

TYPE CA45 CHIP SOLID TANTALUM CAPACITORS

CHARACTERISTICS

Temperature Range: $-55^{\circ}\text{C} \sim +125^{\circ}\text{C} > 85^{\circ}\text{C}$

Above 85°C with Voltage Derating

Tolerance: $\pm 10\%$; $\pm 20\%$

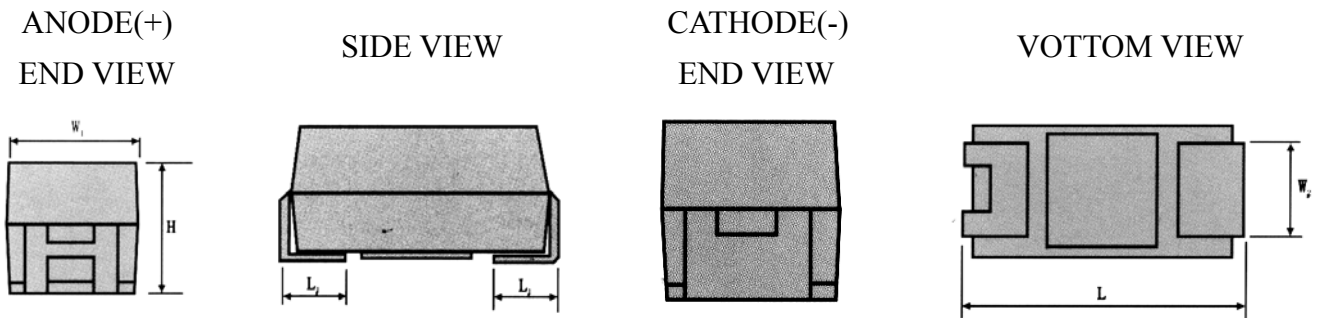
DC Leakage Current: $I_0 \leq 0.01 C_R U_R$ (μA) or 0.5 (μA)
(whichever is greater)

Dissipation Factor: See Table 3

Dimensions, Rated Voltage And Capacitance:
See table 1 and 2, Fig.1

Temperature Characteristics: See Table 3

CAPACITOR OUTLINE DRAWINGS

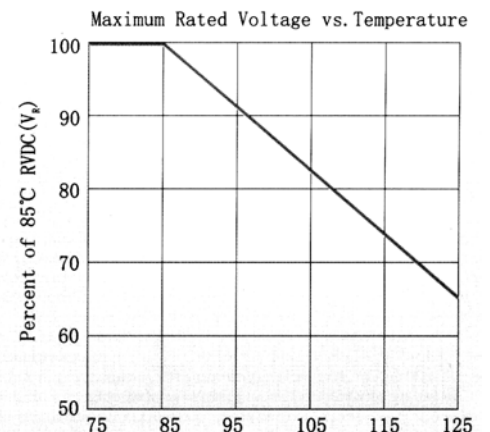
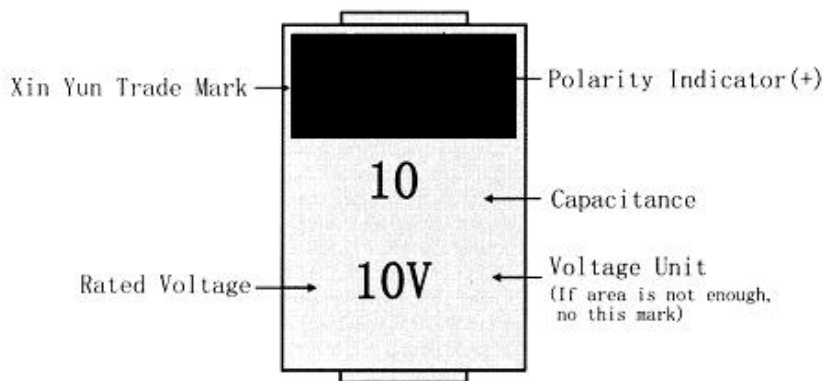


The welding lugs of different case sizes with different shapes.

Table 1 case Dimensions in Millimeters (inches)

Case size	$L \pm 0.2(0.008)$	$W_1 \pm 0.2(0.008)$	$H \pm 0.2(0.008)$	$L_1 \pm 0.3(0.012)$	$W_2 \pm 0.2(0.008)$
A	3.2(0.126)	1.6(0.063)	1.6(0.063)	0.7(0.027)	1.0(0.039)
B	3.4(0.134)	2.6(0.102)	1.9(0.071)	0.8(0.031)	2.0(0.079)
C	5.8(0.228)	3.2(0.126)	2.5(0.098)	1.3(0.051)	2.2(0.087)
D	7.3(0.287)	4.3(0.169)	2.8(0.110)	1.3(0.051)	3.0(0.118)

MARKING



DERATING CURVE

Table 2: Rated Voltage, Category Voltage and Capacitance of Capacitors

Rated voltage	4		6.3		10		16		20		25		32(35)		40		50			
category voltage	2.5		4		6.3		10		13		16		20		25		32			
capacitance																				
	Std.	Ext.	Std.	Ext.	Std.	Ext.	Std.	Ext.	Std.	Ext.	Std.	Ext.	Std.	Ext.	Std.	Ext.	Std.	Ext.		
0.1														A		A		A		
0.15														A		A		B	A	
0.22														A		A		B		
0.33											A			A		B		B		
0.47									A		A			B	A	B		C	B	
0.68								A		A			B	A	B	A	C	B	C	
1.0					A			A		A			B	A	B	A	C		C	
1.5			A		A			A		B	A		B	A	C	B	C		D	C
2.2	A		A		A			B	A	B	A		C	B	C	B	D	C	D	
3.3	A		A		B	A		B	A	B	A		C	B	C		D		D	
4.7	A		B	A	B	A		B	A	C	B		C		D	C	D		D	
6.8	B	A	B	A	B	A		C	B	C	B		D	C	D	C	D			
10	B	A	B	A	C	B		C	B	D	B		D	C	D					
15	B	A	C	B	C	B		C	B	D	C		D							
22	C	B	C	B	C	B		D	C	D	C		D							
33	C	B	D	C	D	C		D	C		D									
47	D	C	D	C	D	C		D		D										
68	D	C	D	C		D		D												
100	D	C		D		D		D												
150		D		D		D														
220		D		D																
330																				
470																				

Table 3 Temperature Characteristics

Capacitance (μF)	Capacitance change(%)			Dissipation factor Max (%)				Leakage current Max (μA)	
	-55°C	+85°C	+125°C	-55°C	+20°C	+85°C		+85°C	+125°C
≤1.0	±10	±10	±12	6	4	6	6	10I ₀	12.5I ₀
1.5~68				10	6	10	10		
100				12	8	12	12		

While ordering, note winding direction of tape, See Fig 3 and Fig 4

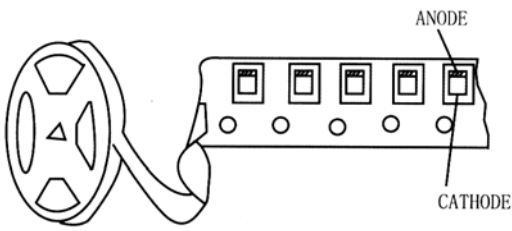


Fig 3 Right rotation

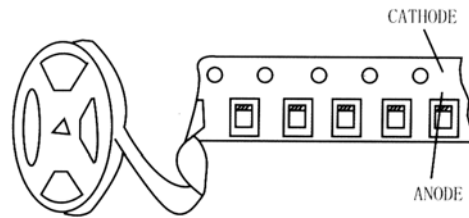
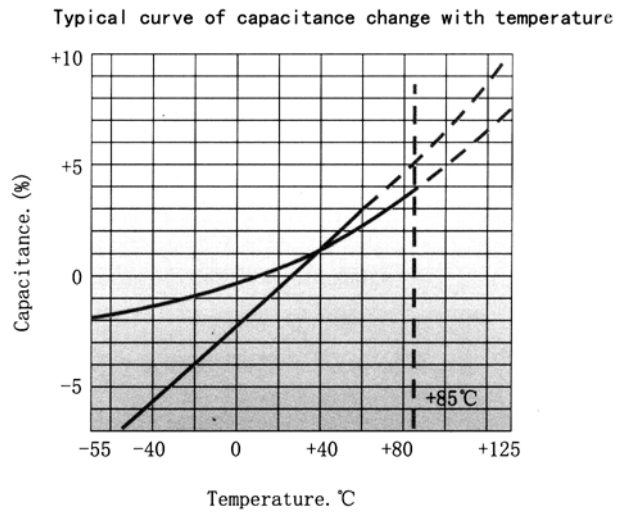
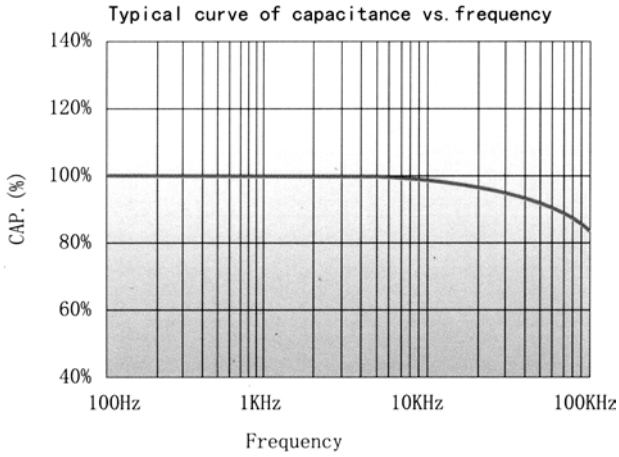
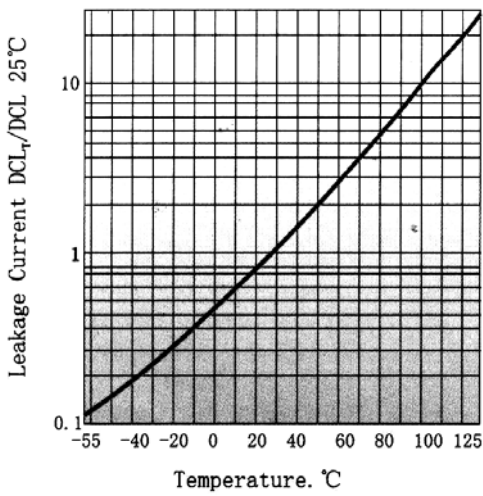


Fig 4 Left rotation

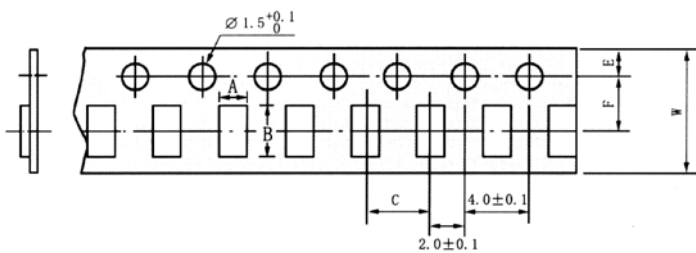
CHARACTERISTIC CURVE



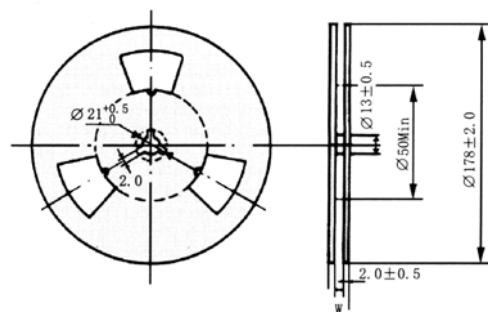
Leakage current change with temperature



TAPE PACKING



TAPE REEL dimensions



mm

Case size	A±0.1	B±0.1	C±0.1	E±0.1	F±0.1	W±0.3
A	1.9	3.5	4.0	1.75	3.5	8.0
B	3.1	3.9	47.0	1.75	3.5	8.0
C	3.7	6.3	8.0	1.75	5.5	12.0
D	4.8	7.7	8.0	1.75	5.5	12.0

Case size	W±1.5	Qty./reel
A B	10.0	2000
C D	14.0	500