company reserves the right to change and /or modify any part of or whole of the specifications as a result of research and development and as may be necessary, without prior notice.