

RLB Series

• 85°C 3,000Hrs assured.

- Non-solvent proof.
- High Ripple, Low Temp.
- For high ripple current application such as air conditioning system
- RoHS compliant.
- Halogen-free capacitors are also available.



SPECIFICATIONS

Item	Characteristics									
Rated Voltage Range	400 ~ 500 V _{DC}									
Operating Temperature Range	-40 ~ +85°C									
Capacitance Tolerance	±10% (K) (at 20°C, 120Hz)									
Leakage Current	$I = 3\sqrt{CV} (\mu A)$ Where, I: Leakage current(μA) C: Nominal capacitance(μF) V: Rated voltage(V _{DC}) (at 20°C, 5 minutes)									
* Dissipation Factor(Tanδ)	<table border="1"> <tr> <td>Rated Voltage(V_{DC})</td> <td>400</td> <td>450~500</td> </tr> <tr> <td>Tanδ(Max.)</td> <td>0.15</td> <td>0.20</td> </tr> </table> (at 20°C, 120Hz)	Rated Voltage(V _{DC})	400	450~500	Tanδ(Max.)	0.15	0.20			
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Temperature Characteristics (Max.Impedance ratio)	<table border="1"> <tr> <td>Rated Voltage(V_{DC})</td> <td>400</td> <td>450~500</td> </tr> <tr> <td>Z(-25°C)/Z(20°C)</td> <td>4</td> <td>8</td> </tr> <tr> <td>Z(-40°C)/Z(20°C)</td> <td>8</td> <td>16</td> </tr> </table> (at 120Hz)	Rated Voltage(V _{DC})	400	450~500	Z(-25°C)/Z(20°C)	4	8	Z(-40°C)/Z(20°C)	8	16
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Load Life	<p>The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage with the rated ripple current is applied (the peak voltage shall not exceed the rated voltage) for 3,000 hours at 85°C</p> <p>Capacitance change ≤ ±20% of the initial value Tanδ ≤ 200% of the initial specified value Leakage current ≤ The initial specified value</p>									
Shelf Life	<p>The following specifications shall be satisfied when the capacitors are restored to 20°C after the exposing them at 85°C for 1,000hours without voltage applied. The rated voltage shall be applied to the capacitors for a minimum of 30 minutes, at least 24 hours and not more than 48 hours before the measurements.</p> <p>Capacitance change ≤ ±15% of the initial value Tanδ ≤ 150% of the initial specified value Leakage Current ≤ The initial specified value</p>									
Others	Satisfied characteristics KS C IEC 60384-4									

* For capacitors with CV products > 100,000 Higher Tanδ value may apply.
 When the capacitance exceeds 1,000μF, 0.01 shall be added every 1,000μF increase.

RATED RIPPLE CURRENT

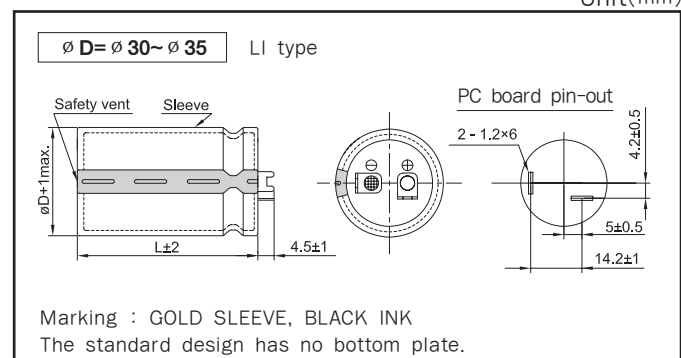
When capacitors are operated in any other condition at 120Hz, the maximum ripple current must be multiplied by the figure shown in the table.

Frequency multiplying factor

V _{DC} \ Freq.(Hz)	60	120	300	1k	10k~
400~500V _{DC}	0.77	1.00	1.16	1.30	1.41

DIMENSIONS OF RLB Series

Unit(mm)



RATINGS OF RLB Series

VDC	Capacitance (μF)	∅D×L(mm)	Rated Ripple Current (Arms/85°C, 120Hz)
400	100	30 × 20	1.01
	150	30 × 25	1.35
		35 × 20	
	220	30 × 30	1.84
		35 × 25	1.83
	270	30 × 35	2.11
	330	30 × 40	2.47
		35 × 30	2.45
	390	35 × 35	2.84
	470	30 × 50	3.32
		35 × 40	3.30
	560	35 × 45	3.70
	680	30 × 60	4.00
		35 × 50	
820	35 × 60	4.50	
450	82	30 × 20	0.94
	120	30 × 25	1.23
		35 × 20	
	180	30 × 30	1.67
		35 × 25	1.66
	220	30 × 35	1.95
	270	30 × 40	2.29
	330	35 × 35	2.64
	390	30 × 50	3.03
		35 × 40	3.01
	470	30 × 60	3.61
		35 × 45	3.50
	560	35 × 50	4.00
	680	35 × 60	4.40
820	35 × 70	4.80	
1,000	35 × 80	5.20	

VDC	Capacitance (μF)	∅D×L(mm)	Rated Ripple Current (Arms/85°C, 120Hz)
500	82	30 × 25	0.69
	100	30 × 30	0.80
		35 × 25	0.79
	120	30 × 35	0.93
	150	30 × 40	1.09
		35 × 30	1.07
	180	35 × 35	1.24
	220	30 × 50	1.45
		35 × 40	1.44
	270	30 × 60	1.72
		35 × 45	1.68
	330	35 × 50	1.94
	390	35 × 60	2.26
	470	35 × 70	2.55