KRB Series

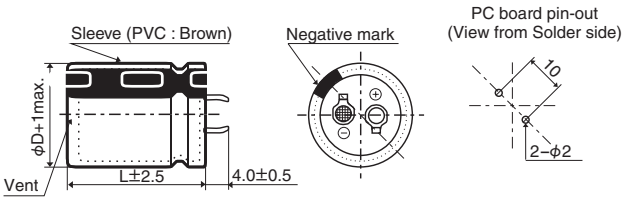
- Higher ripple current on high frequency band
- Endurance with high frequency ripple current : 3,000 hours at 105℃
- Rated voltage range : 400 to 450Vdc, Capacitance range : 90 to 340μF
- Ideal for high frequency drive power conversion system applications such as solar power conditioners
- Non solvent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

◆SPECIFICATIONS

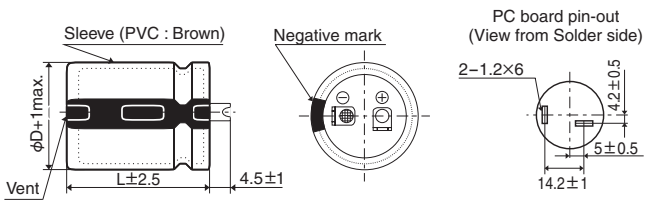
Items	Characteristics			
Category Temperature Range	-40 to +105℃			
Rated Voltage Range	400 to 450Vdc			
Capacitance Tolerance	±20% (M)			(at 20℃, 120Hz)
Leakage Current	I≦3√CV Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V)			(at 20℃ after 5 minutes)
Dissipation 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 3,000 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

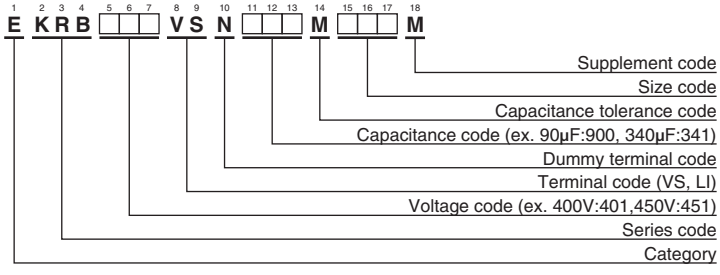


●Terminal Code : LI (ϕ30, ϕ35)



The standard design has no plastic disc.

◆PART NUMBERING SYSTEM



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

KRB 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	EKRB401VSN121MR35M
	150	30 × 41	0.15	5.69	EKRB401VSN151MR41M
	170	30 × 46	0.15	5.83	EKRB401VSN171MR46M
	170	35 × 35	0.15	5.87	EKRB401VSN171MA35M
	200	30 × 51	0.15	5.97	EKRB401VSN201MR51M
	210	35 × 41	0.15	6.10	EKRB401VSN211MA41M
	220	30 × 54	0.15	6.06	EKRB401VSN221MR54M
	240	30 × 59	0.15	6.20	EKRB401VSN241MR59M
	240	35 × 46	0.15	6.30	EKRB401VSN241MA46M
	280	35 × 51	0.15	6.45	EKRB401VSN281MA51M
	300	35 × 54	0.15	6.60	EKRB401VSN301MA54M
	340	35 × 59	0.15	6.85	EKRB401VSN341MA59M
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

WV (V_{dc})	Cap (μF)	Case size φD×L(mm)	tan δ	Rated ripple current (Arms/ 105℃, 100kHz)	Part No.
450	90	30 × 35	0.20	4.58	EKRB451VSN900MR35M
	110	30 × 41	0.20	4.91	EKRB451VSN111MR41M
	120	35 × 35	0.20	5.23	EKRB451VSN121MA35M
	130	30 × 46	0.20	5.15	EKRB451VSN131MR46M
	150	30 × 51	0.20	5.39	EKRB451VSN151MR51M
	160	30 × 54	0.20	5.54	EKRB451VSN161MR54M
	160	35 × 41	0.20	5.63	EKRB451VSN161MA41M
	180	30 × 59	0.20	5.78	EKRB451VSN181MR59M
	180	35 × 46	0.20	5.95	EKRB451VSN181MA46M
	210	35 × 51	0.20	6.28	EKRB451VSN211MA51M
	220	35 × 54	0.20	6.47	EKRB451VSN221MA54M
	250	35 × 59	0.20	6.72	EKRB451VSN251MA59M

◆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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In addition, we have an established system with enhanced traceability, therefore we will limit the applicable lot items for any potential compensation.

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