# Solid Tantalum Chip Capacitor

## ATCC-211(A, B, P) Series

3.2 x 1.60 x 1.6mm
3.5 x 2.80 x 1.9mm
2.0 x 1.25 x 1.1mm

Pb RoHS Compliant

## FEATURES:

- Meets EIA-535BAAC standard
- Large capacitance in small size
- Exceptional stability in wide temperature range

## APPLICATIONS:

- Widely used in PC, cell phones, notebooks and A/V products
- Noise suppression for power supply circuit
- Filtering for Audio circuit, blocking DC bias into earphone
- Power compensation for CPU to run at speed
- Energy storage for LED driving circuit

## ELECTRICAL SPECIFICATIONS:

| | |
|---|---|
| Abracon P/N: | ATCC-211(A, B, P) Series |
| Operating Temperature: | -55˚C to +125˚C (Including self temperature rise) |
| Storage Temperature: | -10˚C ~ +40˚C and 70% R.H. max. |

| Part Number | Dimensions | Rated DC Voltage @ 85°C | Nominal Capacitance | Max Leakage Current 25°C | Max Dissipation Factor @25°C 120Hz | Max Equivalent Series Resistance @25°C 100kHz | Capacitance Code |
|---|---|---|---|---|---|---|---|
| Units | – | V | µF | µA | % | Ω | – |
| Symbol | A, B, P | $V_R$ | C | $I_O$ Max | tan δ Max | ESR Max | – |
| ATCC-211A-004-107 | A | 4.0 | 100.0 | 4.0 | 18.0 | 5.0 | 107 |
| ATCC-211B-004-227 | B | 4.0 | 220.0 | 8.8 | 18.0 | 0.5 | 227 |
| ATCC-211P-006-106 | P | 6.3 | 10.0 | 0.6 | 8.0 | 10.0 | 106 |
| ATCC-211A-006-226 | A | 6.3 | 22.0 | 1.3 | 6.0 | 4.0 | 226 |
| ATCC-211A-006-336 | A | 6.3 | 33.0 | 2.1 | 8.0 | 4.5 | 336 |
| ATCC-211A-006-476 | A | 6.3 | 47.0 | 3.0 | 8.0 | 3.5 | 476 |
| ATCC-211B-006-107 | B | 6.3 | 100.0 | 6.3 | 10.0 | 3.0 | 107 |
| ATCC-211P-010-106 | P | 10.0 | 10.0 | 1.0 | 15.0 | 10.0 | 106 |
| ATCC-211A-010-106 | A | 10.0 | 10.0 | 1.0 | 6.0 | 4.0 | 106 |
| ATCC-211A-010-226 | A | 10.0 | 22.0 | 2.2 | 8.0 | 4.0 | 226 |
| ATCC-211B-010-107 | B | 10.0 | 100.0 | 10.0 | 15.0 | 1.5 | 107 |
| ATCC-211P-016-105 | P | 16.0 | 1.0 | 0.5 | 6.0 | 25.0 | 105 |
| ATCC-211A-016-475 | A | 16.0 | 4.7 | 0.8 | 6.0 | 6.0 | 475 |
| ATCC-211A-016-106 | A | 16.0 | 10.0 | 1.6 | 8.0 | 7.0 | 106 |
| ATCC-211B-016-106 | B | 16.0 | 10.0 | 1.6 | 6.0 | 2.8 | 106 |
| ATCC-211B-016-226 | B | 16.0 | 22.0 | 3.5 | 8.0 | 2.2 | 226 |
| ATCC-211A-025-475 | A | 25.0 | 4.7 | 1.2 | 8.0 | 6.0 | 475 |
| ATCC-211B-025-475 | B | 25.0 | 4.7 | 1.2 | 6.0 | 2.0 | 475 |
| ATCC-211B-025-106 | B | 25.0 | 10.0 | 2.5 | 6.0 | 3.0 | 106 |
| ATCC-211A-035-104 | A | 35.0 | 0.1 | 0.5 | 4.0 | 20.0 | 104 |
| ATCC-211A-035-105 | A | 35.0 | 1.0 | 0.5 | 4.0 | 10.0 | 105 |
| ATCC-211B-035-335 | B | 35.0 | 3.3 | 1.2 | 6.0 | 3.5 | 335 |
| ATCC-211B-035-475 | B | 35.0 | 4.7 | 1.6 | 6.0 | 2.0 | 475 |
| ATCC-211B-050-225 | B | 50.0 | 2.2 | 1.1 | 6.0 | 2.0 | 225 |




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Pb RoHS Compliant

**Test Conditions and equipment:**
a. Ambient Temperature: 25± 10°C
b. Relative Humidity: 50%±30%
c. Air Pressure: 86kPa to 106kPa

Capacitance (C) & Dissipation Factor (tan δ): HP4263B or equivalent, 120±5Hz, 1$V_{rms}$
Leakage Current ($I_0$): TH2686 or equivalent
Equivalent Series Resistance (ESR): HP4263B or equivalent, 100±5kHz

Rated Voltage ($V_R$): The maximum DC operating voltage for continuous duty at -55˚C ~ +85˚C.
Derated Voltage (Vc): Capacitor may be operated at +125˚C with voltage derated to two-thirds of rated rated voltage $V_R$.
Surge voltage $V_S$: The maximum voltage to which capacitors may be subjected under any momentary conditions, including maximum AC pulse voltage, DC bias voltage and any momentary voltage.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Rated Voltage ($V_R$)** | 4.0V | 6.3V | 10.0V | 16.0V | 25.0V | 35.0V | 50.0V | @-55˚C ~ +85˚C |
| **Derated Voltage ($V_C$)** | 2.5V | 4.0V | 6.3V | 10.0V | 16.0V | 20.0V | 32.0V | @+125˚C |
| **Surge Voltage ($V_S$)** | 5.2V | 8.0V | 13.0V | 20.0V | 32.0V | 46.0V | 65.0V | @-55˚C ~ +85˚C |
| **Surge Voltage ($V_S$)** | 3.4V | 5.0V | 8.0V | 13.0V | 20.0V | 28.0V | 40.0V | @+125˚C |

## OPTIONS AND PART IDENTIFICATION

ATCC-211 ☐ - ☐ - ☐ - ☐ - ☐

| Dimension Code |
|---|
| P: 2.0x1.25x1.1 mm |
| A: 3.2x1.6x1.6 mm |
| B: 3.5x2.8x1.9 mm |

| Rated Voltage Code |
|---|
| 004: 4.0V |
| 006: 6.3V |
| 010: 10.0V |
| 016: 16.0V |
| 025: 25.0V |
| 035: 35.0V |
| 050: 50.0V |

| Capacitance Code |
|---|
| Please refer to the table above |

| Capacitance Tolerance |
|---|
| K: ±10% |
| M: ±20% |

| Packaging |
|---|
| T: Tape and Reel (3k pcs/Reel for option P; 2k pcs/reel for A and B) |



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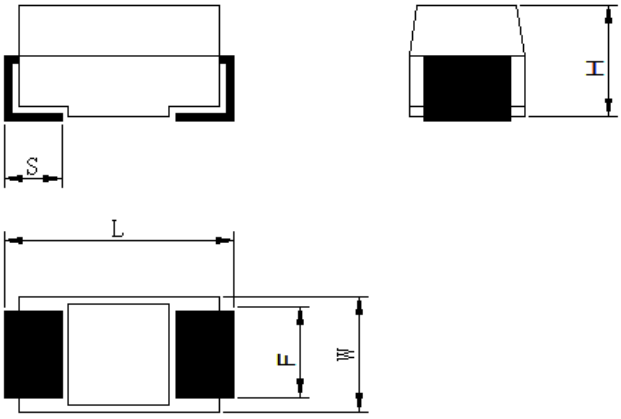
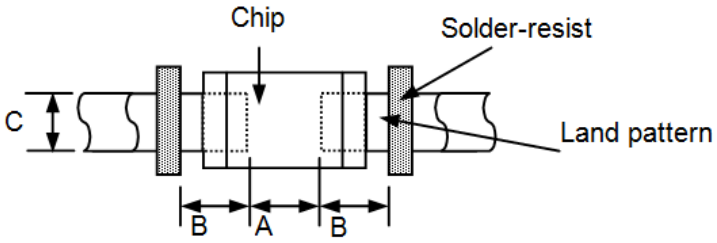
Pb RoHS Compliant

## OUTLINE DIMENSIONS:



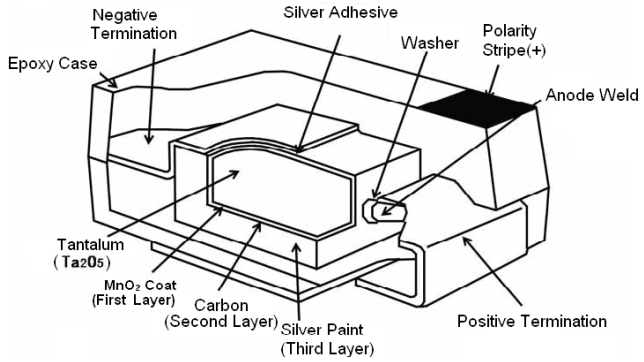

**Recommended Land Pattern**




| Dimension Code | L | W | H | F(±0.10) | S(±0.30) | A | B | C |
|---|---|---|---|---|---|---|---|---|
| P | 2.0±0.15 | 1.25±0.15 | 1.1±0.15 | 0.9 | 0.5 | 1.1 | 1.05 | 1.2 |
| A | 3.2±0.20 | 1.6±0.20 | 1.6±0.20 | 1.2 | 0.8 | 1.1 | 1.35 | 1.5 |
| B | 3.5±0.2 | 2.8±0.2 | 1.9±0.2 | 2.2 | 0.8 | 1.4 | 1.35 | 2.7 |

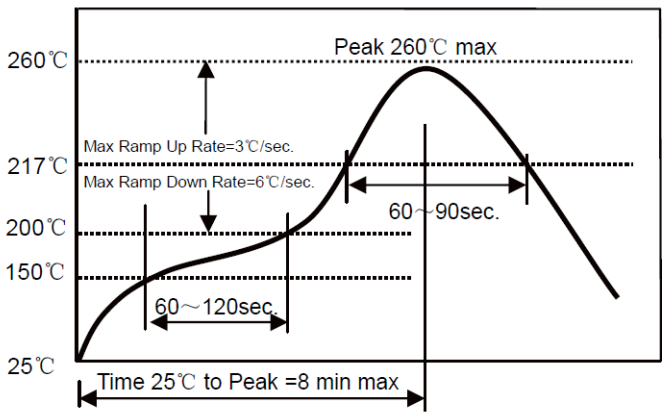
**Dimensions: mm**

**Materials**




***The Case is black molded**

## REFLOW PROFILE:




- Δ Preheat condition: 150 ~200˚C /60~120sec.
- Δ Allowed time above 217˚C: 60~90sec.
- Δ Max temp: 260˚C
- Δ Max time at max temp: 10sec.
- Δ Solder paste: Sn/3.0Ag/0.5Cu
- Δ Allowed Reflow time: 2x max



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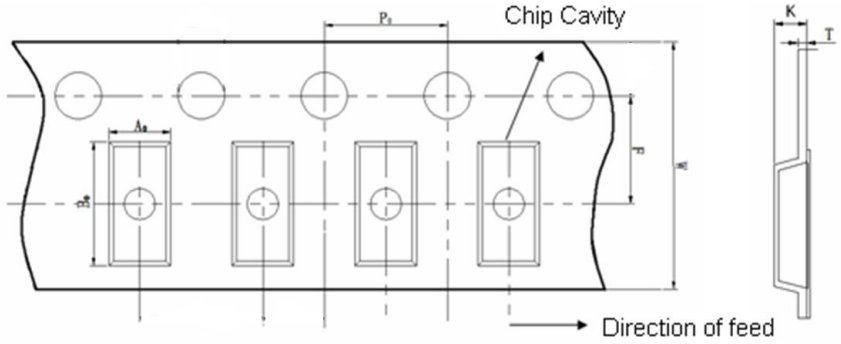
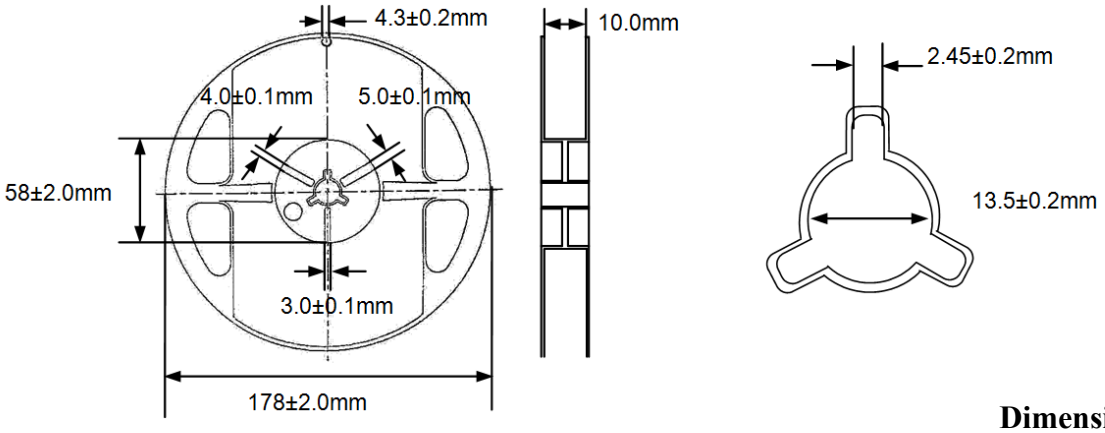
## TAPE & REEL:

**Packaging**

**T: 3,000pcs / reel – Dimension Code P**
**2,000pcs / reel – Dimension Code A/B**




| Dimension Code | $A_0$ | $B_0$ | W | F | $P_0$ | T Max | K Max |
|---|---|---|---|---|---|---|---|
| P | 1.4±0.15 | 2.20±0.15 | 8.0±0.3 | 3.5±0.05 | 4.0±0.1 | 0.3 | 1.45 |
| A | 1.90±0.20 | 3.50±0.20 | 8.0±0.3 | 3.5±0.05 | 4.0±0.1 | 0.3 | 2.1 |
| B | 3.10±0.20 | 3.80±0.20 | 8.0±0.3 | 3.5±0.05 | 4.0±0.1 | 0.3 | 2.3 |




**Dimension: mm**

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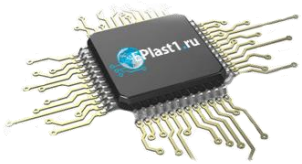
Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits,General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.




**Как с нами связаться**

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