



# CAK31 MIL Wet Tantalum Capacitor

(hermetic seal)



## 1, Brief Introduction and Feature

- ◆ CAK31, Metal case ,hermetic sealed, with insulation sleeve wet tantalum electrolytic capacitors.
- ◆ With polar, axial leads through hole, long life, good performances and stability.
- ◆ Cross part 109D, 138D, M39006/09/21/30/31
- ◆ Widely used in electronic equipment for communication equipment, aerospace, satellite, guided missile and aviation.

Meet standard: GJB733A-96, ZZR-Q/PWV20011-2009

## 2, General Characteristics

Operating Temperature Range:  $-55^{\circ}\text{C} \sim +125^{\circ}\text{C}$  ( $>85^{\circ}\text{C}$  with voltage derating);

Capacitance range:  $1.7\mu\text{F} \sim 1200\mu\text{F}$

Capacitance Tolerance: J= $\pm 5\%$ , K= $\pm 10\%$ , M= $\pm 20\%$

Voltage: 6V~125V

DF see Table 2

DCL see table 2

Case sizes, Dimensions and Max. weight: As shown in Table 1 and figure 1.

Nominal Capacitance, Rated voltage, Voltage Derating: See table 2

## 3, Drawing, Case Dimension and Max. weight

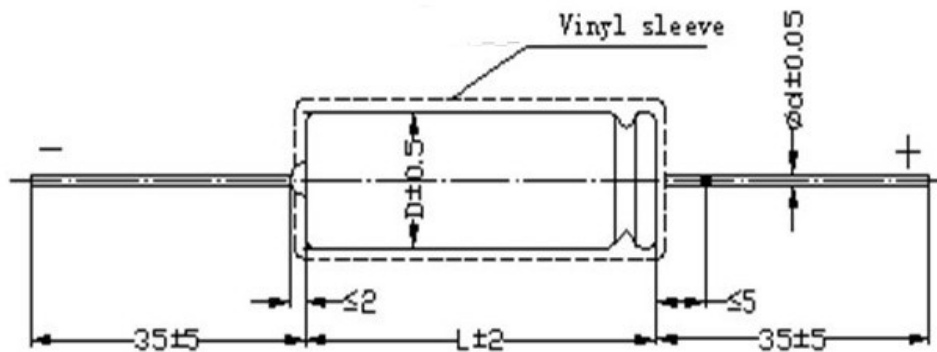


Table 1

Code	Max. weight (g)	Without sleeve		With sleeve	
		D $\pm 0.4$ (mm)	L $\pm 0.8$ (mm)	D $\pm 0.4$ (mm)	L $\pm 0.8$ (mm)
T1	4	4.8	11.5	5.6	12.8
T2	7	7.2	16.3	7.9	17.1
T3	14	9.5	19.5	10.3	20.3
T4	19	9.5	27	10.3	27.8



4, Table 2 General Characteristics

Rated Voltage (V)	Voltage Derating (V)	Case size	Cap. (μF)	DCL (μA)Max		IMP (Ω) -55°C 100Hz	Tgδ (%)		Rated Voltage (V)	Voltage Derating (V)	Case size	Cap. (μF)	DCL (μA)Max		IMP (Ω) -55°C 100Hz	Tgδ (%)			
				25°C	85°C 125°C		25°C	85°C 125°C					25°C	85°C 125°C		25°C	85°C 125°C		
				6	4		T1	30					1	2		100	9.1	30	20
		T1	68	1	2	60	20.4	50	30	T1	5	1	2	400	3.4				
		T2	140	1	3	40	21.3			T1	10	1	2	250	6				
		T2	270	1	6.5	25	81.8			T2	25	1	5	95	11.2				
		T3	330	2	7.9	20	49.6			T2	47	1	9	70	21.4				
		T3	560	2	13	25	128			T3	60	2	12	45	13.6				
		T4	1200	3	14	20	144			T3	82	2	16+	45	24.9				
		T4								T4	160	8	32	27	25.7				
8	5	T1	25	1	2	100	7.6	60	40	T1	4	1	2	550	3				
		T1	56	1	2	59	17			T1	8.2	1	2	275	5				
		T2	220	1	7	30	66.4			T2	20	1	5	105	7.6				
		T3	430	2	14	25	91.5			T2	39	1	9	90	20.7				
		T4	850	4	16	22	65.8			T3	50	2	12	50	15.3				
10	7	T1	20	1	2	175	6.1	75	50	T3	68	2	16	50	30.7				
		T1	47	1	2	100	18.1			T4	140	8	32	28	25.7				
		T2	100	1	4	60	15.2			T1	3.5	1	2	650	2.5				
		T2	180	1	7	40	54.4			T1	6.8	1	2	300	4.1				
		T3	250	2	10	30	37.8	T2	15	1	5	150	7.5						
		T3	390	2	16	25	87.6	T2	33	1	10	90	17.5						
		T4	750	4	16	23	56.5	T3	40	2	12	60	15.2						
15	10	T1	15	1	2	155	5.7	100	65	T4	110	9	36	29	25.7				
		T1	33	1	2	90	12.5			T1	2.5	1	2	950	5				
		T2	70	1	4	75	13.1			T1	4.7	1	2	500	3.6				
		T2	120	1	7	50	36.8			T2	11	1	4	200	5				
		T3	170	2	10	35	25.4			T2	22	1	9	100	11.8				
		T3	270	2	16	30	60.9			T3	30	2	12	80	9.1				
		T4	540	6	24	23	49			T4	86	9	36	30	20.7				
25	15	T1	10	1	2	220	4.6	125	85	T1	1.7	1	2	1250	7				
		T1	22	1	2	140	8.3			T1	3.6	1	2	600	4.1				
		T2	100	1	10	50	31.4			T2	9	1	5	240	10.2				
		T3	180	2	18	32	54.3			T2	14	1	7	167	12.7				
		T4	350	7	28	24	35			T3	18	2	9	129	15				
30	20	T2	68	1	8	60	31			T3	25	2	13	93	19				
		T3	100	2	12	40	19			T4	56	10	40	32	17.5				
		T3	150	2	18	35	46												

**5,How to order**

(GTCAP31 476 K 050 T2)

GT	CAK31	476	K	050	T2
Brand Name	Type	Capacitance	Tolerance	DC voltage	Case code
Green Tech	Military Wet Electrolytic Tantalum Capacitor	476: $47 \times 10^6$ (pF) This is expressed in picofarads. The first two digits are the significant figures. The third is the number of zeros to follow.	J=±5% K=±10% M=±20%	6V=006 8V=008 10V=010 ... 50V=050 60V=060 75V=075 100V=100 125V=125	See table 1

**Notes:**

- 1、Tantalum capacitors can't been measured by multimeter (Easily cause irreversible damage and lead to reject)
- 2、Capacitance, DF measure frequency: 100Hz,  $U_+ = 2.20 - 1.0V$ ,  $U_- = 1.00 - 0.5V$  (effective value), measure method is by series equivalent circuit.
- 3、Measure leakage current above 125°C, please use derated voltage. DLC read within 5 minute.
- 4、Special size and big capacitance products, please negotiate with us