

Features

- Operating temperature Range : -55°C~+125°C;
>85°C with rated voltage derating
- Capacitance tolerance: $\pm 20\%$; $\pm 10\%$ (for special order)
- DC leakage at 25°C; $I_o \leq 0.01 C_R U_R$ or 0.5uA (Whichever is greater)
- Dissipation factor at 20°C; Please See Table 3
- Dimensions ,rated voltage and nominal capacitance: Please see Table 1 & 2 and Figure 1
- Temperature characteristics: See Table 3
- ESR: See Table 4



Brief Introduction

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

Dimensions--Millimeters

table1

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

Temperature characteristics

table3

Capacitance (uF)	Cap.Change			DF Max				DCL Max	
	-55°C	+85°C	+125°C	-55°C	+20°C	+85°C	+125°C	+85°C	+125°C
$t \leq 1.0$	-10	+10	+12	6	4	6	6	10lo	12lo
1.5-68				10	6	10	10		
100-470				12	8	12	12		

Outline Drawings

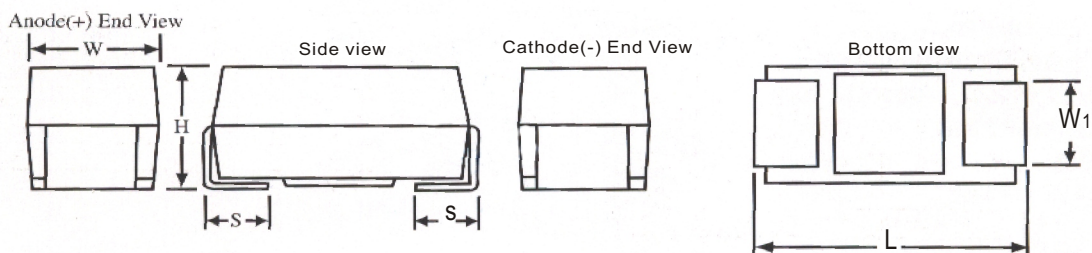
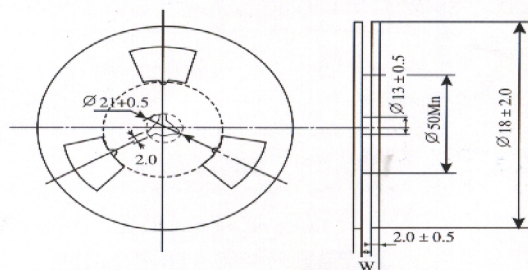
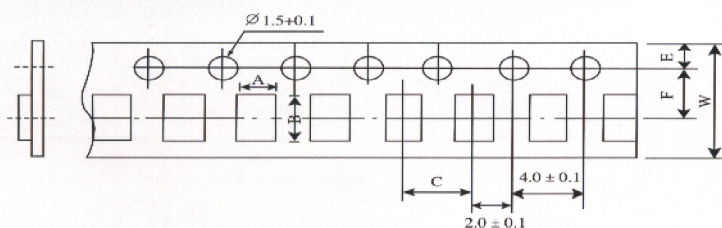


Figure 1

table 4

Rated Voltage	4	6.3	10	16	20	25	35	50
Capacitance (Standard/Extended)(uF)								
0.1					25.0		24.0	22.0
0.15					25.0		21.0	17.0/15.0
0.22					25.0		18.0	14.0
0.33					25.0		15.0	12.0
0.47				25.0	25.0	14.0	10/12	8.0
0.68			30.0	25.0	12/25	10.0	8.0	7.0
1.0		14/25	13/25	11/20	9.0	7/8	6.5	5.5
1.5	30.0	12/25	10.0/25	8.0/12.0	5/6.5	5.0	4.5/5.2	4.0/4.5
2.2	25.0	9/20	7.0/15	5.5/6.5	3.5/5.3	4.5	3.5	2.5
3.3	9/20	7.0/12	5.5/10	4.5/5.0	2.5/3.0	2.8	2.0/2.5	2.0
4.7	7.5/10	6.0/7.0	4/5	3.5/4	2.5/2.8	2.4	1.5/2.2	1.4
6.8	6.5/7.0	4/5	3/4	2.5/3.5	1.8/2.0	1.4/2.0	1.3	
10	4/6	3/4	2.5/3.0	2.0/2.8	1.3	1.2/1.8	1.0	
15	3.5/4	3.3/4.0	2.2/2.8	1.8	1.1	1.0	0.9	
22	3.2/3.5	2.5/3.5	1.8/2.4	1.1/1.6	0.9	0.9	0.9	
33	2.2/2.8	1.8/2.0	1.1/1.6	0.9/1.5	0.9	0.9		
47	1.8/2.2	1.6/2.0	0.9/1.2	0.9/1.4	0.9/0.9			
68	1.1/1.6	0.9/1.2	0.9	0.9	0.9			
100	0.9/1.3	0.9/1.4	0.9	0.9				
150	0.9	0.9	0.9	0.9				
220	0.9	0.9	0.9	0.9				
330	0.9	0.9	0.9					
470	0.9							

Tape and Reel Dimensions



Case Size	A±0.2	B±0.2	C±0.1	E±0.1	F±0.1	W±0.3
S	1.5	2.4	4.0	1.75	3.5	8.0
A	1.9	3.5	4.0	1.75	3.5	8.0
B	3.1	3.8	4.0	1.75	3.5	8.0
C	3.6	6.4	8.0	1.75	5.5	12.0
D	4.7	7.7	8.0	1.75	5.5	12.0
E	4.8	7.7	8.0	1.75	5.5	12.0

Case Size	W			Qty per reel
A B	+1.50	8.4	-0.00	2000
C D	+2.00	12.4	-0.00	500
E	+2.00	12.4	-0.00	400
S	+2.00	12.4	-0.00	2500

table2-1

Rated Voltage	4.0	6.3	10.0	16.0	20.0	25.0	35.0	50.0
Voltage Derating	2.5	4.0	6.3	10.0	13.0	16.0	23.0	33.0
Surge Voltage	5.0	8.0	13.0	20.0	26.0	32.0	46.0	65.0
Surge Voltage	3.4	5.0	9.0	12.0	16.0	20.0	26.0	38.0
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	A/S	B/A	C/B	C	D/C	D
4.7	A/S	A/S	B/A	B/A	D/C	C	D/C	E
6.8	A/S	B/A	B/A	C/B	D/C	D/C	D	
10	B/A	B/A	B/A	C/B	D	D/C	D	
10	B/A	B/A	C/B	C	D	D	E	
22	B/A	B/A	C/B	D/C	D	D	E	
33	C/B	C/B	D/C	D/C	D	E		
47	C/B	C/B	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							