

# LBV Series

- Downsizing of LBG series.
- For airbag application and power supply application
- High capacitance, low ESR and good low temperature behavior
- Endurance with ripple current : 5,000 hours at 105°C
- Solvent resistant type (see PRECAUTIONS AND GUIDELINES)
- RoHS2 Compliant
- AEC-Q200 compliant : Please contact Chemi-Con for more details, test data, information.

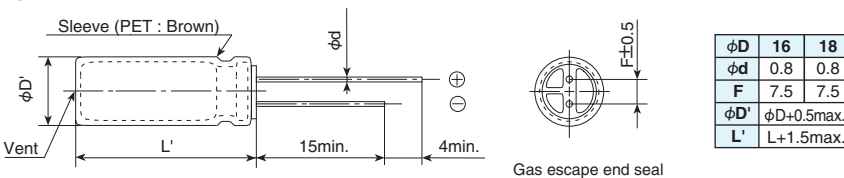


## SPECIFICATIONS

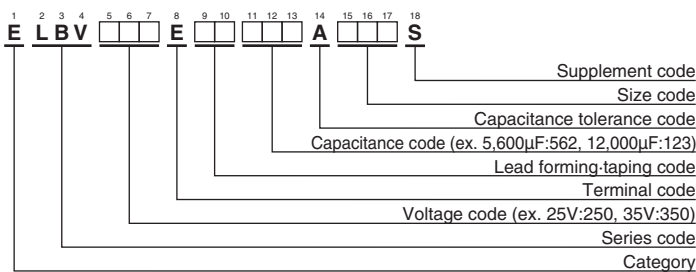
Items	Characteristics	
Category	-55 to +105°C	
Temperature Range	-55 to +105°C	
Rated Voltage Range	25 & 35V <sub>dc</sub>	
Capacitance Range	3,000 to 15,000μF (at 20°C, 120Hz)	
Capacitance Tolerance	0 to +30% (A) (at 20°C, 120Hz)	
Leakage Current	I=0.01CV Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20°C after 2 minutes)	
Dissipation Factor (tan δ)	Rated voltage (V <sub>dc</sub> )	25V 35V
	tan δ (Max.)	0.20 0.16
	When nominal capacitance exceeds 1,000μF, add 0.02 to the value above for each 1,000μF increase. (at 20°C, 120Hz)	
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (V <sub>dc</sub> )	25V 35V
	Z(-55°C)/Z(+20°C)	3 3
	(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 5,000 hours at 105°C.	
	Capacitance change	≤ ±30% of the initial value
	D.F. (tan δ)	≤300% 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	≤ ±30% of the initial value
	D.F. (tan δ)	≤300% of the initial specified value
	Leakage current	≤The initial specified value

## DIMENSIONS [mm]

- Terminal Code : E



## PART NUMBERING SYSTEM



Please refer to "Product code guide (radial lead type)"



## LBV Series

### ◆STANDARD RATINGS

WV (V <sub>ac</sub> )	Cap (μF)	Case size φ D×L (mm)	tan δ	ESR (Ω max./100kHz)		Rated ripple current (mA <sub>rms</sub> /105°C, 100kHz)	Part No.
				20°C	-40°C		
25	4,400	16 × 20	0.26	0.030	0.095	2,000	ELBV250E□□442AL20S
	5,700	18 × 20	0.28	0.028	0.080	2,100	ELBV250E□□572AM20S
	6,200	16 × 25	0.30	0.024	0.073	2,300	ELBV250E□□622AL25S
	8,100	18 × 25	0.34	0.022	0.060	2,400	ELBV250E□□812AM25S
	8,500	16 × 31.5	0.34	0.020	0.065	2,550	ELBV250E□□852ALN3S
	9,900	16 × 35.5	0.36	0.018	0.055	2,700	ELBV250E□□992ALP1S
	11,000	16 × 40	0.40	0.016	0.050	2,900	ELBV250E□□113AL40S
	11,000	18 × 31.5	0.40	0.018	0.045	2,700	ELBV250E□□113AMN3S
	12,000	18 × 35.5	0.42	0.016	0.040	2,900	ELBV250E□□123AMP1S
15,000	18 × 40	0.48	0.015	0.035	3,100	ELBV250E□□153AM40S	
35	3,000	16 × 20	0.20	0.030	0.095	2,000	ELBV350E□□302AL20S
	4,000	18 × 20	0.22	0.028	0.080	2,100	ELBV350E□□402AM20S
	4,300	16 × 25	0.22	0.024	0.073	2,300	ELBV350E□□432AL25S
	5,600	18 × 25	0.24	0.022	0.060	2,400	ELBV350E□□562AM25S
	5,900	16 × 31.5	0.24	0.020	0.065	2,550	ELBV350E□□592ALN3S
	6,900	16 × 35.5	0.26	0.018	0.055	2,700	ELBV350E□□692ALP1S
	7,600	18 × 31.5	0.28	0.018	0.045	2,700	ELBV350E□□762AMN3S
	8,200	16 × 40	0.30	0.016	0.050	2,900	ELBV350E□□822AL40S
	9,000	18 × 35.5	0.32	0.016	0.040	2,900	ELBV350E□□902AMP1S
10,000	18 × 40	0.34	0.015	0.035	3,100	ELBV350E□□103AM40S	

□□ : Enter the appropriate lead forming or taping code.

### ◆RATED RIPPLE CURRENT MULTIPLIERS

#### ● Frequency Multipliers

Capacitance(μF)	Frequency(Hz)			
	120	1k	10k	100k
3,000	0.75	0.90	0.95	1.00
4,000 to 15,000	0.85	0.95	0.98	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.
- The products listed in this catalog are designed and manufactured for general electronics equipment use and are not intended for use in applications that can adversely affect human life; where the malfunction of equipment may cause damage to life or property. In addition, our products are not intended to be used in specific applications that may cause a major social impact. Please consult with us in advance of usage of our products in the following listed applications. ① Aerospace equipment ② Power generation equipment such as thermal power, nuclear power etc. ③ Medical equipment ④ Transport equipment (automobiles, trains, ships, etc.) ⑤ Transportation control equipment ⑥ Disaster prevention / crime prevention equipment ⑦ Highly publicized information processing equipment ⑧ Submarine equipment ⑨ Other applications that are not considered general-purpose applications.
- The circuits described as examples in this catalog and the "delivery specifications" are featured in order to show the operations and usage of our products, however, this fact does not guarantee that the circuits are available to function in your equipment systems. We are not in any case responsible for any failures or damage caused by the use of information contained herein. You should examine our products, of which the characteristics are described in the "delivery specifications" and other documents, and determine whether or not our products suit your requirements according to the specifications of your equipment systems. Therefore, you bear final responsibility regarding the use of our products.  
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- We reserve the right to discontinue production and delivery of products. We do not guarantee that all the products included in this catalog will be available in the future.  
The aforementioned does not apply in the case of individual agreements deviating from the foregoing for customer-specific products
- We continually strive to improve the quality and reliability of our products, but in any case that our product does not meet our published specifications, please stop using it promptly and contact us immediately. As for compensation for non-conforming goods delivered by Chemi-Con, we will limit it only to goods found in non-compliance of our published specifications. This may be accomplished by a no cost replacement of non-conforming individual products, a credit of the piece price paid per each individual non-conforming product, or in other ways deemed necessary.  
In addition, we have an established system with enhanced traceability, therefore we will limit the applicable lot items for any potential compensation.

[Part Numbering System](#)

[Part Numbering System \(Appendix\)](#)

[Standardization](#)

[Available Items by Manufacturing Locations](#)

[Environmental Measures](#)

[Technical Note](#)

[Precautions and Guidelines](#)

[Recommended Soldering Conditions](#)

[Taping, Lead-preforming and Packaging](#)

[Available Terminals for Snap-in and Screw Mount Type](#)