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

30332 Esperanza, Rancho Santa Margarita, California 92688
tel 949-546-8000 | fax 949-546-8001 | www.abracon.com

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

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, 1V_{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)

30332 Esperanza, Rancho Santa Margarita, California 92688
tel 949-546-8000 | fax 949-546-8001 | www.abracon.com

Solid Tantalum Chip Capacitor

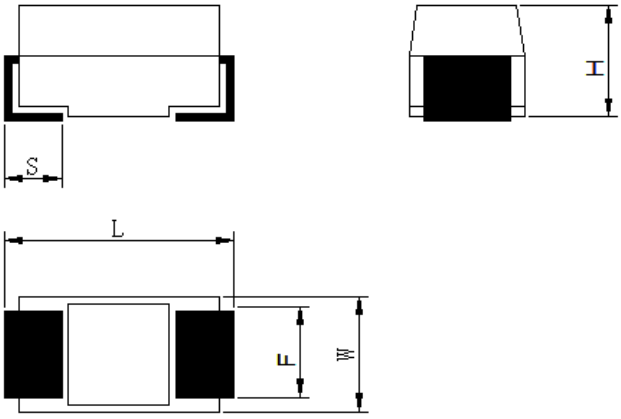
ATCC-211(A, B, P) Series



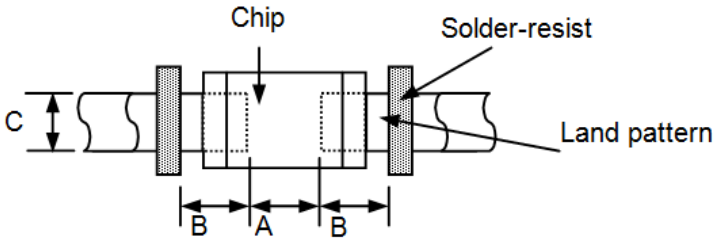
3.2 x 1.60 x 1.6mm
3.5 x 2.80 x 1.9mm
2.0 x 1.25 x 1.1mm

Pb RoHS Compliant

OUTLINE DIMENSIONS:



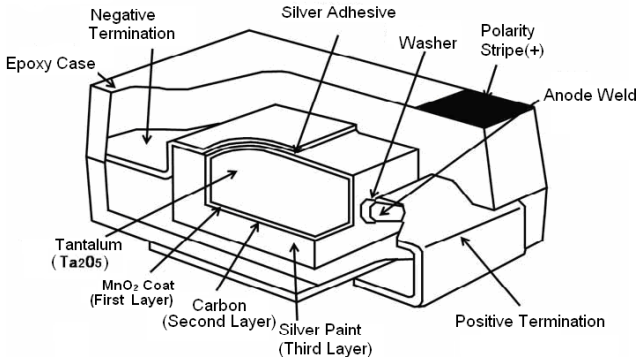
Recommended Land Pattern



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

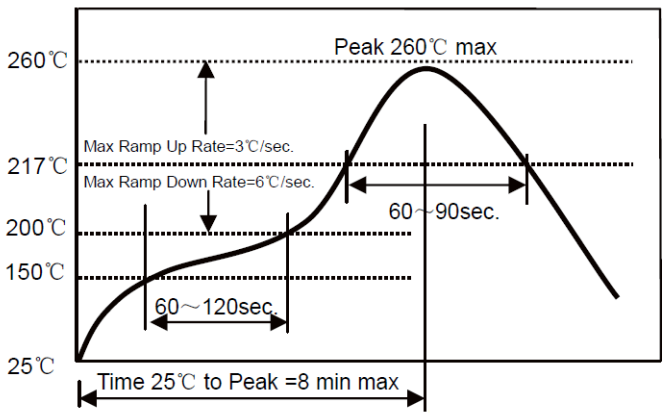
Dimensions: mm

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

30332 Esperanza, Rancho Santa Margarita, California 92688
tel 949-546-8000 | fax 949-546-8001 | www.abracon.com

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

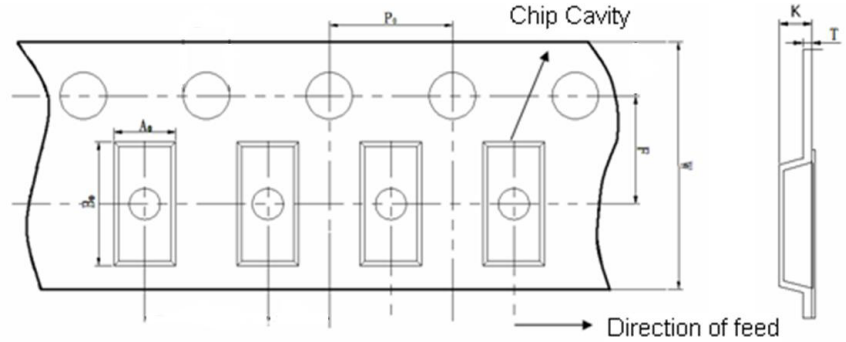
Pb RoHS Compliant

TAPE & REEL:

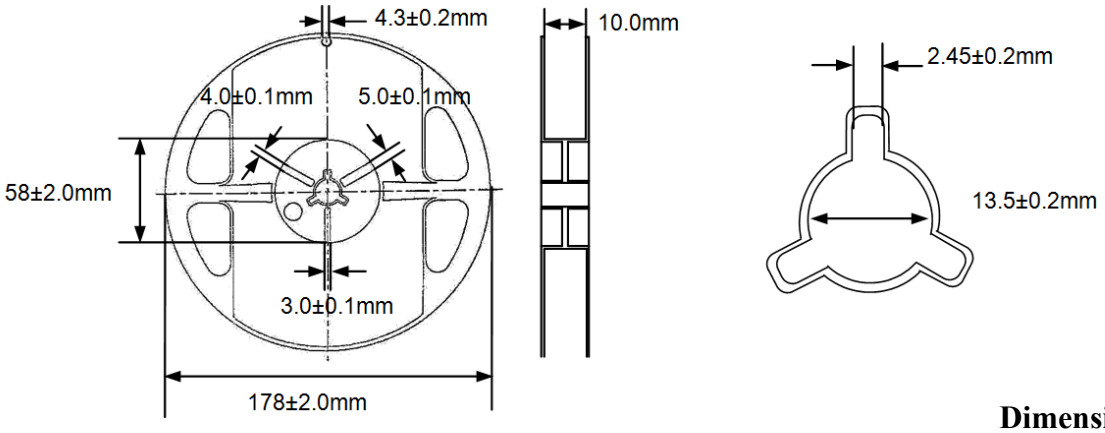
Packaging

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

ATTENTION: Abracon Corporation's products are COTS – Commercial-Off-The-Shelf products; suitable for Commercial, Industrial and, where designated, Automotive Applications. Abracon's products are not specifically designed for Military, Aviation, Aerospace, Life-dependant Medical applications or any application requiring high reliability where component failure could result in loss of life and/or property. For applications requiring high reliability and/or presenting an extreme operating environment, written consent and authorization from Abracon Corporation is required. Please contact Abracon Corporation for more information.

30332 Esperanza, Rancho Santa Margarita, California 92688
tel 949-546-8000 | fax 949-546-8001 | www.abracon.com