

CA30 Series Non-solid Electrolytic Tantalum Capacitor

Brief Introduction

- Silver case encapsulation, Epoxy end-filled, Tubular, Axial-lead, With insulation sleeve;
- Excellent in electrical performances, High reliability, Low DCL, Long life span, Meets SJ/T10030-91 (Industry standard), Small in case for easy using;
- Applicable to DC & Pulse current of communications-equipments and Instruments;
- Executive Standard: QJ/PWV139-2003;
- Ordering Information: CA30-107K100, 100pcs.



Features

- Operating Temperature Range: $-55^{\circ}\text{C} \sim +125^{\circ}\text{C}$ ($>85^{\circ}\text{C}$ with rated voltage derating) ;
- Rated Voltage, Derating Voltage, Nominal Capacitance: See figure 2;
- Capacitance tolerance: K: $\pm 10\%$; M: $\pm 20\%$;
- DC leakage: At $+20^{\circ}\text{C}$, $I_0 \leq 0.001 C_R U_R$ (μA) or $1 \mu\text{A}$ (Choose the greater one) ;
At $+85^{\circ}\text{C}$ or $+125^{\circ}\text{C}$, $I \leq 0.008 C_R U_R$ (μA) or $8 \mu\text{A}$ (Choose the greater one) ;
- Dissipation Factors: Not exceed the parameter in table2;
- ESR of Negative Temperature: Not exceed the parameter in table2;
- Dimensions and Max Weight: See Table & Figure1.

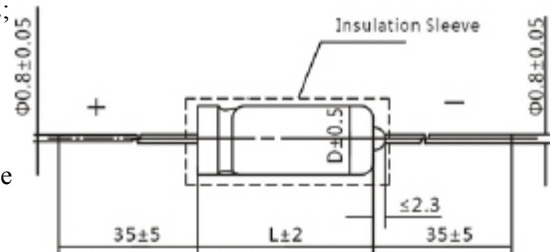


Table1 Dimensions and Max weight

Case Code	Max Weight (g)	Dimensions (mm)	
		D \pm 0.5	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

P.S. The CA30 products with insulation D could be 0.4mm more at most, L could be 1.6mm more at most.

Table 2 Electrical Features

Rated Voltage U_R (V)	Derating Voltage U_c (V)	Case Size	Nominal Capacitance C_R (μ F)	$tg\delta(\%)$ MAX 25°C、85°C 125°C	ESR (Ω) -55°C 100Hz
6.3	4	0	1.0	6	1800
		0	1.5	6	1400
		0	2.2	6	1100
		0	3.3	6	700
		0	4.7	6	500
		0	6.8	8	350
		0	10	8	260
		0	15	10	200
		0	22	10	180
		0	33	12	125
		0	47	15	125
		0	68	18	125
		0	100	20	100
		1	150	30	80
		1	220	40	70
		2	330	40	60
		2	470	50	50
		3	680	50	35
		5	2200	70	20
		6	3300	80	15
10	6.3	0	1.0	6	1800
		0	1.5	6	1400
		0	2.2	6	1100
		0	3.3	6	700
		0	4.7	6	500
		0	6.8	8	350
		0	10	8	250
		0	15	10	200
		0	22	10	175
		0	33	12	125
		0	47	15	100

Rated Voltage U_R (V)	Derating Voltage U_C (V)	Case Size	Nominal Capacitance C_R (μ F)	$tg\delta$ (%) MAX 25°C、85°C 125°C	ESR (Ω) -55°C 100Hz
10	6.3	0	68	18	80
		0	100	20	60
		1	150	30	55
		2	220	40	45
		2	330	45	40
		3	470	50	35
		3	680	50	30
		4	1000	50	25
		4	1200	60	25
		5	1500	60	20
		6	2200	70	20
		7	3300	80	15
		16 (15)	10	0	1.0
0	1.5			6	1400
0	2.2			6	1100
0	3.3			6	700
0	4.7			6	500
0	6.8			8	350
0	10			8	260
0	15			10	180
0	22			10	150
0	33			12	110
0	47			12	90
0	68			18	80
1	100			20	70
2	150			30	60
2	220			40	55
3	330			40	45
4	470			40	40
5	680			45	35
6	1000			50	30
6	1200			50	25
7	1500	60	20		
8	2200	70	20		
25	16	0	1.0	6	1800
		0	1.5	6	1400

Rated Voltage U_R (V)	Derating Voltage U_C (V)	Case Size	Nominal Capacitance C_R (μ F)	$tg\delta$ (%) MAX 25°C、85°C 125°C	ESR (Ω) -55°C 100Hz
25	16	0	2.2	6	1100
		0	3.3	6	700
		0	4.7	6	500
		0	6.8	8	300
		0	10	8	260
		0	15	10	175
		0	22	10	150
		0	33	12	110
		0	47	12	80
		1	68	20	75
		2	100	20	70
		3	150	25	60
		3	220	30	55
		4	330	30	45
		5	470	40	40
		6	680	40	35
		7	1000	40	30
		7	1200	50	25
		8	1500	60	20
		40	25	0	1.0
0	1.5			6	1400
0	2.2			6	1100
0	3.3			6	700
0	4.7			6	450
0	6.8			8	350
0	10			8	260
0	15			10	175
0	22			12	140
1	33			12	110
2	47			15	80
2	68			15	75
2	100			20	65
3	150			20	50
4	220			25	45

Rated Voltage U_R (V)	Derating Voltage U_C (V)	Case Size	Nominal Capacitance C_R (μ F)	$tg\delta$ (%) MAX 25°C、85°C 125°C	ESR (Ω) -55°C 100Hz
40	25	5	330	25	35
		5	350	25	35
		5	470	30	35
		6	680	40	30
		7	1000	45	30
		8	1200	50	25
50	30	0	1.0	6	1800
		0	1.5	6	1400
		0	2.2	6	1100
		0	3.3	6	700
		0	4.7	6	500
		0	6.8	8	350
		0	10	8	260
		0	15	10	175
		1	22	12	150
		2	33	12	110
		2	47	15	80
		3	68	15	75
		3	100	20	65
		4	150	20	50
		4	220	25	45
		5	330	25	45
		6	470	35	35
		7	680	40	35
		8	1000	50	30
		63	40	0	1.0
0	1.5			6	1400
0	2.2			6	1100
0	3.3			6	700
0	4.7			6	500
0	6.8			8	350
0	10			8	260
1	15			10	175
2	22			12	140

Rated Voltage U_R (V)	Derating Voltage U_C (V)	Case Size	Nominal Capacitance C_R (μ F)	$tg\delta$ (%) MAX 25°C、85°C 125°C	ESR (Ω) -55°C 100Hz
63	40	2	33	12	100
		2	47	15	80
		3	68	15	65
		3	100	20	60
		4	150	20	50
		5	220	25	45
		6	330	25	35
		7	470	40	30
		8	680	40	30
75 (70)	60	0	1.0	6	1800
		0	1.5	6	1400
		0	2.2	6	1100
		0	3.3	6	700
		0	4.7	6	500
		1	6.8	8	350
		1	10	8	260
		2	15	10	175
		2	22	12	150
		3	33	12	110
		3	47	15	80
		4	68	15	70
		4	100	20	60
		5	150	20	50
		6	220	25	45
		7	330	25	35
100 (90)	63	0	1.0	6	1800
		0	1.5	6	1400
		0	2.2	6	1100
		0	3.3	6	700

Rated Voltage U _R (V)	Derating Voltage U _C (V)	Case Size	Nominal Capacitance C _R (μF)	tgδ(%) MAX 25°C、85°C 125°C	ESR (Ω) -55°C 100Hz
100 (90)	63	0	4.7	6	500
		1	6.8	8	350
		1	10	8	260
		2	15	10	175
		2	22	10	150
		3	33	15	100
		4	47	15	70
		4	68	15	65
		5	100	20	60
		6	150	20	50
		7	220	20	45
		8	330	25	35
125	75	0	0.47	6	4500
		0	0.68	6	3000
		0	1.0	6	1800
		0	1.5	6	1400
		0	2.2	6	1100
		0	3.3	6	700
		1	4.7	6	500
		1	6.8	8	350
		2	10	10	260
		2	15	10	175
		3	22	15	150
		3	33	15	120
		4	47	15	90
		5	68	15	70
		6	100	15	50
		7	150	20	45

P.S. : 1 Please do not use multimeter through the measuring procedures.

2 Capacitance and DF measured at :100Hz, U_~=2.2^{±0.10}V, U_~=1.0^{±0.05}V, Frequency=100Hz.

Test only applied in series equivalent circuit.

3 Voltage derating is applied at +125°C. (The DCL parameter should be read after 5minutes when it connected to the circuit) .

4 Special size and demand could consult with us.