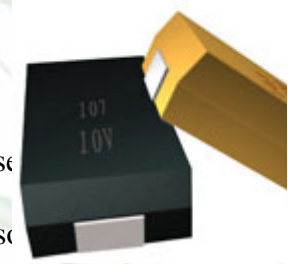


CA45 Series Solid Electrolyte Tantalum Chip Capacitor

Brief Introduction

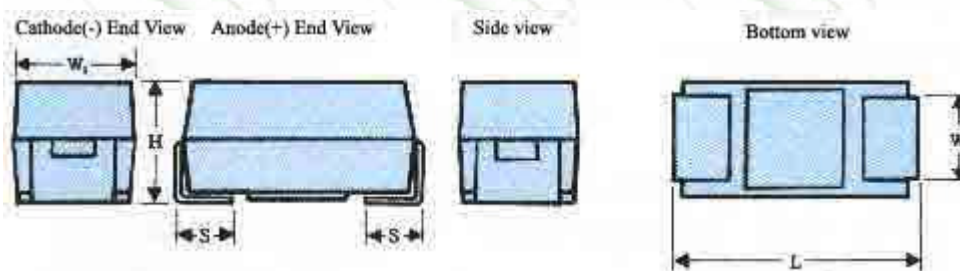
CA45 Series sinter-anode,molded solid tantalum chip capacitor, small size, high capacitance—high reliability and excellent operation performances—is used for telecommunications—computers—camcorder—SMT electric circuits and so on. It meets the requirements of EIA Standard 535BAAC®



Features

- Operating temperature Range: -55;æ;«+125;æ»£¼85;æ With rated voltage derating®
- Capacitance tolerance: ±20%£»±10%£¬for special order©;
- DC leakage at 20;æ£°I₀Ü0.01CRVR or 0.5!IA£¬Whichever Is greater©.
- Dissipation factor at 20;æ£°Please See Table 3
- Dimensions—rated voltage and nominal capacitors:
Please see Table £!2 and Figure 1.
- Temperature characteristics£°See table 3
- ESR£°See Table 4

Outline Drawings



Dimensions-Millimeters

Tableçñ

Case Size	L _i ±0.2	W1 _i ±0.2	H _i ±0.2	S _i ±0.2	W2 _i ±0.1
S	2.0 _i ±0.2	1.20 _i ±0.2	1.20 _i ±0.2	0.5 _i ±0.3	1.2 _i ±0.1
A	3.2 _i ±0.2	1.6 _i ±0.2	1.6 _i ±0.2	0.8 _i ±0.3	1.2 _i ±0.1
B	3.5 _i ±0.2	2.8 _i ±0.2	1.9 _i ±0.2	0.8 _i ±0.3	2.2 _i ±0.1
C	6.0 _i ±0.3	3.2 _i ±0.3	2.5 _i ±0.3	1.3 _i ±0.3	2.2 _i ±0.1
D	7.3 _i ±0.3	4.3 _i ±0.3	2.8 _i ±0.3	1.3 _i ±0.3	2.4 _i ±0.1
E	7.3 _i ±0.3	4.3 _i ±0.3	4.0 _i ±0.3	1.3 _i ±0.3	2.4 _i ±0.1

Rated Voltage, Voltage Derating, Surge Voltage and Normal Capacitance table 2-1

Rated Voltage (V)	4	6.3	10	16	20	25	35	50
Voltage Derating(V)	2.5	4	6.3	10	13	16	23	33
Surge Voltage (V+85jæ)	5	8	13	20	26	32	46	65
Surge Voltage (V+125jæ)	3.4	5	9	12	16	20	26	38
Capacitance	Case size: Standard/Extended							
0.1					S		A	A
0.15					S		A	B/A
0.22					S		A	B
0.33					S		A	B
0.47				S	S	A	B/A	C
0.68			S	S	A/S	A	B	C
1.0		A/S	A/S	A/S	A	B/A	B	C
1.5	S	A/S	A/S	A/S	B/A	B	C/B	D/C
2.2	S	A/S	A/S	B/A	B/A	B	C	D
3.3	A/S	A/S	B/A	B/A	C/B	C	D/C	D
4.7	A/S	B/A	B/A	B/A	D/C	C	D/C	E
6.8	B/A	B/A	B/A	C/B	D/C	D/C	D	
10	B/A	B/A	B/A	C/B	D	D/C	D	
15	B/A	C/B	C/B	C	D	D	E	
22	C/B	C/B	C/B	D/C	D	D	E	
33	C/B	D/C	D/C	D/C	D	E		
47	D/C	D/C	D/C	D/C	E/D			
68	D/C	D/C	D	D	E			
100	D/C	D/C	D	D				
150	D/C	D	E	E				
220	D	E	E	E				
330	E	E	E					
470	E							

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Temperature Characteristics

Capacitance µF	Cap. Change			DF Max.				DCL Max.	
	-55jæ	+85jæ	+125jæ	-55jæ	+20jæ	+85jæ	+125jæ	+85jæ	+125jæ
1.0	-10	+10	+12	6	4	6	6	10I ₀	12I ₀
.568				10	6	10	10		
00-470				12	8	12	12		

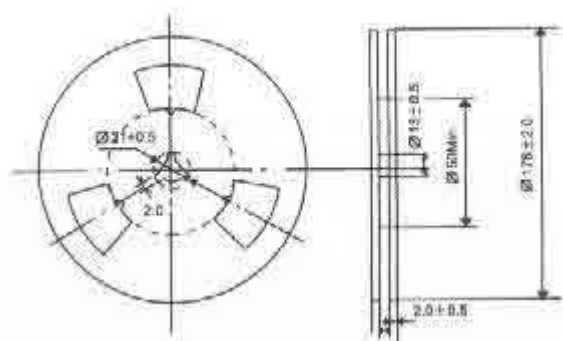
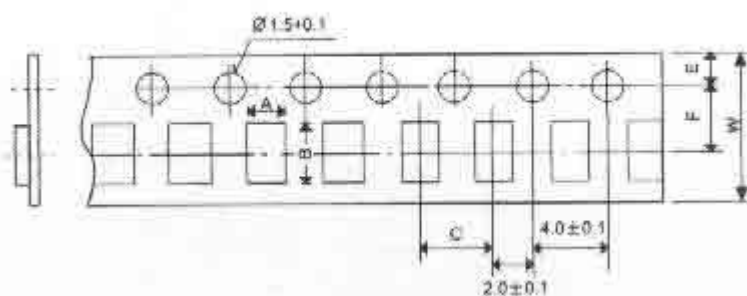
ii ii ii ii ii ii ii iii ii

ESR Of Capacitor

Rated	4	6.3	10	16	20	25	35	50
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Voltage								
Capacitance	Case size Standard/Extended							
.1					25		24	22
.15					25		21	17/15
.22					25		18	14
.33					25		15	12
.47				25	25	14	10/12	8
.68			30	25	12/25	10	8	7
.0		14/25	13/25	11/20	9	7/8	6.5	5.5
.5	30	12/25	10	8/12	5/6.5	5	4.5/5.2	4/4.5
.2	25	9/20	7	5.5/6.5	3.5/5.3	4.5	3.5	2.5
.3	9/20	7/12	5.0/5.5	4.5/5	2.5/3	2.8	2.0/2.5	2.0
.7	7.5	5/6	4/5	3.5/4	2.5/2.8	2.4	1.5/2.2	1.4
.8	6/6.5	4/5	3/4	2.5/3.5	1.8/2	1.4/2	1.3	
0	4/6	3/4	2.5/3	2/2.8	1.3	1.2/1.8	1	
5	3.5/4	2.5/3.2	2.2/2.8	1.8	1.1	1	0.9	
2	2.5/3.2	2/2.5	1.8/2.4	1.1/1.6	0.9	0.9	0.9	
3	2.2/2.8	1.3/1.8	1.1/1.6	0.9/1.5	0.9	0.9		
7	1.3/1.8	1.1/1.6	0.9/1.2	0.9/1.4	0.9/0.9			
8	1.1/1.6	0.9/1.6	0.9	0.9	0.9			
00	0.9/1.3	0.9/1.4	0.9	0.9				
50	0.9	0.9	0.9	0.9				
20	0.9	0.9	0.9	0.9				
30	0.9	0.9	0.9					
70	0.9							

Tape and Reel Dimensions



Case size	A _i ±0.2	B _i ±0.2	C _i ±0.2	E _i ±0.2	F _i ±0.2	W _i ±0.2
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	1.6	2.4	4.0	1.75	3.5	8.0
	1.9	3.5	4.0	1.75	3.5	8.0
	3.1	3.8	4.0	1.75	3.5	8.0
	3.6	6.4	8.0	1.75	5.5	12.0
	4.7	7.7	8.0	1.75	5.5	12.0
	4.6	7.6	8.0	1.75	5.5	12.0

Case size	W	Qty. per reel
B	+1.5 8.4 °C0.00	2000
D	+2.00 12.4 -0.00	500
	+2.00 12.4 -0.00	400
	+2.00 12.4 -0.00	2500

Capacitor markings

Direct designation is used for case sizes B;C;D;E while code designation is used for case size A and S.

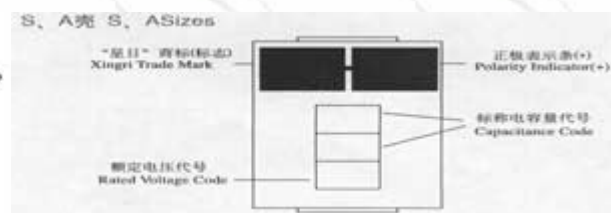
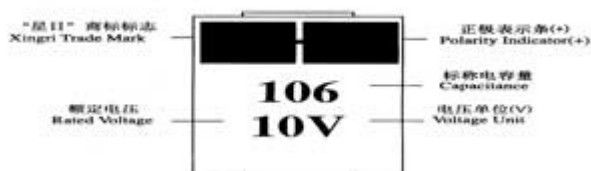
Rated Voltage Code

Rated Voltage V	4	6	10	16	20	25	35	50
Volatge Code	G	J	A	C	D	E	V	H

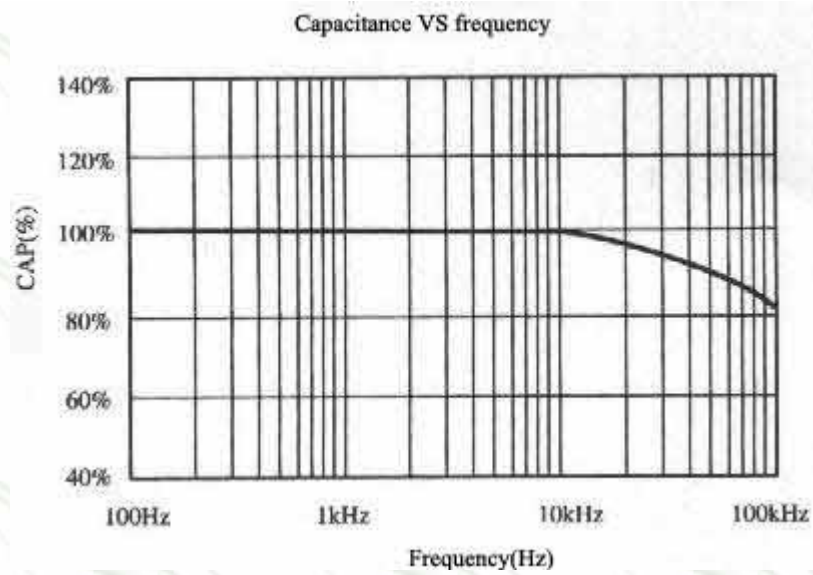
Capacitance uF	1	1.5	2.2	3.3	4.7	6.8
Capacitance Code	A	E	J	N	S	W

Multiplier	10 ⁴	10 ⁵	10 ⁶	10 ⁷
Second digit	4	5	6	7

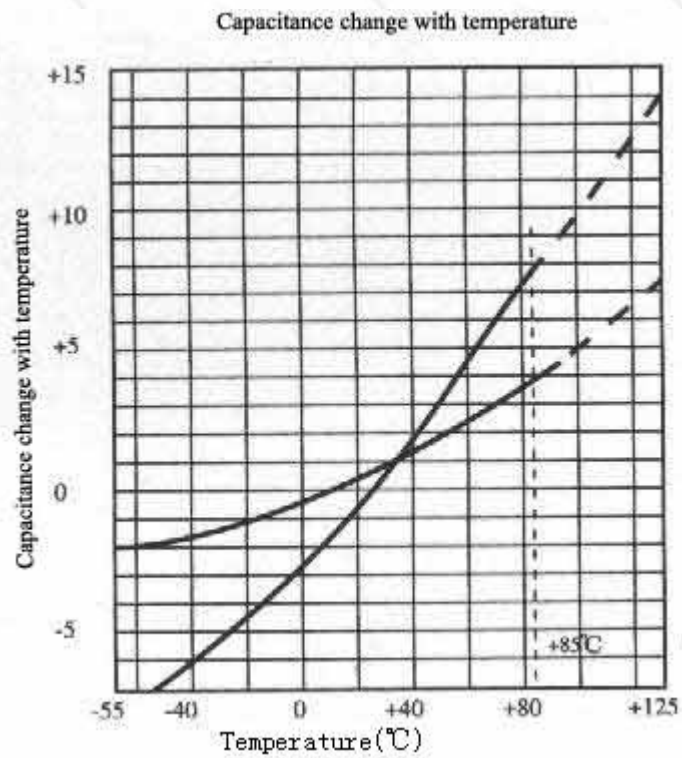
Exp^oA6C: A represents nominal capacitance code, the second digit represents multiplier and the third digit represents rated voltage, that is : voltage 16V;Capacitance 1;106pF;16V1uF



CHARACTERISTIC CURVE:

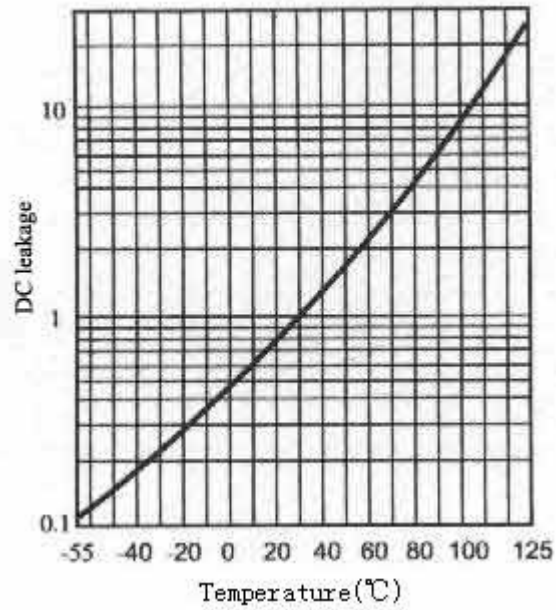


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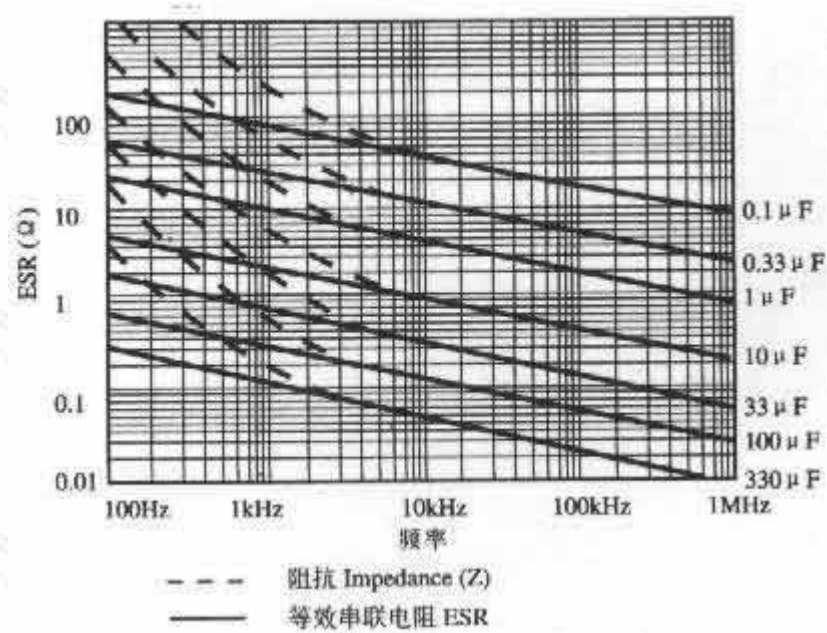


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DC leakage VS temperature



impedance VS frequency


[BACK](#)