

Type CA-1 Sold-electrolyte Tantalum Capacitors

Features and Applications

1. Metal cased. Hermetically sealed. Axial lead. Tubular. Polar Capacitors.
2. Excellent and stable electricity performance. High reliability. Low dissipation factor and DC leakage current. Long life. Small size. Equal to Vishay type 150D.
3. Suitable for high-request consumer electronic equipment such as communication equipment, instruments, etc.

Performance and Characteristics

Operating Temperature: -55°C to $+85^{\circ}\text{C}$. (To $+125^{\circ}\text{C}$ with voltage derating.)

Rated Voltage, Derating Voltage: See table 2.

Capacitance Tolerance: At 100Hz, $+25^{\circ}\text{C}$, $\pm 10\%$; $\pm 20\%$ standard. $\pm 5\%$, special order.

DC Leakage Current at 25°C : $\text{DCL}_{\text{Max}} \leq 0.01 C_R U_R$ (μA) or $1 \mu\text{A}$ (Whichever is greater) .

Dissipation Factor(D.F): At 100Hz, $+25^{\circ}\text{C}$. D.F won't exceed the values in table 1.

Temperature Performance: No more than maximum limits in table 1.

Dimensions and Weight(Max.): See Outline drawings and table 2.

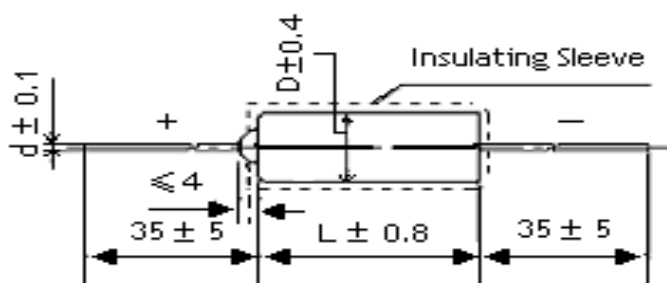


Table 1 Temperature Performance

Capacitance μF	Capacitance Change %			Maximum					
				D.F.(%)				DCL(μA)	
	-55°C	85°C	125°C	25°C	-55°C	85°C	125°C	85°C	125°C
≤ 1	± 8	± 8	± 10	3	3			$8I_0$	$10I_0$
1.2~82				5	5				
100~330				6	6				
390~470				8	8				

Remarks: 1) Test Voltage: $U = 2.2_{-1.0}^0 \text{V}$; $U \sim 1.0_{-0.5}^0 \text{V}$ (RMS). Test frequency: 100Hz.

2) To 125°C with voltage derating.



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Table 2 Rating Voltage、Derating Voltage、Case Size and Weight(Max.)

Rating Voltage(U_R) V			6	10	15	20	35	50	75	100	
Derating Voltage(U_C) V			4	7	10	13	23	33	50	67	
D×L mm			Weight (Max.) g	Nominal Capacitance (C_R) μF							
D	L	d									
3.2	6.5	0.5	0.7	5.6	3.9	2.7	1.2	0.1	0.04	0.10	0.04
				6.8	4.7	3.3	1.5	0.12	7	0.12	7
							1.8	0.15	0.05	0.15	0.05
							2.2	0.18	6	0.18	6
								0.22	0.06	0.22	0.06
								0.27	8	0.27	8
								0.33	0.08	0.33	0.08
								0.39	2	0.39	2
								0.47	0.10	0.47	0.10
								0.56	0.12	0.56	0.12
								0.68	0.15	0.68	0.15
								0.82	0.18		0.18
								1.0	0.22		0.22
									0.27		0.27
									0.33		0.33
									0.39		0.39
									0.47		0.47
					0.56		0.56				
					0.68						
					0.82						
					1.0						
4.5	11	0.5	2.3	47	27	18	8.2	1.2	1.2	0.82	0.68
				56	33	22	10	1.5	1.5	1.0	0.82
					39		12	1.8	1.8	1.2	1.0
							15	2.2	2.2	1.5	1.2
								2.7	2.7	1.8	1.5
								3.3	3.3	2.2	1.8
								3.9	3.9	2.7	2.2
								4.7	4.7	3.3	2.7
								5.6		3.9	
								6.8			
7.0	16.5	0.65	6.5	150	82	56	27	8.2	5.6		
				180	100	68	33	10	6.8		
					120		39	12	8.2		
							47	15	10		
								18	12		
								22	15		
									18		
8.6	19	0.65	11.0	270	150	82	56	27	22		
				330	180	100	68	33	27		
				390	220	120	82	39	33		
				470	270	150	100	47			
					330	180	120	56			
								68			

Remarks: With insulating sleeves, D(Max.) will be increased 0.3mm, L(Max.) will be increased 1mm.