

# 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

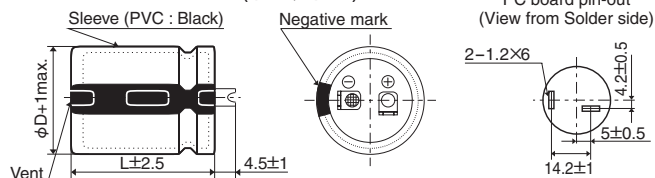


## SPECIFICATIONS

Items	Characteristics		
Category	-25 to +85°C		
Temperature Range			
Rated Voltage Range	180 to 250V		
Capacitance Tolerance	± 10% (K)		
Leakage Current	$I \leq 3/CV$ Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V)		
	(at 20°C, 120Hz)		
Dissipation Factor (tan δ)	Rated voltage (V <sub>dc</sub> )	180 to 250V	
	tan δ (Max.)	0.15	(at 20°C, 120Hz)
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (V <sub>dc</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	

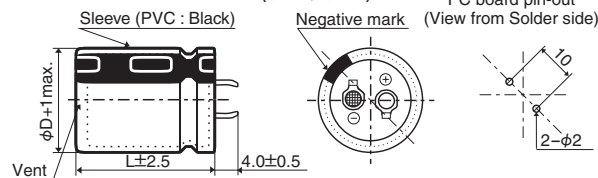
## DIMENSIONS [mm]

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

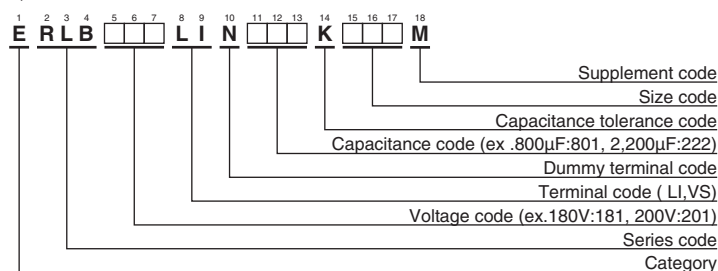


The standard design has no plastic disc.

### Terminal Code : VS (φ30, φ35)



## 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
210	2,200	35 × 55	0.15	7.60	ERLB201LIN222KA55M		900	35 × 35	0.15	4.73	ERLB251LIN901KA35M
	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 deterioration of aluminum electrolytic capacitors accelerates their life due to the internal heating produced by ripple current. For details, refer to Section "5-3 Ripple Current Effect on Lifetime" in the catalog, Technical Note.



- Always read "Notes on Use" before using the product in order to enable you to use the product correctly and prevent any faults and accidents from occurring.
- Request the Product Specification on the product of NIPPON CHEMI-CON CORPORATION to refer to it as well as this brochure prior to the order of the products. Some specific notes on use of the ordered product may be described in the specifications.
- The products listed in this catalog are designed and manufactured for general electronics equipment use and are not intended for use in applications that can adversely affect human life; where the malfunction of equipment may cause damage to life or property. In addition, our products are not intended to be used in specific applications that may cause a major social impact. Please consult with us in advance of usage of our products in the following listed applications. ① Aerospace equipment ② Power generation equipment such as thermal power, nuclear power etc. ③ Medical equipment ④ Transport equipment (automobiles, trains, ships, etc.) ⑤ Transportation control equipment ⑥ Disaster prevention / crime prevention equipment ⑦ Highly publicized information processing equipment ⑧ Submarine equipment ⑨ Other applications that are not considered general-purpose applications.
- The circuits described as examples in this catalog and the "delivery specifications" are featured in order to show the operations and usage of our products, however, this fact does not guarantee that the circuits are available to function in your equipment systems. We are not in any case responsible for any failures or damage caused by the use of information contained herein. You should examine our products, of which the characteristics are described in the "delivery specifications" and other documents, and determine whether or not our products suit your requirements according to the specifications of your equipment systems. Therefore, you bear final responsibility regarding the use of our products.  
Please make sure that you take appropriate safety measures such as use of redundant design and malfunction prevention measures in order to prevent fatal accidents and/or fires in the event any of our products malfunction.
- We strongly recommend our customers to purchase Nippon Chemi-Con products only through our official sales channels. We assume no responsibility for any defects or damages caused by using products purchased from outside our official sales channel or of counterfeit goods. In addition, we will ask the customer to pay the investigation cost for products purchased outside our official sales channel.
- We reserve the right to discontinue production and delivery of products. We do not guarantee that all the products included in this catalog will be available in the future.  
The aforementioned does not apply in the case of individual agreements deviating from the foregoing for customer-specific products
- We continually strive to improve the quality and reliability of our products, but in any case that our product does not meet our published specifications, please stop using it promptly and contact us immediately. As for compensation for non-conforming goods delivered by Chemi-Con, we will limit it only to goods found in non-compliance of our published specifications. This may be accomplished by a no cost replacement of non-conforming individual products, a credit of the piece price paid per each individual non-conforming product, or in other ways deemed necessary.  
In addition, we have an established system with enhanced traceability, therefore we will limit the applicable lot items for any potential compensation.

[Part Numbering System](#)

[Part Numbering System \(Appendix\)](#)

[Standardization](#)

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[Environmental Measures](#)

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[Precautions and Guidelines](#)

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[Available Terminals for Snap-in and Screw Mount Type](#)