

# KRB Series New!



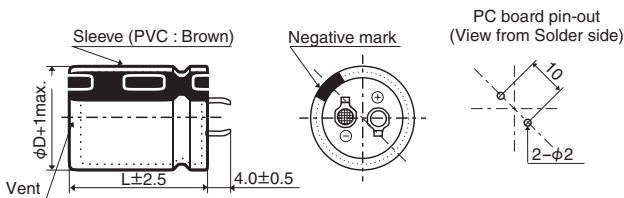
- Higher ripple current on high frequency band
- Endurance with high frequency ripple current : 3,000 hours at 105°C
- Rated voltage range : 400 to 450V<sub>dc</sub>, Capacitance range : 90 to 340µF
- Ideal for high frequency drive power conversion system applications such as solar power conditioners
- Non solvent resistant type
- RoHS2 Compliant

## SPECIFICATIONS

Items	Characteristics		
<b>Category</b>	-40 to +105°C		
<b>Temperature Range</b>	-40 to +105°C		
<b>Rated Voltage Range</b>	400 to 450V <sub>dc</sub>		
<b>Capacitance Tolerance</b>	±20% (M) (at 20°C, 120Hz)		
<b>Leakage Current</b>	I ≤ 3/CV Where, I : Max. leakage current (µA), C : Nominal capacitance (µF), V : Rated voltage (V) (at 20°C after 5 minutes)		
<b>Dissipation Factor (tan δ)</b>	Rated voltage (V <sub>dc</sub> )	400V	420 & 450V
	tan δ (Max.)	0.15	0.20
	(at 20°C, 120Hz)		
<b>Low Temperature Characteristics (Max. Impedance Ratio)</b>	Rated voltage (V <sub>dc</sub> )	400V	420 & 450V
	Z(-25°C)/Z(+20°C)	3	8
	Z(-40°C)/Z(+20°C)	12	14
	(at 120Hz)		
<b>Endurance</b>	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 3,000 hours at 105°C.		
	Capacitance change	≤ ±20% of the initial value	
	D.F. (tan δ)	≤ 200% of the initial specified value	
	Leakage current	≤ The initial specified value	
<b>Shelf Life</b>	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours at 105°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	

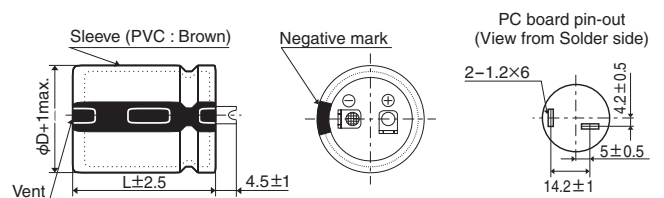
## DIMENSIONS [mm]

Terminal Code : VS (φ30, φ35) : Standard

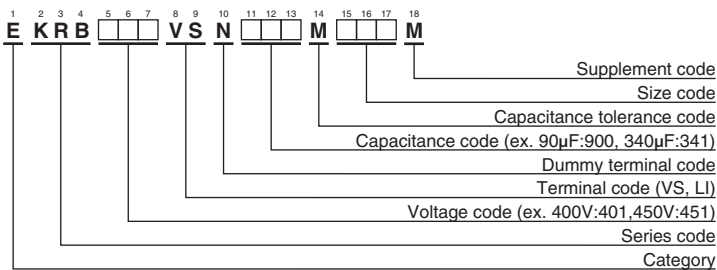


The standard design has no plastic disc.

Terminal Code : LI (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/105°C, 100kHz)	Part No.	WV (V <sub>dc</sub> )	Cap (μF)	Case size φD×L(mm)	tan δ	Rated ripple current (Arms/105°C, 100kHz)	Part No.
400	120	30 × 35	0.15	5.54	EKRB401VSN121MR35M	450	90	30 × 35	0.20	4.58	EKRB451VSN900MR35M
	150	30 × 41	0.15	5.69	EKRB401VSN151MR41M		110	30 × 41	0.20	4.91	EKRB451VSN111MR41M
	170	30 × 46	0.15	5.83	EKRB401VSN171MR46M		120	35 × 35	0.20	5.23	EKRB451VSN121MA35M
	170	35 × 35	0.15	5.87	EKRB401VSN171MA35M		130	30 × 46	0.20	5.15	EKRB451VSN131MR46M
	200	30 × 51	0.15	5.97	EKRB401VSN201MR51M		150	30 × 51	0.20	5.39	EKRB451VSN151MR51M
	210	35 × 41	0.15	6.10	EKRB401VSN211MA41M		160	30 × 54	0.20	5.54	EKRB451VSN161MR54M
	220	30 × 54	0.15	6.06	EKRB401VSN221MR54M		160	35 × 41	0.20	5.63	EKRB451VSN161MA41M
	240	30 × 59	0.15	6.20	EKRB401VSN241MR59M		180	30 × 59	0.20	5.78	EKRB451VSN181MR59M
	240	35 × 46	0.15	6.30	EKRB401VSN241MA46M		180	35 × 46	0.20	5.95	EKRB451VSN181MA46M
	280	35 × 51	0.15	6.45	EKRB401VSN281MA51M		210	35 × 51	0.20	6.28	EKRB451VSN211MA51M
	300	35 × 54	0.15	6.60	EKRB401VSN301MA54M		220	35 × 54	0.20	6.47	EKRB451VSN221MA54M
	340	35 × 59	0.15	6.85	EKRB401VSN341MA59M		250	35 × 59	0.20	6.72	EKRB451VSN251MA59M
420	100	30 × 35	0.20	4.58	EKRB421VSN101MR35M						
	130	30 × 41	0.20	4.91	EKRB421VSN131MR41M						
	140	30 × 46	0.20	5.15	EKRB421VSN141MR46M						
	140	35 × 35	0.20	5.23	EKRB421VSN141MA35M						
	170	30 × 51	0.20	5.39	EKRB421VSN171MR51M						
	180	30 × 54	0.20	5.54	EKRB421VSN181MR54M						
	180	35 × 41	0.20	5.63	EKRB421VSN181MA41M						
	200	30 × 59	0.20	5.78	EKRB421VSN201MR59M						
	210	35 × 46	0.20	5.95	EKRB421VSN211MA46M						
	240	35 × 51	0.20	6.28	EKRB421VSN241MA51M						
	260	35 × 54	0.20	6.47	EKRB421VSN261MA54M						
290	35 × 59	0.20	6.72	EKRB421VSN291MA59M							

## ◆ 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.
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The aforementioned does not apply in the case of individual agreements deviating from the foregoing for customer-specific products
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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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[Available Terminals for Snap-in and Screw Mount Type](#)