

# **LBG**Series

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

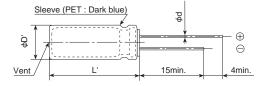


#### **SPECIFICATIONS**

Items	Characteristics						
Category Temperature Range	-55 to +105℃						
Rated Voltage Range	25 & 35V <sub>dc</sub>						
Capacitance Range	1,000 to 11,000µF	(at 20°C, 120⊩	Hz)				
Capacitance Tolerance	0 to +30% (A) (at 20°C, 120						
Leakage Current	I=0.01CV Where, I: Max. leakage	current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20°C after 2 minute	es)				
Dissipation Factor	Rated voltage (Vdc)	25V 35V					
(tan δ)	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	Rated voltage (Vdc)	25V 35V					
Characteristics	Z(-55°C)/Z(+20°C)	3 3					
(Max. Impedance Ratio)		(at 120H	Hz)				
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 $\delta$ )	≦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	≦±20% of the initial value					
	D.F. (tan $\delta$ )	≦200% of the initial specified value					
	Leakage current	≦The initial specified value					

### **◆DIMENSIONS** [mm]

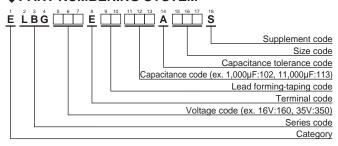
## ●Terminal Code : E





φD	12.5	14.5	16	18		
$\phi$ d	0.6	0.8	0.8	0.8		
F	5.0	7.5	7.5	7.5		
φ <b>D</b> '	φD+0.5max.					
L'	L+1.5max.					

# **◆PART NUMBERING SYSTEM**



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





### **STANDARD RATINGS**

WV (V <sub>dc</sub> )	Cap (µF)	Case size φ D×L(mm)	tan $\delta$	Impedance (Ω max./100kHz)		Rated ripple current	
				20℃	-40℃	(mArms/105°C, 100kHz)	Part No.
	1,700	12.5 × 20	0.20	0.057	0.29	1,700	ELBG250E □□ 172AK20S
	2,400	12.5 × 25	0.22	0.045	0.23	2,000	ELBG250E □□ 242AK25S
	2,400	14.5 × 20	0.22	0.051	0.26	2,000	ELBG250E □□ 242AU20S
	2,800	12.5 × 30	0.22	0.039	0.20	2,300	ELBG250E □□ 282AK30S
	3,000	16 × 20	0.24	0.044	0.22	2,250	ELBG250E □□ 302AL20S
	3,400	14.5 × 25	0.24	0.041	0.21	2,400	ELBG250E □□ 342AU25S
	3,500	12.5 × 35	0.24	0.033	0.17	2,700	ELBG250E □□ 352AK35S
	4,200	16 × 25	0.26	0.033	0.17	2,600	ELBG250E □ □ 422AL25S
	4,200	18 × 20	0.26	0.042	0.21	2,500	ELBG250E □□ 422AM20S
25	4,500	12.5 × 40	0.26	0.027	0.14	3,100	ELBG250E □ □ 452AK40S
25	4,600	14.5 × 31.5	0.26	0.032	0.16	2,700	ELBG250E □□ 462AUN3S
	5,400	14.5 × 35.5	0.28	0.028	0.14	3,100	ELBG250E □□ 542AUP1S
	5,600	16 × 31.5	0.28	0.026	0.13	3,200	ELBG250E □□ 562ALN3S
	6,000	18 × 25	0.30	0.030	0.15	2,800	ELBG250E □□ 602AM25S
	6,400	14.5 × 40	0.30	0.025	0.13	3,400	ELBG250E □□ 642AU40S
	6,600	16 × 35.5	0.30	0.023	0.12	3,500	ELBG250E □□ 662ALP1S
	7,800	16 × 40	0.32	0.021	0.11	3,800	ELBG250E □ □ 782AL40S
	7,900	18 × 31.5	0.32	0.024	0.12	3,500	ELBG250E □□ 792AMN3\$
	9,200	18 × 35.5	0.36	0.022	0.11	3,700	ELBG250E □□ 922AMP1\$
	11,000	18 × 40	0.40	0.020	0.10	4,000	ELBG250E □□ 113AM40S
	1,000	12.5 × 20	0.16	0.057	0.29	1,700	ELBG350E □□ 102AK20S
	1,400	12.5 × 25	0.16	0.045	0.23	2,000	ELBG350E □□ 142AK25S
	1,400	14.5 × 20	0.16	0.051	0.26	2,000	ELBG350E 🗆 🗆 142AU20S
	1,600	12.5 × 30	0.16	0.039	0.20	2,300	ELBG350E □□ 162AK30S
	1,800	16 × 20	0.16	0.044	0.22	2,250	ELBG350E □□ 182AL20S
	2,000	14.5 × 25	0.18	0.041	0.21	2,400	ELBG350E □□ 202AU25S
	2,100	12.5 × 35	0.18	0.033	0.17	2,700	ELBG350E □ □ 212AK35S
	2,500	16 × 25	0.18	0.033	0.17	2,600	ELBG350E □□ 252AL25S
	2,500	18 × 20	0.18	0.042	0.21	2,500	ELBG350E □□ 252AM20S
	2,700	12.5 × 40	0.18	0.027	0.14	3,100	ELBG350E □□ 272AK40S
35	2,800	14.5 × 31.5	0.18	0.032	0.16	2,700	ELBG350E □□ 282AUN3
-	3,200	14.5 × 35.5	0.20	0.028	0.14	3,100	ELBG350E □□ 322AUP1S
	3,400	16 × 31.5	0.20	0.026	0.13	3,200	ELBG350E □□ 342ALN3S
	3,600	18 × 25	0.20	0.030	0.15	2,800	ELBG350E □□ 362AM255
	3,800	14.5 × 40	0.20	0.025	0.13	3,400	ELBG350E □□ 382AU40S
1	4,000	16 × 35.5	0.22	0.023	0.12	3,500	ELBG350E □□ 402ALP1S
	4,700	16 × 40	0.22	0.021	0.11	3,800	ELBG350E □□ 472AL40S
	4,800	18 × 31.5	0.22	0.024	0.12	3,500	ELBG350E □□ 482AMN35
	5,600	18 × 35.5	0.24	0.022	0.11	3,700	ELBG350E □□ 562AMP1S
	6,700	18 × 40	0.26	0.020	0.10	4,000	ELBG350E □□ 672AM40S

 $<sup>\</sup>square$  : Enter the appropriate lead forming or taping code.

# **◆RATED RIPPLE CURRENT MULTIPLIERS**

#### Frequency Multipliers

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Capacitance(µF) Frequency(Hz)	120	1k	10k	100k
1,000 to 2,000	0.60	0.87	0.95	1.00
2,100 to 3,800	0.75	0.90	0.95	1.00
4,000 to 11,000	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.