

KVB Series

- Designed for automotive application (including On Board Charger) by high vibration resistance structure.
- Endurance with ripple current : 3,000 hours at 105°C
- Rated voltage range : 450V_{dc}, Capacitance range : 150 to 920μF
- Non solvent resistant type
- RoHS2 Compliant
- AEC-Q200 compliant : Please contact Chemi-Con for more details, test data, information.

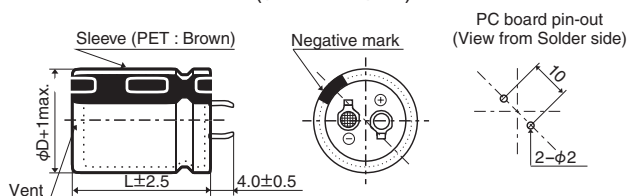


SPECIFICATIONS

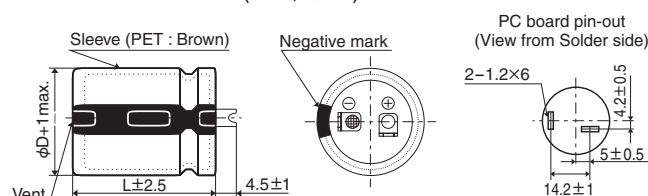
Items	Characteristics		
Category	-40 to +105℃		
Temperature Range			
Rated Voltage Range	450V _{dc}		
Capacitance Tolerance	±20% (M)		(at 20℃, 120Hz)
Leakage Current	I≤3√CV Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20℃ after 5 minutes)		
Dissipation Factor (tan δ)	Rated voltage (V _{dc})	450V	(at 20℃, 120Hz)
	tan δ (Max.)	0.20	
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (V _{dc})	450V	(at 120Hz)
	Z(-25℃)/Z(+20℃)	8	
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	
Vibration	The following specifications shall be satisfied when the capacitors are restored to 20℃ after subjected to vibration test (vibration profile shown below) at room temperature (15 to 35℃).		
	Capacitance change	≤ ±5% of the initial value	
	D.F. (tan δ)	≤ The initial specified value	
	Leakage current	≤ The initial specified value	
	Vibration profile		
	Vibration frequency range	10 to 2,000Hz	
	Acceleration	49m/s ² (5G)	
	Sweep rate	10 to 2,000 to 10Hz 20 minutes	
	Direction and period of motion	4 hours in each of 3 mutually perpendicular directions (total of 12 hours)	
	Fixation	Securely attach the main body using a fixing tool. Please contact us for details.	

DIMENSIONS [mm]

● Terminal Code : VS (φ25.4 to φ35) : Standard

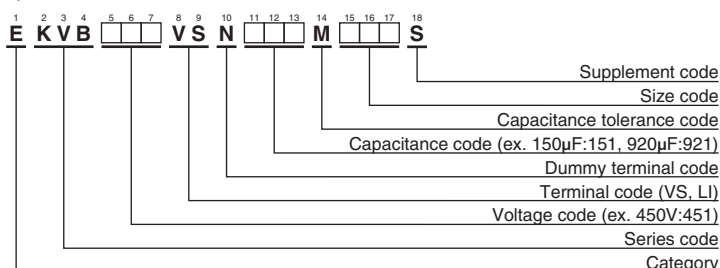


● Terminal Code : LI (φ30, φ35)



The standard design has no plastic disc.

PART NUMBERING SYSTEM



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

KVB Series

◆STANDARD RATINGS

WV (V _{dc})	Cap (μF)	Case size φD×L(mm)	tan δ	Rated ripple current (Arms/ 105°C, 120Hz)	Part No.	WV (V _{dc})	Cap (μF)	Case size φD×L(mm)	tan δ	Rated ripple current (Arms/ 105°C, 120Hz)	Part No.
450	150	25.4 × 25	0.20	0.93	EKVB451VSN151MQ25S	450	420	30 × 40	0.20	1.69	EKVB451VSN421MR40S
	200	25.4 × 30	0.20	1.10	EKVB451VSN201MQ30S		460	35 × 35	0.20	1.67	EKVB451VSN461MA35S
	220	30 × 25	0.20	1.15	EKVB451VSN221MR25S		470	25.4 × 60	0.20	1.96	EKVB451VSN471MQ60S
	240	25.4 × 35	0.20	1.26	EKVB451VSN241MQ35S		490	30 × 45	0.20	1.88	EKVB451VSN491MR45S
	270	35 × 25	0.20	1.24	EKVB451VSN271MA25S		550	35 × 40	0.20	1.90	EKVB451VSN551MA40S
	290	25.4 × 40	0.20	1.41	EKVB451VSN291MQ40S		560	30 × 50	0.20	2.04	EKVB451VSN561MR50S
	290	30 × 30	0.20	1.34	EKVB451VSN291MR30S		620	30 × 55	0.20	2.19	EKVB451VSN621MR55S
	330	25.4 × 45	0.20	1.54	EKVB451VSN331MQ45S		650	35 × 45	0.20	2.11	EKVB451VSN651MA45S
	350	30 × 35	0.20	1.50	EKVB451VSN351MR35S		690	30 × 60	0.20	2.35	EKVB451VSN691MR60S
	370	35 × 30	0.20	1.48	EKVB451VSN371MA30S		740	35 × 50	0.20	2.30	EKVB451VSN741MA50S
	380	25.4 × 50	0.20	1.67	EKVB451VSN381MQ50S		830	35 × 55	0.20	2.48	EKVB451VSN831MA55S
	420	25.4 × 55	0.20	1.81	EKVB451VSN421MQ55S		920	35 × 60	0.20	2.66	EKVB451VSN921MA60S

◆RATED RIPPLE CURRENT MULTIPLIERS

●Frequency Multipliers

Frequency(Hz)	50	120	300	1k	10k	50k
450V	0.77	1.00	1.16	1.30	1.41	1.43

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.