

# RLB Series

- Endurance with ripple current : 5,000 hours at 85°C
- High ripple current capability in a commercial frequency range
- High ripple current for inverter control like air conditioner
- Rated voltage range : 180 to 250Vdc, Capacitance range : 600 to 2,200μF
- Non solvent resistant type
- RoHS2 Compliant

RLB

↑  
Longer life  
RLA

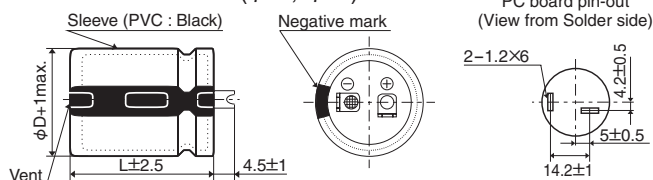


## SPECIFICATIONS

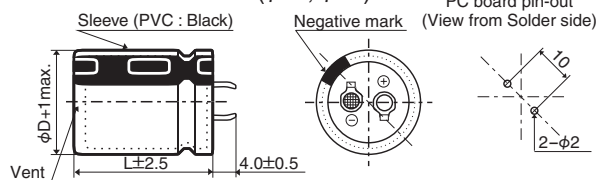
Items	Characteristics	
Category	-25 to +85°C	
Temperature Range		
Rated Voltage Range	180 to 250V	
Capacitance Tolerance	± 10% (K) (at 20°C, 120Hz)	
Leakage Current	$I \leq 3/CV$ Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20°C after 5 minutes)	
Dissipation Factor (tan δ)	Rated voltage (V <sub>ac</sub> )	180 to 250V
	tan δ (Max.)	0.15 (at 20°C, 120Hz)
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (V <sub>ac</sub> )	180 to 250V
	Z(-25°C)/Z(+20°C)	4 (at 120Hz)
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after subjected to DC voltage with the rated ripple current is applied (the peak voltage shall not exceed the rated voltage) for 5,000 hours at 85°C.	
	Capacitance change	≤ ±20% of the initial value
	D. F. (tan δ)	≤ 200% of the initial specified value
	Leakage current	≤ The initial specified value
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours at 85°C without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to Item 4.1 of JIS C 5101-4.	
	Capacitance change	≤ ± 15% of the initial value
	D. F. (tan δ)	≤ 150% of the initial specified value
	Leakage current	≤ The initial specified value

## DIMENSIONS [mm]

### Terminal Code : LI (φ30, φ35) : Standard

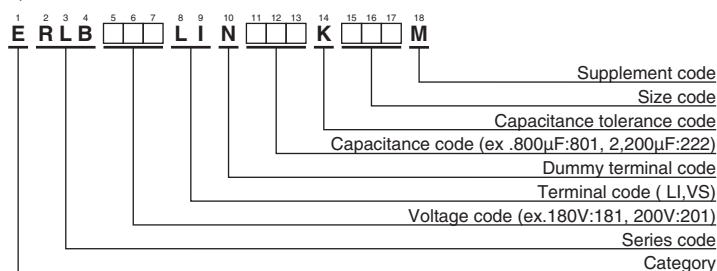


### Terminal Code : VS (φ30, φ35)



The standard design has no plastic disc.

## PART NUMBERING SYSTEM



Please refer to "Product code guide (snap-in type)"

◆STANDARD RATINGS

WV (V <sub>dc</sub> )	Cap (μF)	Case size φD×L(mm)	tan δ	Rated ripple current (Arms/85°C, 120Hz)	Part No.	WV (V <sub>dc</sub> )	Cap (μF)	Case size φD×L(mm)	tan δ	Rated ripple current (Arms/85°C, 120Hz)	Part No.
180	900	30 × 35	0.15	4.66	ERLB181LIN901KR35M	210	1,400	30 × 55	0.15	6.31	ERLB211LIN142KR55M
	1,100	30 × 40	0.15	5.17	ERLB181LIN112KR40M		1,500	35 × 45	0.15	6.21	ERLB211LIN152KA45M
	1,300	30 × 45	0.15	5.64	ERLB181LIN132KR45M		1,700	35 × 50	0.15	6.82	ERLB211LIN172KA50M
	1,500	30 × 50	0.15	6.07	ERLB181LIN152KR50M		2,000	35 × 55	0.15	7.62	ERLB211LIN202KA55M
	1,500	35 × 40	0.15	5.75	ERLB181LIN152KA40M	220	700	30 × 35	0.15	4.27	ERLB221LIN701KR35M
	1,700	30 × 55	0.15	6.63	ERLB181LIN172KR55M		900	30 × 40	0.15	4.85	ERLB221LIN901KR40M
	1,800	35 × 45	0.15	6.37	ERLB181LIN182KA45M		1,000	30 × 45	0.15	5.19	ERLB221LIN102KR45M
	2,000	35 × 50	0.15	6.84	ERLB181LIN202KA50M		1,000	35 × 35	0.15	4.87	ERLB221LIN102KA35M
200	900	30 × 35	0.15	4.66	ERLB201LIN901KR35M		1,200	30 × 50	0.15	5.68	ERLB221LIN122KR50M
	1,000	30 × 40	0.15	5.01	ERLB201LIN102KR40M		1,200	35 × 40	0.15	5.44	ERLB221LIN122KA40M
	1,200	30 × 45	0.15	5.51	ERLB201LIN122KR45M		1,300	30 × 55	0.15	6.09	ERLB221LIN132KR55M
	1,200	35 × 35	0.15	5.14	ERLB201LIN122KA35M		1,400	35 × 45	0.15	5.96	ERLB221LIN142KA45M
	1,400	30 × 50	0.15	5.95	ERLB201LIN142KR50M	1,600	35 × 50	0.15	6.51	ERLB221LIN162KA50M	
	1,400	35 × 40	0.15	5.66	ERLB201LIN142KA40M	1,800	35 × 55	0.15	7.10	ERLB221LIN182KA55M	
	1,500	30 × 55	0.15	6.36	ERLB201LIN152KR55M	250	600	30 × 35	0.15	4.03	ERLB251LIN601KR35M
	1,600	35 × 45	0.15	6.14	ERLB201LIN162KA45M		800	30 × 40	0.15	4.66	ERLB251LIN801KR40M
1,900	35 × 50	0.15	6.82	ERLB201LIN192KA50M	900		30 × 45	0.15	5.01	ERLB251LIN901KR45M	
2,200	35 × 55	0.15	7.60	ERLB201LIN222KA55M	900		35 × 35	0.15	4.73	ERLB251LIN901KA35M	
210	800	30 × 35	0.15	4.48	ERLB211LIN801KR35M		1,000	30 × 50	0.15	5.32	ERLB251LIN102KR50M
	900	30 × 40	0.15	4.86	ERLB211LIN901KR40M		1,100	35 × 40	0.15	5.33	ERLB251LIN112KA40M
	1,100	30 × 45	0.15	5.39	ERLB211LIN112KR45M		1,200	30 × 55	0.15	5.96	ERLB251LIN122KR55M
	1,100	35 × 35	0.15	5.06	ERLB211LIN112KA35M		1,200	35 × 45	0.15	5.68	ERLB251LIN122KA45M
	1,200	30 × 50	0.15	5.71	ERLB211LIN122KR50M	1,400	35 × 50	0.15	6.25	ERLB251LIN142KA50M	
	1,300	35 × 40	0.15	5.65	ERLB211LIN132KA40M	1,600	35 × 55	0.15	6.87	ERLB251LIN162KA55M	

◆RATED RIPPLE CURRENT MULTIPLIERS

●Frequency Multipliers

Frequency(Hz)	50	120	300	1k	10k	50k
180 to 250V <sub>dc</sub>	0.70	1.00	1.17	1.32	1.45	1.50

The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5°C rise. When long life performance is required in actual use, the rms ripple current has to be reduced.