



**CA382 High-Temp Wet Tantalum Capacitor**  
**Tantalum Case for -55°C~+200°C operation**  
**(hermetic seal)**

**1, Brief Introduction and Feature**

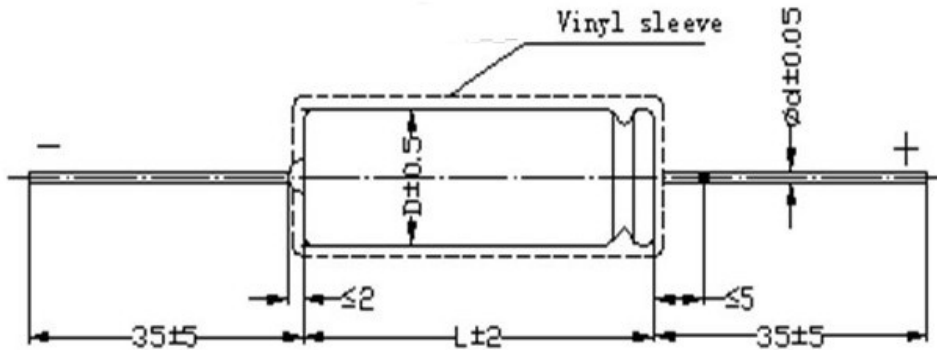
- 1) CA382, All tantalum case ,hermetic sealed, with high-temp insulated sleeve wet tantalum electrolytic capacitors.
- 2) With polar, axial leads through hole.High reliability,long life,
- 3) This unit have a 3V reverse voltage capability. Big ripple current.
- 4) Can use in high temperature area 200°C available.
- 5) Widely used in electronic equipment for high-temp applications such as oil down hole drilling, aerospace,satellite,military equipment and other DC or PC.



Meet standard: Q/RTO.464.199-2014

**2, General Characteristics**

- 1) Operating Temperature: -55°C~+200°C(>85°C use voltage derating);
- 2) Storage temperature: -62°C~+130°C
- 3) Capacitance Tolerance: K=±10% ,M=±20%,-10%~+30%,-20%~+50%
- 4) Leakage current: see the table 2 list
- 5) Ripple current: see the table 2 list
- 6) Dimensions and Max. weight: See table 1



**Table 1 Dimension**

Case Code	Dimension (mm)		L±1.5 (mm)	Max. Weight (g)
	Without Sleeve D±0.4	With Sleeve D1 Max		
T1	4.78	5.56	11.5	3
T2	7.14	7.92	16.3	7
T3	9.52	10.31	19.5	12
T4	9.52	10.31	27.0	18
*T5	9.52	10.31	27.8	20
*T6	9.9	10.7	27.2	22
*T7	9.9	10.7	30	24

Remark: \* means extend items.

Please read the important notes and cautions at the end of this document.



**3, Table 2 General characteristics**

Rated Vol. (V)	A Derated Vol. 125°C (V)	B Derated Vol. 200°C (V)	Nominal Cap. (μF)	Dissipation Factor +25°C +85°C +200°C (%)	Leakage current (μA)		Impedance 100Hz -55°C (Ω)	Cap change rate (%)			85°C 40KHZ AC Ripple current (mA)	Case Code					
					+25°C	+85°C +125°C		-55°C	+85°C	+200°C							
6	4	3.6	30	7	1	2	100	-40	+11	+15	820	T1					
			68	12			60				+14		960				
			140	17			40						+20	1200			
			270	30			25							+25	1375		
			330	30	2	8	20	-44	+18	+20	1800	T2					
			560	45		13	25				-64		+18	+25	1900		
			1200	90		14	20				-80		+25	+30	2265		
8	5	4.8	25	7	1	2	100	-40	+11	+15	820	T1					
			56	10			59				+14		900				
			120	15			50						+18	+20	1220		
			220	30			30							-44	+25	1370	
			290	30	2	6	25	-64	+18	+25	1770	T2					
			430	36		14	25				1825						
			850	50		4	16				22		-80	+25	+30	2330	
10	7	6	20	5	1	2	175	-32	+11	+15	820	T1					
			47	11			100				+14		+18	855			
			100	12			60						+20	1200			
			180	20			40							1365			
			250	25	2	10	30	-40	+18	+25	1720	T2					
			390	25		16	25				-64		+18	1800			
			750	40		4	23				-80		+25	+30	2360		
15	10	9	15	5	1	2	155	-24	+11	+15	780	T1					
			33	8			90				+14		+18	820			
			70	10			75							+18	1150		
			120	15			50								+20	1450	
			170	20	2	10	35	-32	+14	+20	1480	T2					
			270	25		16	30				-56		+18	+25	1740		
			540	35		6	20				23		-80	+25	+30	2330	
25	15	12	10	4	1	2	220	-16	+8	+10	715	T1					
			22	5.5			140				-20		+11	825			
			50	8			70							-28	+13	+15	1130
			100	12			50										1435
			120	18	2	6	38	-32	+13	+15	1450	T2					
			180	20		16	32				-48		1525				
			350	30		7	21				24		-70	+25	+30	1970	

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**Table 2 General characteristics**

Rated Vol. (V)	A Derated Vol. 125°C (V)	B Derated Vol. 200°C (V)	Nominal Cap. (μF)	Dissipation Factor +25°C +85°C +200°C (%)	Leakage current (μA)		Impedance 100Hz -55°C (Ω)	Cap change rate (%)			85°C 40KHZ AC Ripple current (mA)	Case Code
					+25°C	+85°C +125°C		-55°C	+85°C	+200°C		
30	20	18	8	4	1	2	275	-16	+8	+12	640	T1
			15	5			175	-20	+11	+15	780	
			40	8			5	65			-24	1120
			68	11	8	60		+13	1285			
			100	15	2	10	40	-28	+11	+18	1450	T3
			150	20		15	35	-48	+13	+25	1525	
			300	25	8	32	25	-60	+25	+35	1950	T4
50	30	30	5	3	1	2	400	-16	+5	+9	580	T1
			10	4			2	250	-24	+8	+12	
			25	7			5	95	-20	+11	+15	1005
			47	10	8	70	-28	+13	+18	1155		
			60	10	2	10	45	-16	+11	+15	1335	T3
			82	12		12	45	-32	+13	+18	1400	
			160	15	8	30	27	-50	+25	+30	1900	T4
60	40	36	4	2.8	1	2	550	-16	+5	+9	525	T1
			8.2	4			2	275	-24	+8	+12	
			20	6			5	105	-16	+11	+15	930
			39	8	8	90	-28	1110				
			50	9	2	10	50	-16	+11	+15	1330	T3
			68	10		10	45	-32			1365	
			140	12	8	30	28	-40	+20	+25	1850	T4
			*560	50	30	160	25	-60	+40	+50	2800	T5
75	50	45	3.5	2.5	1	2	650	-16	+5	+9	525	T1
			6.8	3.5			2	300	-20	+8	+12	
			15	5			5	150	-16	+11	+18	890
			33	8	9	90	-24	+15	1000			
			40	8	2	10	60	-16	+11	+18	1250	T3
			56	10		12		-28			1335	
100	65	60	110	10	9	30	29	-35	+20	+25	1850	T4
			2.5	2	1	2	950	-16	+7	+10	505	T1
			4.7	3							2	
			11	5	9	4	200	-16	+8	+10	835	T2
			22	6							9	

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**Table 2 General characteristics**

Rated Vol. (V)	A Derated Vol. 125°C (V)	B Derated Vol. 200°C (V)	Nominal Cap. (μF)	Dissipation Factor +25°C +85°C +200°C (%)	Leakage current (μA)		Impedance 100Hz -55°C (Ω)	Cap change rate (%)			85°C 40KHZ AC Ripple current (mA)	Case Code
					+25°C	+85°C +125°C		-55°C	+85°C	+200°C		
100	65	60	30	6	2	10	80	-16			1240	T3
			43	7		14	70				-20	
			86	8	9	30	30	-25	+15	+18	1800	T4
			*400	45	40	120	20	-70	+20	+30	3000	T6
			*440	50	50	140	20	-70	+20	+80	3000	T7
125	85	75	1.7	2	1	2	1250	-16	+7	+10	415	T1
			3.6	2.7		2	600				520	
			9	5		5	240				755	
			14	5		7	167				860	
			18	6	2	9	129				1130	T3
			25	6		10	93				1200	
			56	6.5		10	40				32	-25

**4,How to order**

(GTCA382 476 M 050T2)

GT	CA382	476	M	050	T2
Brand Name	Type	Capacitance	Tolerance	DC voltage	Case code
GTCAP	High-temp Wet Electrolytic Tantalum Capacitor	476: 47X10 <sup>6</sup> (pF)This is expressed in picofarads. The first two digits are the significant figures. The third is the number of zeros to follow.	K=±10% M=±20%	6V=006 8V=008 10V=010 ... 100V=100 125V=125	See table 1

**Notes:**

- Tantalum capacitors can't been measured by multimeter (Easily cause irreversible damage and lead to reject)  
 A Derated Vol. 125°C (V) means temperature range 85°C~125°C (not include 85°C but include 125°C)  
 B Derated Vol. 200°C (V) means temperature range 125°C~200°C (not include 125°C but include 200°C)
- Capacitance, DF measure frequency: 100Hz, U<sub>r</sub>=2.2<sub>-10</sub><sup>0</sup>V, U<sub>w</sub>=1.0<sub>0.5</sub><sup>0</sup>V(effective value), measure method is by series equivalent circuit.
- Measure leakage current above 125°C, please use derated voltage. DLC read within 5 minute.
- Special size and big capacitance products, please negotiate with us

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