

# LBK 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)
- RoHS Compliant
- AEC-Q200 compliant : Please contact Chemi-Con for more details, test data, information.

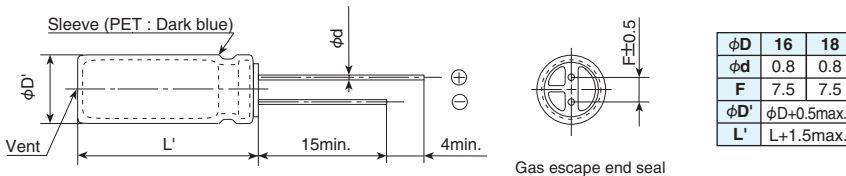


## ◆ SPECIFICATIONS

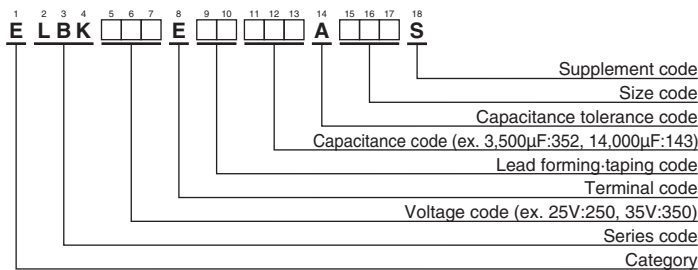
Items	Characteristics	
Category	-55 to +105°C	
Temperature Range	-55 to +105°C	
Rated Voltage Range	25 & 35V <sub>dc</sub>	
Capacitance Range	2,500 to 14,000µF (at 20°C, 120Hz)	
Capacitance Tolerance	0 to +30% (A) (at 20°C, 120Hz)	
Leakage Current	I=0.01CV Where, I : Max. leakage current (µA), C : Nominal 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	≤ ±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	≤ ±20% of the initial value
	D.F. (tan δ)	≤200% 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)"

**LBK Series**
**◆STANDARD RATINGS**

WV (V <sub>dc</sub> )	Cap (μF)	Case size φD×L (mm)	ESR (Ω max./100kHz)		Rated ripple current (mA <sub>rms</sub> /105°C, 100kHz)	Part No.
			20°C	-40°C		
25	4,200	16 × 20	0.033	0.095	2,250	ELBK250E□□422AL20S
	5,300	18 × 20	0.029	0.082	2,500	ELBK250E□□532AM20S
	5,900	16 × 25	0.024	0.073	2,600	ELBK250E□□592AL25S
	7,500	18 × 25	0.022	0.063	2,800	ELBK250E□□752AM25S
	8,000	16 × 31.5	0.021	0.052	3,200	ELBK250E□□802ALN3S
	9,500	16 × 35.5	0.019	0.046	3,500	ELBK250E□□952ALP1S
	10,000	18 × 31.5	0.019	0.045	3,500	ELBK250E□□103AMN3S
	11,000	16 × 40	0.017	0.040	3,800	ELBK250E□□113AL40S
	11,000	18 × 35.5	0.017	0.040	3,700	ELBK250E□□113AMP1S
14,000	18 × 40	0.015	0.035	4,000	ELBK250E□□143AM40S	
35	2,500	16 × 20	0.033	0.095	2,250	ELBK350E□□252AL20S
	3,100	18 × 20	0.029	0.082	2,500	ELBK350E□□312AM20S
	3,500	16 × 25	0.024	0.073	2,600	ELBK350E□□352AL25S
	4,500	18 × 25	0.022	0.063	2,800	ELBK350E□□452AM25S
	4,700	16 × 31.5	0.021	0.052	3,200	ELBK350E□□472ALN3S
	5,600	16 × 35.5	0.019	0.046	3,500	ELBK350E□□562ALP1S
	6,000	18 × 31.5	0.019	0.045	3,500	ELBK350E□□602AMN3S
	6,600	16 × 40	0.017	0.040	3,800	ELBK350E□□662AL40S
	7,100	18 × 35.5	0.017	0.040	3,700	ELBK350E□□712AMP1S
8,400	18 × 40	0.015	0.035	4,000	ELBK350E□□842AM40S	

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

**◆RATED RIPPLE CURRENT MULTIPLIERS**

## ● Frequency Multipliers

Capacitance(μF)	Frequency(Hz)			
	120	1k	10k	100k
2,500 to 3,500	0.75	0.90	0.95	1.00
4,200 to 14,000	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.