

LVB Series

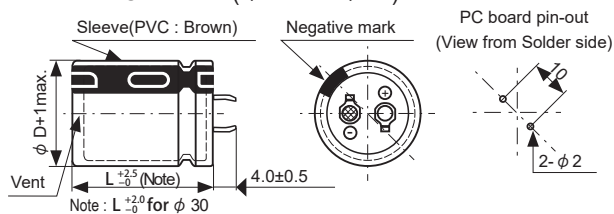
- LVA series with higher capacitance and higher ripple current
- Endurance with ripple current : 5,000 hours at 105°C.
- Rated voltage range : 450 to 500V, Capacitance range : 150 to 790μF
- Designed for automotive application (including On Board Charger) by high vibration resistance structure.
- Non 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

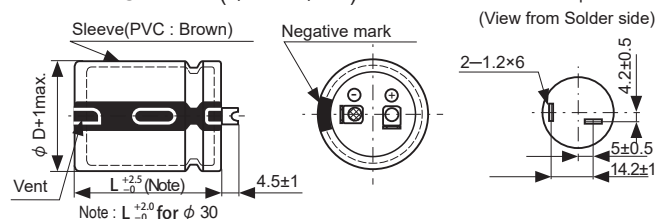
Items	Characteristics		
Category			
Temperature Range	-40 to +105°C		
Rated Voltage Range	450 to 500V _{dc}		
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)		
Leakage Current	$I \leq 3\sqrt{CV}$ Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20°C after 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 5,000 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	
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	
	Leakage current	≤ 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. (tanδ)	≤ 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 (φ 25.4 to φ 35) : Standard

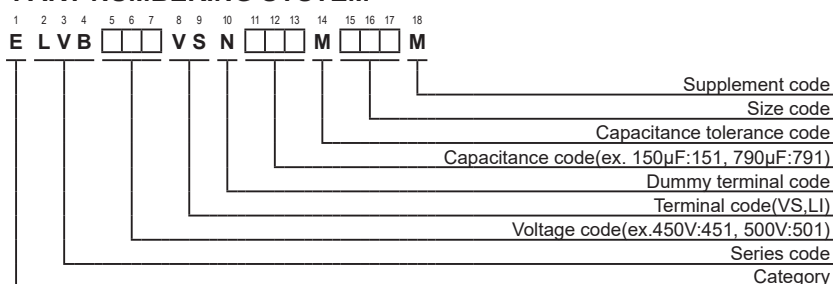


- Terminal Code : LI (φ 30、 φ 35)



The standard design has no plastic disc.

◆ PART NUMBERING SYSTEM





LARGE CAPACITANCE ALUMINUM ELECTROLYTIC CAPACITORS

LVB 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	ELVB451VSN211MQ30M	475	360	25.4×55	0.30	1.86	ELVB4H1VSN361MQ55M	
	260	25.4×35	0.20	1.63	ELVB451VSN261MQ35M		380	35×35	0.30	1.93	ELVB4H1VSN381MA35M	
	270	30×30	0.20	1.72	ELVB451VSN271MR30M		390	30×45	0.30	2.10	ELVB4H1VSN391MR45M	
	310	25.4×40	0.20	1.81	ELVB451VSN311MQ40M		400	25.4×60	0.30	2.00	ELVB4H1VSN401MQ60M	
	340	30×35	0.20	1.97	ELVB451VSN341MR35M		440	30×50	0.30	2.28	ELVB4H1VSN441MR50M	
	360	25.4×45	0.20	1.99	ELVB451VSN361MQ45M		460	35×40	0.30	2.18	ELVB4H1VSN461MA40M	
	380	35×30	0.20	1.97	ELVB451VSN381MA30M		500	30×55	0.30	2.48	ELVB4H1VSN501MR55M	
	410	25.4×50	0.20	2.16	ELVB451VSN411MQ50M		550	35×45	0.30	2.44	ELVB4H1VSN551MA45M	
	410	30×40	0.20	2.05	ELVB451VSN411MR40M		630	35×50	0.30	2.67	ELVB4H1VSN631MA50M	
	460	25.4×55	0.20	2.14	ELVB451VSN461MQ55M		500	150	25.4×30	0.30	1.06	ELVB501VSN151MQ30M
	490	30×45	0.20	2.29	ELVB451VSN491MR45M			180	25.4×35	0.30	1.21	ELVB501VSN181MQ35M
	490	35×35	0.20	2.07	ELVB451VSN491MA35M			200	30×30	0.30	1.40	ELVB501VSN201MR30M
	510	25.4×60	0.20	2.30	ELVB451VSN511MQ60M			220	25.4×40	0.30	1.36	ELVB501VSN221MQ40M
	560	30×50	0.20	2.50	ELVB451VSN561MR50M			250	30×35	0.30	1.61	ELVB501VSN251MR35M
	590	35×40	0.20	2.33	ELVB451VSN591MA40M			260	25.4×45	0.30	1.51	ELVB501VSN261MQ45M
	630	30×55	0.20	2.70	ELVB451VSN631MR55M			280	35×30	0.30	1.61	ELVB501VSN281MA30M
690	35×45	0.20	2.59	ELVB451VSN691MA45M	290	25.4×50		0.30	1.62	ELVB501VSN291MQ50M		
790	35×50	0.20	2.83	ELVB451VSN791MA50M	300	30×40		0.30	1.80	ELVB501VSN301MR40M		
475	170	25.4×30	0.30	1.13	ELVB4H1VSN171MQ30M	330		25.4×55	0.30	1.78	ELVB501VSN331MQ55M	
	210	25.4×35	0.30	1.31	ELVB4H1VSN211MQ35M	350		35×35	0.30	1.85	ELVB501VSN351MA35M	
	210	30×30	0.30	1.44	ELVB4H1VSN211MR30M	360		25.4×60	0.30	1.90	ELVB501VSN361MQ60M	
	250	25.4×40	0.30	1.45	ELVB4H1VSN251MQ40M	360		30×45	0.30	2.02	ELVB501VSN361MR45M	
	270	30×35	0.30	1.67	ELVB4H1VSN271MR35M	410		30×50	0.30	2.20	ELVB501VSN411MR50M	
	280	25.4×45	0.30	1.57	ELVB4H1VSN281MQ45M	430		35×40	0.30	2.11	ELVB501VSN431MA40M	
	300	35×30	0.30	1.67	ELVB4H1VSN301MA30M	460		30×55	0.30	2.38	ELVB501VSN461MR55M	
	330	25.4×50	0.30	1.73	ELVB4H1VSN331MQ50M	500	35×45	0.30	2.33	ELVB501VSN501MA45M		
	330	30×40	0.30	1.89	ELVB4H1VSN331MR40M	580	35×50	0.30	2.57	ELVB501VSN581MA50M		

◆ 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.