LRB Series New!

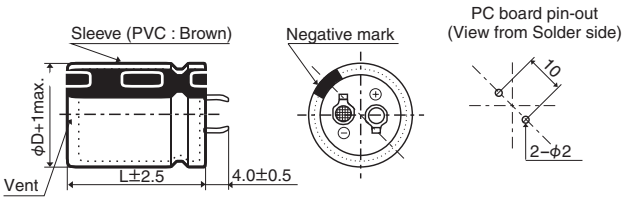
- Higher ripple current on high frequency band
- Endurance with high frequency ripple current : 5,000 hours at 105℃
- Rated voltage range : 400 to 450Vdc, Capacitance range : 85 to 330μF
- Ideal for high frequency drive power conversion system applications such as solar power conditioners
- Non solvent resistant type
- RoHS2 Compliant

◆SPECIFICATIONS

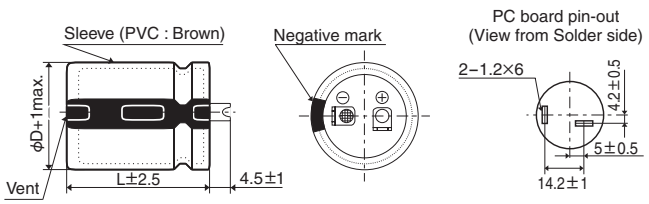
Items	Characteristics			
Category Temperature Range	-40 to +105℃			
Rated Voltage Range	400 to 450Vdc			
Capacitance Tolerance	±20% (M)			(at 20℃, 120Hz)
Leakage Current	I≦3√CV Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V)			(at 20℃ after 5 minutes)
Dissipation Factor (tan δ)	Rated voltage (Vdc)	400V	420 & 450V	
	tan δ (Max.)	0.15	0.20	(at 20℃, 120Hz)
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (Vdc)	400V	420 & 450V	
	Z(-25℃)/Z(+20℃)	3	8	
	Z(-40℃)/Z(+20℃)	12	14	(at 120Hz)
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20℃ 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 105℃.			
	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℃ after exposing them for 1,000 hours at 105℃ 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 : VS (ϕ30, ϕ35) : Standard

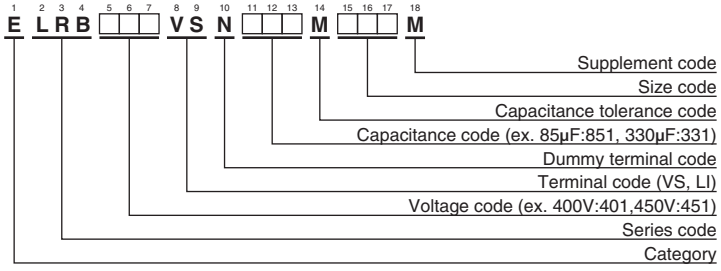


●Terminal Code : LI (ϕ30, ϕ35)



The standard design has no plastic disc.

◆PART NUMBERING SYSTEM



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

LRB New! Series

◆STANDARD RATINGS

WV (V_{dc})	Cap (μF)	Case size φD×L(mm)	tan δ	Rated ripple current (Arms/ 105℃, 100kHz)	Part No.
400	120	30 × 35	0.15	5.54	ELRB401VSN121MR35M
	150	30 × 41	0.15	5.69	ELRB401VSN151MR41M
	170	30 × 46	0.15	5.83	ELRB401VSN171MR46M
	170	35 × 35	0.15	5.87	ELRB401VSN171MA35M
	190	30 × 51	0.15	5.97	ELRB401VSN191MR51M
	210	30 × 54	0.15	6.06	ELRB401VSN211MR54M
	210	35 × 41	0.15	6.10	ELRB401VSN211MA41M
	230	30 × 59	0.15	6.20	ELRB401VSN231MR59M
	230	35 × 46	0.15	6.30	ELRB401VSN231MA46M
	270	35 × 51	0.15	6.45	ELRB401VSN271MA51M
	290	35 × 54	0.15	6.60	ELRB401VSN291MA54M
	330	35 × 59	0.15	6.85	ELRB401VSN331MA59M
420	100	30 × 35	0.20	4.58	ELRB421VSN101MR35M
	120	30 × 41	0.20	4.91	ELRB421VSN121MR41M
	140	30 × 46	0.20	5.15	ELRB421VSN141MR46M
	140	35 × 35	0.20	5.23	ELRB421VSN141MA35M
	160	30 × 51	0.20	5.39	ELRB421VSN161MR51M
	170	30 × 54	0.20	5.54	ELRB421VSN171MR54M
	170	35 × 41	0.20	5.63	ELRB421VSN171MA41M
	190	30 × 59	0.20	5.78	ELRB421VSN191MR59M
	200	35 × 46	0.20	5.95	ELRB421VSN201MA46M
	230	35 × 51	0.20	6.28	ELRB421VSN231MA51M
	250	35 × 54	0.20	6.47	ELRB421VSN251MA54M
	280	35 × 59	0.20	6.72	ELRB421VSN281MA59M

WV (V_{dc})	Cap (μF)	Case size φD×L(mm)	tan δ	Rated ripple current (Arms/ 105℃, 100kHz)	Part No.
450	85	30 × 35	0.20	4.58	ELRB451VSN850MR35M
	110	30 × 41	0.20	4.91	ELRB451VSN111MR41M
	120	30 × 46	0.20	5.15	ELRB451VSN121MR46M
	120	35 × 35	0.20	5.23	ELRB451VSN121MA35M
	140	30 × 51	0.20	5.39	ELRB451VSN141MR51M
	150	30 × 54	0.20	5.54	ELRB451VSN151MR54M
	150	35 × 41	0.20	5.63	ELRB451VSN151MA41M
	170	30 × 59	0.20	5.78	ELRB451VSN171MR59M
	170	35 × 46	0.20	5.95	ELRB451VSN171MA46M
	200	35 × 51	0.20	6.28	ELRB451VSN201MA51M
	210	35 × 54	0.20	6.47	ELRB451VSN211MA54M
	240	35 × 59	0.20	6.72	ELRB451VSN241MA59M

◆RATED RIPPLE CURRENT MULTIPLIERS

●Frequency Multipliers

Frequency(Hz)	50	120	300	1k	10k	50k	100k
400 to 450V	0.22	0.33	0.49	0.73	1.00	1.00	1.00

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.

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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
Available Items by Manufacturing Locations
Environmental Measures
Technical Note
Precautions and Guidelines
Recommended Soldering Conditions
Taping, Lead-preforming and Packaging
Available Terminals for Snap-in and Screw Mount Type

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