

1、SCOPE

This specification applies to CA82 series axial wet tantalum electrolytic capacitor (175°C) produced by Shenzhen Be-Top Electronic Components Co., Ltd.



2、Brief Introduction

CA82 series wet electrolyte tantalum capacitors (175°C) are fully and silver coating sealed with polar axial leads. The series capacitors are characterized by low DC Leakage, low dissipation factor, stable performances, high reliability and long life. It has good performance in high-temp environment. It can be used in the conditions of 175°C. CA82 Series meets the standard QJ/PWV80-2002 and it is widely used in oil & gas exploration & drilling equipments.

3、General Specification

- 1) Operating Temperature: -55 °C ~+175 °C (using derating voltage when the temperature is higher than 155 °C). (see table 1)
- 2) Capacitance Tolerance: ±10% (K) , ±20% (M), -10%~+30% (S)
- 3) Current Leakage:
 - At 25 °C: $I_0 \leq 0.0008C_R U_R$ (μA) or 6μA (Whichever is greater)
 - At 85 °C: $I_0 \leq 0.006C_R U_R$ (μA) or 6μA (Whichever is greater)
 - At 175 °C: $I_0 \leq 0.02C_R U_R$ (μA) or 8μA (Whichever is greater)
- 4) Dissipation Factor at 25 °C 100Hz frequency(see table 1).
- 5) Product Dimension and max weight (see table 2).

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

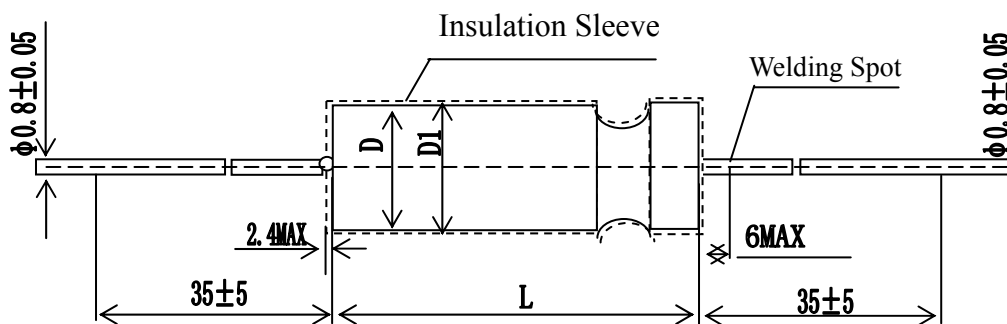
Rated Voltage U_R (V)	Derating Voltage U_c (V)	Case Code	Capacitance C_R (μ F)	DF (%)25 °C ,85 °C ,125 °C	Impedance (Ω)-55 °C , 100HZ	Rated Voltage U_R (V)	Derating Voltage U_c (V)	Case Code	Capacitance C_R (μ F)	DF (%)25 °C ,85 °C ,125 °C	Impedance (Ω)-55 °C , 100HZ		
10	6. 3	1	33	15	125	40	25	3	68	20	75		
		1	47	15	100			4	100	35	65		
		2	68	30	80			5	150	35	50		
		2	100	20	60			6	220	30	45		
		3	150	50	55			63	40	1	4.7	6	500
		3	220	45	45					1	6.8	8	350
	4	330	70	40	2	10	8			260			
	5	470	75	35	2	15	10			175			
	6	680	65	30	3	22	18			140			
	3	33	18	100	3	33	18			100			
	16	10	1	22	10	150	100	63	4	47	25	80	
			1	33	12	130			5	68	25	65	
2			47	20	100	6			100	25	60		
2			68	20	80	1			3.3	6	700		
3			100	35	70								

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		
16	10	3	150	35	60	100	63	1	4.7	6	500		
		4	220	60	55			2	6.8	8	410		
		5	330	70	45			2	10	10	260		
		6	470	50	40			3	15	15	175		
25	15	1	15	10	175			125	75	3	22	15	150
		1	22	10	150					4	33	20	100
		2	33	20	110					5	47	25	70
		2	47	15	80					6	68	20	65
		3	68	25	75					1	2.2	6	1100
		3	100	25	70					1	3.3	6	700
		4	150	50	60					2	4.7	6	500
		5	220	50	55					2	6.8	8	350
40	25	6	330	40	45	125	75	3	10	15	260		
		1	10	8	350			3	15	15	175		
		1	15	10	210			4	22	20	150		
		2	22	20	140			5	33	20	120		
		2	33	20	110			6	47	20	90		
		3	47	20	100								

Table 2: Product Dimension and Max Weight

Case Code	Max Weight (g)	Without Insulation Sleeve		With Insulation Sleeve	
		$D \pm 0.5(mm)$	$L \pm 2(mm)$	$D_1 max(mm)$	$L max(mm)$
1	4	5	14	5.8	16
2	5	6	16	6.8	18
3	7	8	16	8.8	18
4	10	8	22	8.8	24
5	14	10	22	10.8	24
6	17	10	25	10.8	27

Figure of Product



How to order

CA82-107M025

CA82	107	M	025
Type	Capacitance	Tolerance	Rated Voltage
CA82 Series axial wet tantalum capacitor (175°C)	107=100μF	K=±10% M=±20% S=-10%~+30%	10V=010 16V=016 25V=025 40V=040 63V=063 100V=100 125V=125