LBV Series

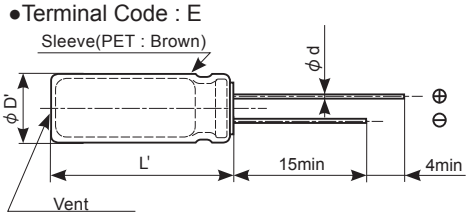
- Downsizing of LBG series.
- For airbag application and power supply application.
- High capacitance, low ESR, and good low temperature behavior.
- Endurance with ripple current : 5,000 hours at 105°C
- Solvent resistant type
- RoHS2 Compliant
- AEC-Q200 compliant : Please contact Chemi-Con for more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

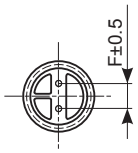
◆ SPECIFICATIONS

Items	Characteristics			
Category Temperature Range	-55 to +105°C			
Rated Voltage Range	25 & 35V_{dc}			
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_{dc})	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_{dc})	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

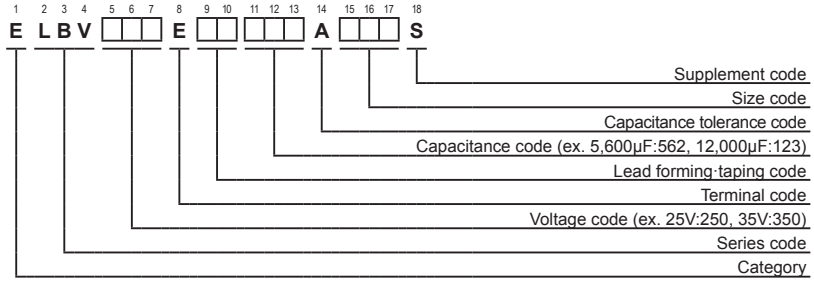




Gas escape end seal

φD	16	18
φd	0.8	0.8
F	7.5	7.5
φD'	φD+0.5max.	
L'	L+1.5max.	

◆ PART NUMBERING SYSTEM



LBV Series

◆ STANDARD RATINGS

WV (V_{dc})	Cap (μF)	Case size φ D×L(mm)	tan δ	ESR (Ω max./100kHz)		Rated ripple current (mArms/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 endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5°C rise.
When long life performance is required in actual use, the rms ripple current has to be reduced.