



CBFC

Tantalum case with glass-to-tantalum hermetic seal, high reliability, equative CAK39 series

Datasheet

Brief Introduction and Feature

- CBFC, Tantalum case, hermetic seal, with insulation sleeve wet tantalum electrolytic capacitors.
- With polar, axial leads through hole, in stable and excellent performances.
- High reliability, long life, high ripple current, low ESR and low DC leakage current (DCL).
- Widely used in electronic equipment for military applications such as telecommunication, aerospace and aviation.



Meet standard: GJB733A-96, QJ/PWV319-2002

Cross: MIL-PRF-39006/25 CLR81

◆ General Characteristics

Operating Temperature Range: $-55^{\circ}\text{C} \sim +125^{\circ}\text{C}$ ($>125^{\circ}\text{C}$ with voltage derating);

Capacitance range: $6.8\mu\text{F} \sim 2200\mu\text{F}$

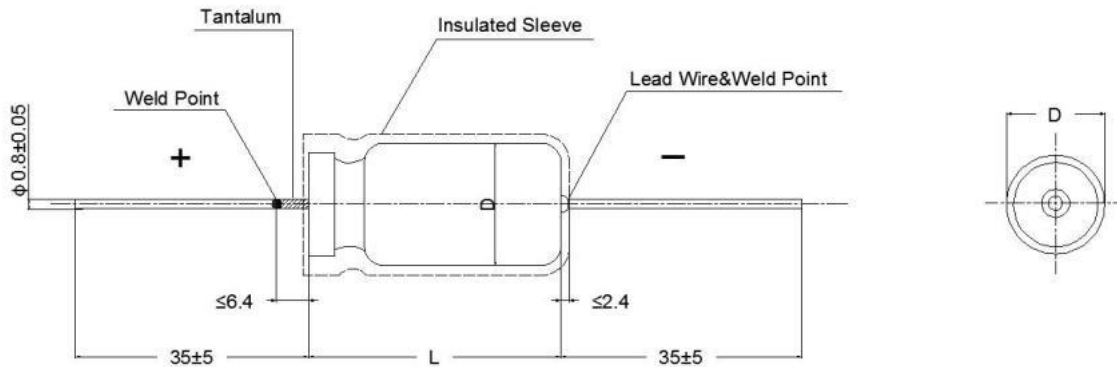
Ripple current: $700\text{mA} \sim 2300\text{mA}$

Capacitance Tolerance: $K = \pm 10\%$, $M = \pm 20\%$

Voltage: $6\text{V} \sim 125\text{V}$

Reverse voltage capability: 3V

◆ Drawing, Case Dimension and Max. Weight



Code	Max. weight (g)	Without sleeve		With sleeve	
		D±0.4 (mm)	L±0.8 (mm)	D±0.4 (mm)	L±0.8 (mm)
T1	3	4.78	11.51	5.58	14.31
T2	7	7.14	16.28	7.94	19.08
T3	12	9.52	19.46	10.32	22.26
T4	18	9.52	26.97	10.32	29.77



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◆ Electric Performance Characteristics of CAK39 series.

Rated Voltage (V)	Voltage Derating (V)	Case size	Capacitance (μF)	DCL (μA)Max.		IMP. (Ω) -55℃ 100Hz	AC ripple 85℃ 40kHz (mA)	tgδ(%) 25℃ 100Hz
				25℃	85℃ 125℃			
60I	4	T1	220	2	9	36	1000	50
		T2	820	3	14	18	1500	155
		T3	1500	5	20	18	1900	172
		T4	2200	6	24	13	2300	170
80K	5	T1	180	2	9	45	1000	41
		T2	680	3	14	22	1500	130
		T3	1500	5	20	18	1900	170
		T4	1800	7	25	14	2300	138
101A	7	T1	150	2	9	54	900	34
		T2	560	3	16	27	1450	106
		T3	1200	5	20	18	1850	137
		T4	1500	7	25	15	2300	114
151R	10	T1	100	2	9	72	900	30
		T2	390	3	16	31	1450	74
		T3	820	6	24	22	1800	111
		T4	1000	8	32	17	2300	92
251E	15	T1	68	2	9	90	850	22
		T2	270	3	16	33	1400	55
		T3	560	7	20	24	1750	76
		T4	680	8	32	19	2100	63
301U	20	T1	56	2	9	100	800	22
		T2	220	3	16	36	1200	42
		T3	470	8	32	25	1500	64
		T4	560	9	36	20	2000	55
501H	30	T1	33	2	9	135	700	12.3
		T2	120	4	24	49	1200	22.5
		T3	270	8	32	29	1450	37
		T4	330	9	36	22	1900	38
601I	40	T1	27	3	12	144	700	10.2
		T2	100	4	20	54	1100	19
		T3	220	8	32	29	1400	30
		T4	270	9	36	23	1850	27
751M	50	T1	22	3	12	157	600	8.5
		T2	82	4	24	63	1000	15.2
		T3	180	9	36	30	1380	24.4
		T4	220	10	40	24	1800	37

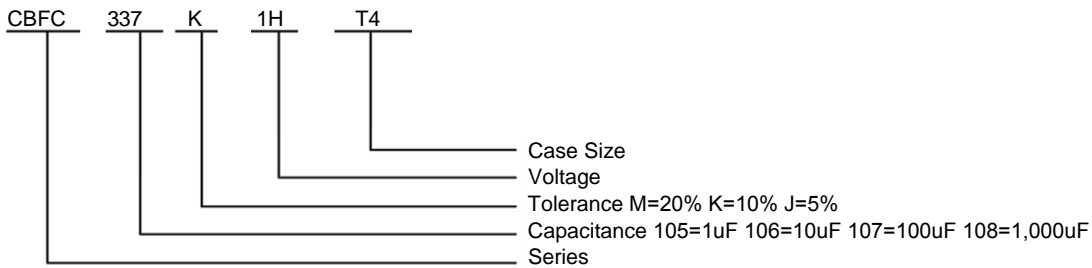


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				25℃	85℃ 125℃			
100 2A	65	T1	10	3	12	200	800	4.5
		T2	39	5	24	80	1300	10.4
		T3	68	10	40	40	1600	11.3
		T4	120	12	48	30	200	25
125 2Q	85	T1	6.8	3	12	300	700	6
		T2	27	5	24	90	1200	7.2
		T3	47	10	40	50	1500	7.9
		T4	82	12	48	32	1900	17.4

PART NUMBER EXAMPLE



Notes:

- Tantalum capacitors can't be measured by multimeter. (Easily cause irreversible damage and lead to reject when reversed polarity)
- Capacitance, DF measure frequency: 100Hz, DC offset voltage $U=2.2^{0.1}V$, Exchange offset voltage $U=1.0^{0.5}V$ (effective value), measure method is by series equivalent circuit.
- Measure the leakage current at 125℃, please use derated voltage. DCL read at 5 minute.
- Special size and big capacitance products, please negotiate with JINPEI.