

Type AEB

SMT Aluminum Electrolytic Capacitors - High Voltage, 105 °C

Low Impedance and Long Life for High Voltage, High Ripple Current Applications



Type AEB capacitors are it for high voltage applications like input bus capacitors in board mounted miniature AC/DC supplies. The AEB's low impedance in ratings up to 450 Vdc, and long life, make it ideal for power supply input and other high voltage applications. The vertical, cylindrical cases make easy automatic mounting and reflow soldering.

Highlights

- +105 °C, Up to 5000 Hour Load Life
- Capacitance Range: 2.2 μF to 100 μF
- Voltage Range: 160 Vdc to 450 Vdc

Specifications

Operating Temperature: -25 °C to +105 °C

Rated Voltage: 160, 200, 250, 350, 400, 450 Vdc

Capacitance: 2.2 μF to 100 μF

Capacitance Tolerance: ±20% @ 120 Hz and +20 °C

Impedance Ratio (at 120 Hz):

| Rated Voltage | 160 | 200 | 250 | 350 | 400 | 450 |
|-------------------|-----|-----|-----|-----|-----|-----|
| Z(-25°C)/Z(+20°C) | 2 | 2 | 3 | 5 | 6 | 6 |



Complies with the EU Directive 2002/95/EC requirement restricting the use of Lead (Pb), Mercury (Hg), Cadmium (Cd), Hexavalent chromium (Cr(VI)), PolyBrominated Biphenyls (PBB) and PolyBrominated Diphenyl Ethers (PBDE).

Life Test: 5000 h @ +105 °C, L — S Cases

4000 h @ +105 °C, K Case

3000 h @ +105 °C, J Case

Δ Capacitance ± 20%

DF: ≤ 200% of limit

DCL: ≤ 100% of limit

Shelf Test: 1000 h @ 105 °C

Δ Capacitance ± 20%

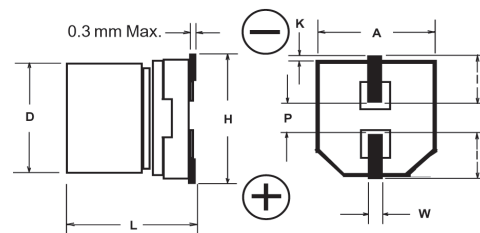
DF: ≤ 200% of limit

DCL: ≤ 100% of limit

AEB Series Marking



Outline Drawing



Case Dimensions

| Case Code | D ±0.5 | L ±0.5 | A ±0.2 | H (max) | I (ref) | W | P (ref) | K (mm) |
|-----------|--------|--------|--------|---------|---------|----------|---------|-----------|
| J | 10.0 | 13.5 | 10.3 | 12 | 3.5 | 0.9 ±0.2 | 4.6 | 0.7 ± 0.2 |
| K | 10.0 | 16.5 | 10.3 | 12 | 3.5 | 0.9 ±0.2 | 4.6 | 0.7 ± 0.2 |
| L | 12.5 | 16.5 | 13.5 | 15 | 4.7 | 0.9 ±0.3 | 4.4 | 0.7 ± 0.3 |
| P | 16.0 | 16.5 | 17.0 | 19 | 5.5 | 1.2 ±0.3 | 6.7 | 0.7 ± 0.3 |
| U | 16.0 | 21.5 | 17.0 | 19 | 5.5 | 1.2 ±0.3 | 6.7 | 0.7 ± 0.3 |
| R | 18.0 | 16.5 | 19.0 | 21 | 6.7 | 1.2 ±0.3 | 6.7 | 0.7 ± 0.3 |
| S | 18.0 | 21.5 | 19.0 | 21 | 6.7 | 1.2 ±0.3 | 6.7 | 0.7 ± 0.3 |

Type AEB

SMT Aluminum Electrolytic Capacitors - High Voltage, 105 °C

Ratings

| Cap (μ F) | Catalog Part Number | Max. DCL 2 min (μ A) | Max. Dissipation Factor @ 120 Hz 20 °C | Max. Impedance @ 100 kHz 20 °C (Ω) | Max. Ripple Current @ 105 °C 100 kHz (mA) | Size (mm) D x L | Quantity Reel |
|-------------------|------------------------|------------------------------------|--|---|---|--------------------|------------------|
| 160 Vdc | | | | | | | |
| 10.0 | AEB106M2CJ32T-F | 106 | 0.15 | 3.00 | 70 | 10 x 13.5 | 250 |
| 33.0 | AEB336M2CL32T-F | 327 | 0.15 | 1.80 | 470 | 12.5 x 16.5 | 150 |
| 47.0 | AEB476M2CP44T-F | 461 | 0.15 | 1.40 | 600 | 16 x 16.5 | 125 |
| 68.0 | AEB686M2CU44T-F | 663 | 0.15 | 0.55 | 750 | 16 x 21.5 | 75 |
| 68.0 | AEB686M2CR44T-F | 663 | 0.15 | 0.80 | 750 | 18 x 16.5 | 125 |
| 100.0 | AEB107M2CS44T-F | 970 | 0.15 | 0.50 | 1060 | 18 x 21.5 | 75 |
| 200 Vdc | | | | | | | |
| 22.0 | AEB226M2DL32T-F | 274 | 0.15 | 1.80 | 470 | 12.5 x 16.5 | 150 |
| 33.0 | AEB336M2DP44T-F | 406 | 0.15 | 1.40 | 600 | 16 x 16.5 | 125 |
| 47.0 | AEB476M2DR44T-F | 574 | 0.15 | 0.80 | 600 | 18 x 16.5 | 125 |
| 68.0 | AEB686M2DU44T-F | 826 | 0.15 | 0.55 | 750 | 16 x 21.5 | 75 |
| 100.0 | AEB107M2DS44T-F | 1210 | 0.15 | 0.50 | 1060 | 18 x 21.5 | 75 |
| 250 Vdc | | | | | | | |
| 10.0 | AEB106M2EK32T-F | 160 | 0.15 | 2.50 | 88 | 10 x 16.5 | 200 |
| 22.0 | AEB226M2EP44T-F | 340 | 0.15 | 1.60 | 560 | 16 x 16.5 | 125 |
| 33.0 | AEB336M2ER44T-F | 505 | 0.15 | 0.85 | 560 | 18 x 16.5 | 125 |
| 47.0 | AEB476M2EU44T-F | 715 | 0.15 | 0.70 | 710 | 16 x 21.5 | 75 |
| 68.0 | AEB686M2ES44T-F | 1030 | 0.15 | 0.60 | 990 | 18 x 21.5 | 75 |
| 350 Vdc | | | | | | | |
| 10.0 | AEB106M2VP44T-F | 220 | 0.20 | 3.20 | 270 | 16 x 16.5 | 125 |
| 22.0 | AEB226M2VR44T-F | 472 | 0.20 | 1.60 | 350 | 18 x 16.5 | 125 |
| 33.0 | AEB336M2VU44T-F | 703 | 0.20 | 1.20 | 480 | 16 x 21.5 | 75 |
| 47.0 | AEB476M2VS44T-F | 997 | 0.20 | 1.00 | 670 | 18 x 21.5 | 75 |
| 400 Vdc | | | | | | | |
| 3.3 | AEB335M2GJ32T-F | 89 | 0.24 | 8.00 | 40 | 10 x 13.5 | 250 |
| 4.7 | AEB475M2GK32T-F | 123 | 0.24 | 5.50 | 50 | 10 x 16.5 | 200 |
| 10.0 | AEB106M2GP44T-F | 250 | 0.24 | 3.60 | 250 | 16 x 16.5 | 125 |
| 22.0 | AEB226M2GU44T-F | 538 | 0.24 | 2.20 | 410 | 16 x 21.5 | 75 |
| 33.0 | AEB336M2GS44T-F | 802 | 0.24 | 1.20 | 600 | 18 x 21.5 | 75 |
| 450 Vdc | | | | | | | |
| 2.2 | AEB225M2WJ32T-F | 69 | 0.24 | 11.00 | 29 | 10 x 13.5 | 250 |
| 3.3 | AEB335M2WK32T-F | 99 | 0.24 | 7.00 | 41 | 10 x 16.5 | 200 |
| 4.7 | AEB475M2WL32T-F | 137 | 0.24 | 4.80 | 49 | 12.5 x 16.5 | 150 |
| 10.0 | AEB106M2WR44T-F | 280 | 0.24 | 3.00 | 310 | 18 x 16.5 | 125 |
| 22.0 | AEB226M2WS44T-F | 604 | 0.24 | 1.80 | 560 | 18 x 21.5 | 75 |

Part Numbering System

| | | | | | | | |
|-------------|---------------------|----------------------------------|---------------------|--------------|----------------------|----------------------------------|---------------------------|
| AEB | 106 | M | 2C | J | 32T | -F | |
| | | | | | | | |
| Type | Capacitance | Capacitance Tolerance | Voltage Code | | Case Code | Packaging Information | RoHS Compliant |
| | 105 = 1.0 μ F | M = \pm 20% | 2C = 160 Vdc | 2V = 350 Vdc | | 32 = Carrier tape | |
| | 106 = 10.0 μ F | | 2D = 200 Vdc | 2G = 400 Vdc | | Width (mm) | |
| | 107 = 100.0 μ F | | 2E = 250 Vdc | 2W = 450 Vdc | | T = Tape & Reel | |
| | | | | | | B = bulk | |

See the Aluminum SMT Application Guide for Packaging Information.

Type AEB

SMT Aluminum Electrolytic Capacitors - High Voltage, 105 °C

Recommended Land Pattern



| Case Code | Case Dia. (mm) | A (mm) | B (mm) | C (mm) |
|-----------|----------------|--------|--------|--------|
| J | 10 | 4.0 | 4.5 | 2.0 |
| K | 10 | 4.0 | 4.5 | 2.0 |
| L | 12.5 | 4.0 | 5.7 | 2.0 |
| P | 16 | 6.0 | 6.5 | 2.5 |
| U | 16 | 6.0 | 6.5 | 2.5 |
| R | 18 | 6.0 | 7.5 | 2.5 |
| S | 18 | 6.0 | 7.5 | 2.5 |

Ripple Current Correction Factor

| Vdc | Ripple Current Correction Factor vs Frequency | | | |
|------------|---|------|----------------|-----------------|
| | 120 Hz | 1kHz | 10kHz to 30kHz | 30kHz to 100kHz |
| 160 to 250 | 0.55 | 0.85 | 0.90 | 1.00 |
| 350 to 450 | 0.50 | 0.80 | 0.90 | 1.00 |

Recommended Reflow Soldering Profile for AEB Series (10 to 18 mm dia.)



| | |
|--|------------------|
| Max. top surface temperature during reflow soldering | 230°C |
| Maximum time at peak temperature | 5 seconds |
| Maximum time at or above 200°C | 20 seconds |
| Number of reflow processes | 1 |
| Terminal Material | copper clad iron |

Type AEB

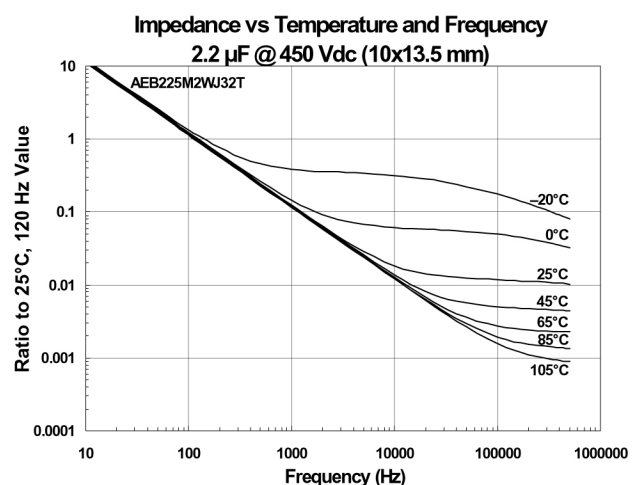
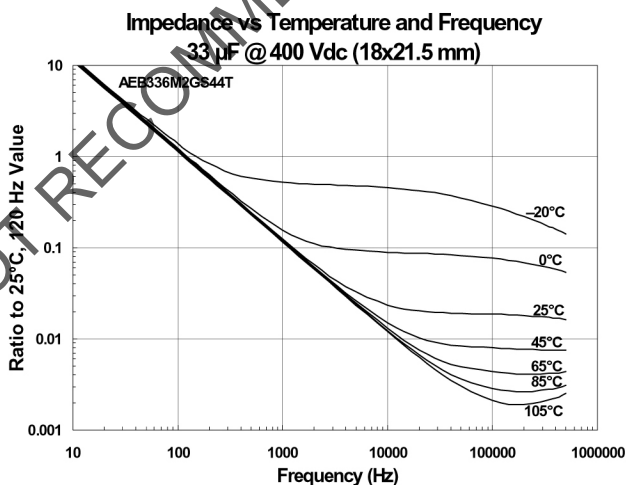
SMT Aluminum Electrolytic Capacitors - High Voltage, 105 °C

Typical Performance Curves



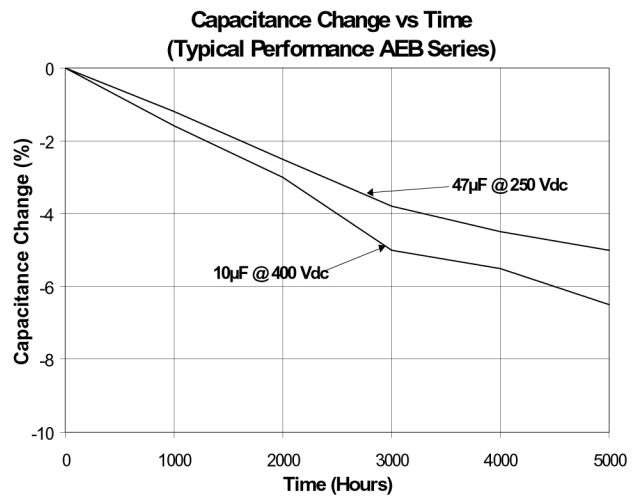
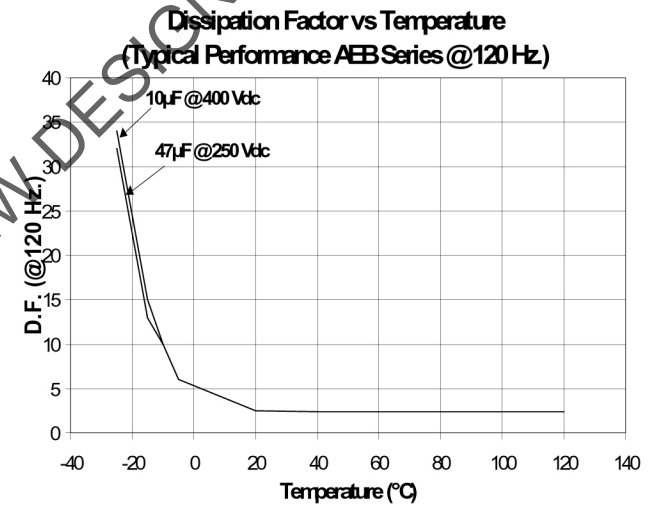
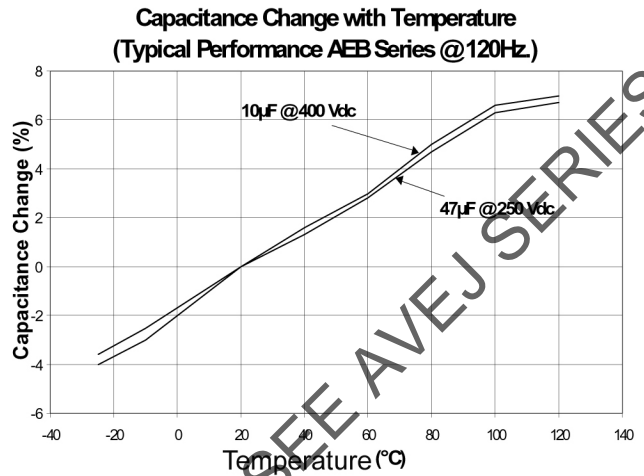
Type AEB

SMT Aluminum Electrolytic Capacitors - High Voltage, 105 °C



Type AEB

SMT Aluminum Electrolytic Capacitors - High Voltage, 105 °C



Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- Конкуренспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



Тел: +7 (812) 336 43 04 (многоканальный)
Email: org@lifeelectronics.ru