

KVC Series

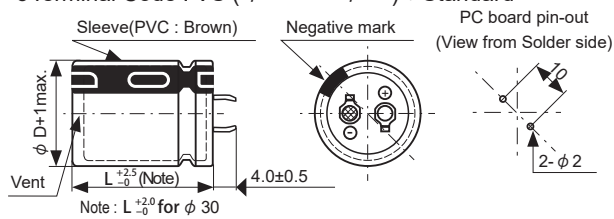
- KVB series with higher capacitance and higher ripple current
- Endurance with ripple current : 3,000 hours at 105°C.
- Rated voltage range : 450 to 500V, Capacitance range : 150 to 790μF
- Designed for automotive application (including On Board Charger) by high vibration resistance structure.
- Non solvent resistant type
- RoHS2 Compliant
- AEC-Q200 compliant : Please contact Chemi-Con for more details, test data, information.
- The logo printed on the sleeve will be changed.

◆ SPECIFICATION

Items	Characteristics		
Category			
Temperature Range	-40 to +105°C		
Rated Voltage Range	450 to 500V _{dc}		
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)		
Leakage Current	$I \leq 3\sqrt{CV}$ 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 _{dc})	450V	475, 500V
	tanδ (Max.)	0.20	0.30
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (V _{dc})	450V	475, 500V
	Z(-25°C)/Z(+20°C)	8	20
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 .		
Shelf Life	Capacitance change	≤ ±20% of the initial value	
	D.F. (tan δ)	≤ 200% of the initial specified value	
	Leakage current	≤ The initial specified value	
Vibration	Capacitance change	≤ ±5% of the initial value	
	D.F. (tanδ)	≤ The initial specified value	
	Leakage current	≤ The initial specified value	
Vibration	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.		

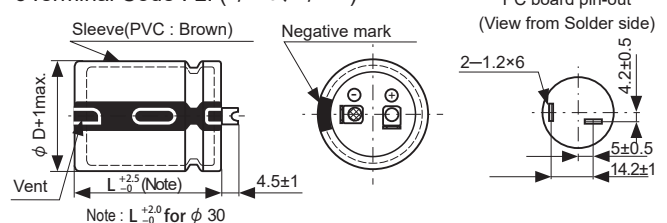
◆ DIMENSIONS [mm]

● Terminal Code : VS (φ 25.4 to φ 35) : Standard



Note : L +2.5/-0 for φ 30
The standard design has no plastic disc.

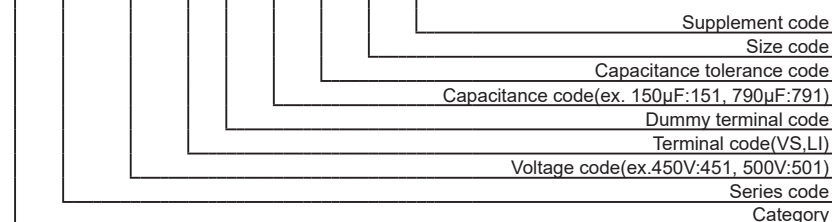
● Terminal Code : LI (φ 30、φ 35)



Note : L +2.5/-0 for φ 30

◆ PART NUMBERING SYSTEM

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
E KVC [] VS N [] M [] M





KVC Series

◆ STANDARD RATINGS

WV (V _{dc})	Cap (μF)	Case size φ D×L(mm)	tan δ	Rated ripple current (Arms/105°C,120Hz)	Part No.	WV (V _{dc})	Cap (μF)	Case size φ D×L(mm)	tan δ	Rated ripple current (Arms/105°C,120Hz)	Part No.	
450	210	25.4×30	0.20	1.40	EKVC451VSN211MQ30M	475	390	25.4×55	0.30	1.93	EKVC4H1VSN391MQ55M	
	260	25.4×35	0.20	1.63	EKVC451VSN261MQ35M		410	30×45	0.30	2.09	EKVC4H1VSN411MR45M	
	270	30×30	0.20	1.72	EKVC451VSN271MR30M		410	35×35	0.30	1.90	EKVC4H1VSN411MA35M	
	310	25.4×40	0.20	1.81	EKVC451VSN311MQ40M		430	25.4×60	0.30	2.08	EKVC4H1VSN431MQ60M	
	340	30×35	0.20	1.97	EKVC451VSN341MR35M		470	30×50	0.30	2.28	EKVC4H1VSN471MR50M	
	360	25.4×45	0.20	1.99	EKVC451VSN361MQ45M		500	35×40	0.30	2.15	EKVC4H1VSN501MA40M	
	380	35×30	0.20	1.97	EKVC451VSN381MA30M		530	30×55	0.30	2.48	EKVC4H1VSN531MR55M	
	410	25.4×50	0.20	2.16	EKVC451VSN411MQ50M		580	35×45	0.30	2.38	EKVC4H1VSN581MA45M	
	410	30×40	0.20	2.05	EKVC451VSN411MR40M		670	35×50	0.30	2.62	EKVC4H1VSN671MA50M	
	460	25.4×55	0.20	2.14	EKVC451VSN461MQ55M		500	150	25.4×30	0.30	1.06	EKVC501VSN151MQ30M
	490	30×45	0.20	2.29	EKVC451VSN491MR45M			190	25.4×35	0.30	1.24	EKVC501VSN191MQ35M
	490	35×35	0.20	2.07	EKVC451VSN491MA35M			210	30×30	0.30	1.39	EKVC501VSN211MR30M
	510	25.4×60	0.20	2.30	EKVC451VSN511MQ60M			230	25.4×40	0.30	1.39	EKVC501VSN231MQ40M
	560	30×50	0.20	2.50	EKVC451VSN561MR50M			260	30×35	0.30	1.59	EKVC501VSN261MR35M
	590	35×40	0.20	2.33	EKVC451VSN591MA40M			270	25.4×45	0.30	1.54	EKVC501VSN271MQ45M
	630	30×55	0.20	2.70	EKVC451VSN631MR55M			290	35×30	0.30	1.56	EKVC501VSN291MA30M
690	35×45	0.20	2.59	EKVC451VSN691MA45M	310	25.4×50		0.30	1.68	EKVC501VSN311MQ50M		
790	35×50	0.20	2.83	EKVC451VSN791MA50M	320	30×40		0.30	1.80	EKVC501VSN321MR40M		
475	180	25.4×30	0.30	1.16	EKVC4H1VSN181MQ30M	340		25.4×55	0.30	1.81	EKVC501VSN341MQ55M	
	220	25.4×35	0.30	1.34	EKVC4H1VSN221MQ35M	370		30×45	0.30	1.98	EKVC501VSN371MR45M	
	230	30×30	0.30	1.46	EKVC4H1VSN231MR30M	370		35×35	0.30	1.81	EKVC501VSN371MA35M	
	260	25.4×40	0.30	1.48	EKVC4H1VSN261MQ40M	380		25.4×60	0.30	1.95	EKVC501VSN381MQ60M	
	290	30×35	0.30	1.68	EKVC4H1VSN291MR35M	430		30×50	0.30	2.18	EKVC501VSN431MR50M	
	300	25.4×45	0.30	1.62	EKVC4H1VSN301MQ45M	450		35×40	0.30	2.04	EKVC501VSN451MA40M	
	320	35×30	0.30	1.63	EKVC4H1VSN321MA30M	480		30×55	0.30	2.36	EKVC501VSN481MR55M	
	350	25.4×50	0.30	1.78	EKVC4H1VSN351MQ50M	530	35×45	0.30	2.27	EKVC501VSN531MA45M		
350	30×40	0.30	1.89	EKVC4H1VSN351MR40M								

◆ RATED RIPPLE CURRENT MULTIPLIERS

●Frequency Multipliers

Frequency(Hz)	50	120	300	1k	10k	50k
450V _{dc}	0.77	1.00	1.10	1.21	1.32	1.33
475、500V _{dc}	0.77	1.00	1.11	1.20	1.25	1.33

The deterioration of aluminum electrolytic capacitors accelerates their life due to the internal heating produced by ripple current.