

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)
- RoHS2 Compliant
- AEC-Q200 compliant : Please contact Chemi-Con for more details, test data, information.

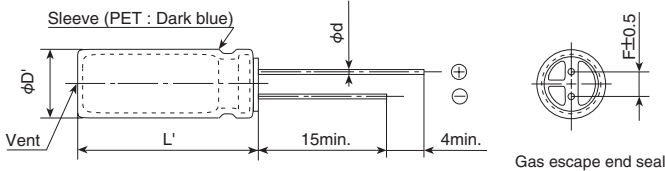


◆ SPECIFICATIONS

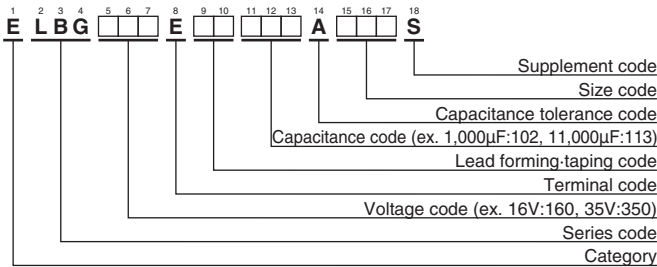
| Items | Characteristics | |
|---|---|--------------------------------------|
| Category | -55 to +105°C | |
| Temperature Range | | |
| Rated Voltage Range | 25 & 35V _{dc} | |
| Capacitance Range | 1,000 to 11,000µF (at 20°C, 120Hz) | |
| Capacitance Tolerance | 0 to +30% (A) (at 20°C, 120Hz) | |
| 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 | ≤ ±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)"

◆STANDARD RATINGS

| WV (V _{ac}) | Cap (μF) | Case size φD×L(mm) | tan δ | Impedance (Ω max./100kHz) | | Rated ripple current (mA _{rms} /105°C, 100kHz) | Part No. |
|--------------------------|-------------|-----------------------|-------|---------------------------|-------|--|----------------------|
| | | | | 20°C | -40°C | | |
| 25 | 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 |
| | 4,500 | 12.5 × 40 | 0.26 | 0.027 | 0.14 | 3,100 | ELBG250E □□ 452AK40S |
| | 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 □□ 792AMN3S | |
| 9,200 | 18 × 35.5 | 0.36 | 0.022 | 0.11 | 3,700 | ELBG250E □□ 922AMP1S | |
| 11,000 | 18 × 40 | 0.40 | 0.020 | 0.10 | 4,000 | ELBG250E □□ 113AM40S | |
| 35 | 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 |
| | 2,800 | 14.5 × 31.5 | 0.18 | 0.032 | 0.16 | 2,700 | ELBG350E □□ 282AUN3S |
| | 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 □□ 362AM25S |
| | 3,800 | 14.5 × 40 | 0.20 | 0.025 | 0.13 | 3,400 | ELBG350E □□ 382AU40S |
| | 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 □□ 482AMN3S |
| | 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 | |

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

◆RATED RIPPLE CURRENT MULTIPLIERS

● Frequency Multipliers

| 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 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.