

**KVB** New!  
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<sub>dc</sub>, Capacitance range : 150 to 920μF
- Non solvent resistant type
- RoHS2 Compliant
- AEC-Q200 compliant : Please contact Chemi-Con for more details, test data, information.



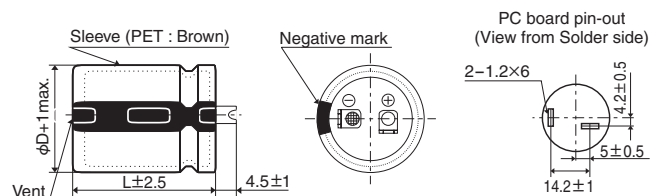
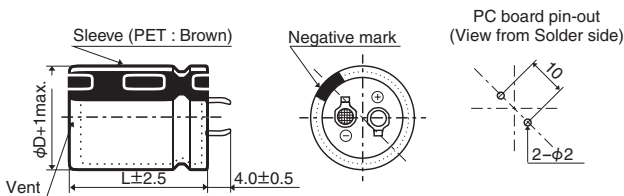
◆ SPECIFICATIONS

Items	Characteristics	
Category	-40 to +105°C	
Temperature Range		
Rated Voltage Range	450V <sub>dc</sub>	
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)	
Leakage Current	I ≤ 3/CV Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20°C after 5 minutes)	
Dissipation Factor (tan δ)	Rated voltage (V <sub>dc</sub> )	450V
	tan δ (Max.)	0.20 (at 20°C, 120Hz)
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (V <sub>dc</sub> )	450V
	Z(-25°C)/Z(+20°C)	8 (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 3,000 hours at 105°C.	
	Capacitance change	≤ ±20% of the initial value
	D.F. (tan δ)	≤ 200% of 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 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
Vibration	The following specifications shall be satisfied when the capacitors are restored to 20°C after subjected to vibration test (vibration profile shown below) at room temperature (15 to 35°C).	
	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 <sup>2</sup> (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]

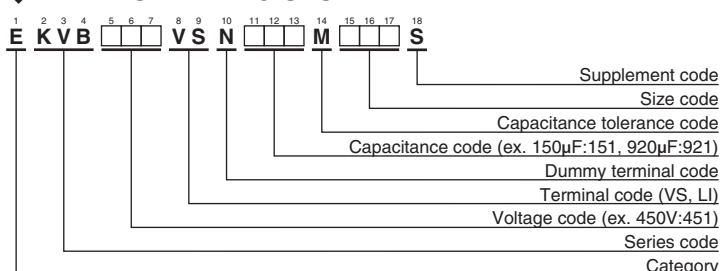
● Terminal Code : VS (φ25.4 to φ35) : Standard

● Terminal Code : LI (φ30, φ35)



The standard design has no plastic disc.

◆ PART NUMBERING SYSTEM



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

◆STANDARD RATINGS

WV (V <sub>dc</sub> )	Cap (μF)	Case size φD×L(mm)	tan δ	Rated ripple current (Arms/ 105°C, 120Hz)	Part No.	WV (V <sub>dc</sub> )	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