

1、SCOPE

This specification applies to CA30 series axial wet tantalum electrolytic capacitor produced by Shenzhen Be-Top Electronic Components Co., Ltd.



2、Brief Introduction

CA30 series wet electrolyte tantalum capacitors are half-sealed with polar axial leads. The series capacitors are characterized by small size, low DC Leakage, stable performances, high reliability and long life. CA30 Series meets the standard QJ/PWV139-2003 and they are widely used in military equipments, aerospace and other electronic products.

3、General Specification

- 1) Operating Temperature: $-55\text{ }^{\circ}\text{C} \sim +125\text{ }^{\circ}\text{C}$ (using derating voltage when the temperature is higher than $85\text{ }^{\circ}\text{C}$). (see table 1)
- 2) Capacitance Tolerance: $\pm 10\%$ (K) , $\pm 20\%$ (M)
- 3) Current Leakage at Normal and High Temperature:
 At normal temperature: $I_0 \leq 0.001C_R U_R (\mu\text{A})$ or $1\mu\text{A}$ (Whichever is greater)
 At high temperature: $I_0 \leq 0.008C_R U_R (\mu\text{A})$ or $8\mu\text{A}$ (Whichever is greater)
- 4) Dissipation Factor at Normal and High Temperature (see table 1).
- 5) Product Dimension and max weight (see table 2)
- 6) Test Conditions:
 Tests should be done at temperatures $5\text{-}35\text{ }^{\circ}\text{C}$, humidity of 45-85%RH, and pressure of 860-1060mbar. But in the case of a discrepancy, the final decision should be made by the testing at temp of $25 \pm 2\text{ }^{\circ}\text{C}$, humidity of 50-70%RH, and pressure of 860-1060mbar.

Table 1: Relation between Rated Voltage, Derating Voltage and Capacitance

Rated Voltage $U_R(\text{V})$	Derating Voltage $U_c(\text{V})$	Case Code	Capacitance $C_R(\mu\text{F})$	DF (%) 25 $^{\circ}\text{C}$, 85 $^{\circ}\text{C}$, 125 $^{\circ}\text{C}$	Impedance (Ω)-55 $^{\circ}\text{C}$, 100HZ	Rated Voltage $U_R(\text{V})$	Derating Voltage $U_c(\text{V})$	Case Code	Capacitance $C_R(\mu\text{F})$	DF (%) 25 $^{\circ}\text{C}$, 85 $^{\circ}\text{C}$, 125 $^{\circ}\text{C}$	Impedance (Ω)-55 $^{\circ}\text{C}$, 100HZ
6.3	4	0	1.0	6	1800	40	25	0	22	12	140
		0	1.5	6	1400			1	33	12	110
		0	2.2	6	1100			2	47	15	80
		0	3.3	6	700			2	68	15	75
		0	4.7	6	500			2	100	20	65
		0	6.8	8	350			3	150	20	50

Rated Voltage U _R (V)	Derating Voltage U _c (V)	Case Code	Capacitance C _R (μ F)	DF (%) 25 °C ,85 °C ,125 °C	Impedance (Ω) -55 °C , 100HZ	Rated Voltage U _R (V)	Derating Voltage U _c (V)	Case Code	Capacitance C _R (μ F)	DF (%) 25 °C ,85 °C ,125 °C	Impedance (Ω) -55 °C , 100HZ			
6.3	4	0	10	8	260	40	25	4	220	25	45			
		0	15	10	200			5	330	25	35			
		0	22	10	180			5	350	25	35			
		0	33	12	125			5	470	30	35			
		0	47	15	125			6	680	40	30			
		0	68	18	125			7	1000	45	30			
		0	100	20	100			8	1200	50	25			
		1	150	30	80			50	30	0	1.0	6	1800	
	1	220	40	70	0	1.5	6			1400				
	2	330	40	60	0	2.2	6			1100				
	2	470	50	50	0	3.3	6			700				
	3	680	50	35	0	4.7	6			500				
	3	1000	60	25	0	6.8	8			350				
	4	1200	60	25	0	10	8			260				
	4	1500	60	20	0	15	10			175				
	5	2200	70	20	1	22	12			150				
	6	3300	80	15	2	33	12			110				
	10	6.3	0	1.0	6	1800	63			40	2	47	15	80
			0	1.5	6	1400					3	68	15	75
			0	2.2	6	1100		3	100		20	65		
0			3.3	6	700	4		150	20		50			
0			4.7	6	500	4		220	25		45			
0			6.8	8	350	5		330	25		45			
0			10	8	250	6		470	35		35			
0			15	10	200	7		680	40		30			
0			22	10	175	8		1000	50		30			
0			33	12	125	0		1.0	6		1800			
0			47	15	100	0		1.5	6		1400			
0			68	18	80	0		2.2	6		1100			
0		100	20	60	0	3.3	6	700						
1		150	30	55	0	4.7	6	500						
2		220	40	45	0	6.8	8	350						
2		330	45	40	0	10	8	260						
3		470	50	35	1	15	10	175						
3		680	50	30	2	22	12	140						
4		1000	50	25	2	33	12	100						
4		1200	60	25	2	47	15	80						
5	1500	60	20	3	68	15	65							
6	2200	70	20	3	100	20	60							
16(15)	10	0	1.0	6	1800	4	150	20	50					
		0	1.5	6	1400	5	220	25	45					
		0	2.2	6	1100	6	330	25	35					
		0	3.3	6	700	7	470	40	30					

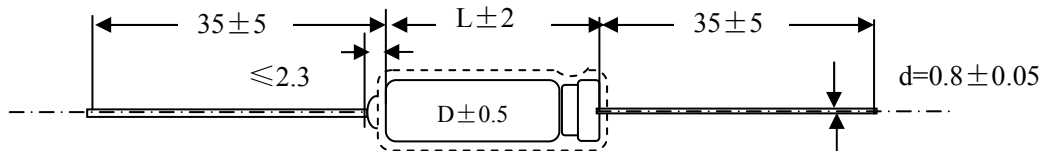
Rated Voltage U _R (V)	Derating Voltage U _c (V)	Case Code	Capacitance C _R (μ F)	DF (%) 25 °C ,85 °C ,125 °C	Impedance (Ω) -55 °C , 100HZ	Rated Voltage U _R (V)	Derating Voltage U _c (V)	Case Code	Capacitance C _R (μ F)	DF (%) 25 °C ,85 °C ,125 °C	Impedance (Ω) -55 °C , 100HZ
16(15)	10	0	4.7	6	500	75(70)	50	0	1.0	6	1800
		0	6.8	8	350			0	1.5	6	1400
		0	10	8	260			0	2.2	6	1100
		0	15	10	180			0	3.3	6	700
		0	22	10	150			0	4.7	6	500
		0	33	12	110			1	6.8	8	350
		0	47	12	90			1	10	8	260
		0	68	18	80			2	15	10	175
		1	100	20	70			2	22	12	150
		2	150	30	60			3	33	12	110
		2	220	40	55			3	47	15	80
		3	330	40	45			4	68	15	70
		4	470	40	40			4	100	20	60
		5	680	45	35			5	150	20	50
		6	1000	50	30			6	220	25	45
		6	1200	50	25			7	330	25	35
		7	1500	60	20			0	1.0	6	1800
		25	16	0	1.0			6	1800	100(90)	63
0	1.5			6	1400	0	2.2	6	1100		
0	2.2			6	1100	0	3.3	6	700		
0	3.3			6	700	0	4.7	6	500		
0	4.7			6	500	1	6.8	8	350		
0	6.8			8	300	1	10	8	260		
0	10			8	260	2	15	10	175		
0	15			10	175	2	22	10	150		
0	22			10	150	3	33	15	100		
0	33			12	110	3	47	15	70		
0	47			12	80	4	68	15	65		
1	68			20	75	5	100	20	60		
2	100			20	70	6	150	20	50		
3	150			25	60	7	220	20	40		
3	220			30	55	0	0.47	6	4500		
4	330			30	45	0	0.68	6	3000		
5	470			40	40	0	1.0	6	1800		
6	680			40	35	0	1.5	6	1400		
7	1000	40	30	0	2.2	6	1100				
7	1200	50	25	0	3.3	6	700				
8	1500	60	20	1	4.7	6	500				
40	25	0	1.0	6	1800	125	75	1	6.8	8	350
		0	1.5	6	1400			2	10	10	260
		0	2.2	6	1100			2	15	10	175
		0	3.3	6	700			3	22	15	150
		0	4.7	6	450			3	33	15	120

Rated Voltage $U_R(V)$	Derating Voltage $U_c(V)$	Case Code	Capacitance $C_R(\mu F)$	DF (%) 25 °C, 85 °C, 125 °C	Impedance (Ω)-55 °C, 100HZ	Rated Voltage $U_R(V)$	Derating Voltage $U_c(V)$	Case Code	Capacitance $C_R(\mu F)$	DF (%) 25 °C, 85 °C, 125 °C	Impedance (Ω)-55 °C, 100HZ
40	25	0	6.8	8	350	125	75	4	47	15	90
		0	10	8	260			5	68	15	70
		0	15	10	175			6	100	15	50
								7	150	20	45

Table 2: Product Dimension and Max Weight

Case Code	Max Weight (g)	Dimension (mm)	
		$D \pm 5$	$L \pm 2$
0	3	5	10
1	4	5	14
2	5	6	16
3	7	8	16
4	10	8	22
5	14	10	22
6	17	10	25
7	20	10	30
8	23	10	33

Figure of Product



How to order

CA30-106M035-1

CA30	106	M	035	1
Type	Capacitance	Tolerance	Rated Voltage	Operation Temperature
CA30 series axial wet tantalum capacitor	106=10 μ F	K=±10% M=±20%	6.3V=006 10V=010 16V=016 25V=025 35V=035 40V=040 63V=063 75V=075 100V=100	1. -55 °C—+125 °C 2. -55 °C—+85 °C