



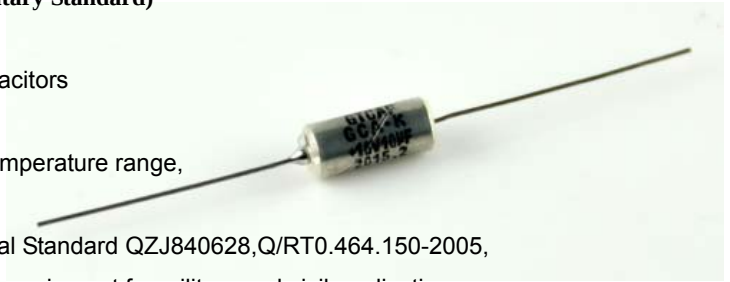
GCA Solid Tantalum Electrolytic Capacitor (Military Standard)

1, Brief Introduction:

GCA Series metal-cased solid tantalum electrolytic capacitors
with polar axial, **Hermetically sealed.**

leads are characterized in small size, wide operating temperature range,
stable performances, high reliability and long life,

GCA Series meets the requirements of Chinese National Standard QZJ840628, Q/RT0.464.150-2005,
Widely used in instruments meters and other electronic equipment for military and civil applications.



2, General Characteristics

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

Capacitance Tolerance: $\pm 20\%$, $\pm 10\%$, $\pm 5\%$

DC Leakage current: (25°C): $I_0 \leq 0.01C_R U_R$ or $0.5\mu\text{A}$ (whichever is greater)

(85°C): $I_0 \leq 0.08C_R U_R$ (μA)

(125°C): $I_0 \leq 0.1C_R U_R$ (μA)

Dissipation factor (20°C): see table 1

Table 1

Capacitance (μF)	Cap. ChangeΔC/C (%)			MAX.					
				DF(%)Max				DCL Max.	
	-55℃	+85℃	+125℃	-55℃	+20℃	+85℃	+125℃	+85℃	+125℃
≤1	±8	±8	±10	3	3	3		8 lo	10lo
1.5～68				5	5	5			
100～330				6	6	6			
470～1000				8	8	8			

Note: (1) Measured at a voltage derating.

3, Drawing ,Dimensions and Max Weight

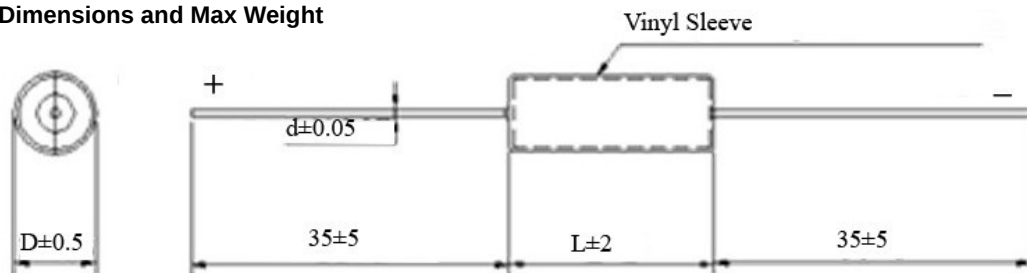


Table 2

Case code	Weight Max (g)	uninsulated		With insulated sleeve		d±0.1 (mm)
		D±0.5 (mm)	L±2 (mm)	D±0.5 (mm)	L±2 (mm)	
1	0.7	3.2	8	4	10	0.4
2	2.3	5	12	5.8	14	0.6
3	3.0	6	14	6.8	16	0.6
4	4.0	8	14	8.8	16	0.8
5	8.0	8	22	8.8	24	0.8
6	14.0	10	22	10.8	24	0.8

Note: When encapsulated with plastic insulation sleeve, dimension D increase 0.8mm and L increase 2mm.



4, Nominal Capacitance, Rated voltage, Voltage Derating

Table 3

Rated voltage	6.3	10	16	25	32	40	63	75	100
Voltage Derating	4	6.3	10	16	20	25	40	50	63
Code	Capacitance (μF)								
1	1.0	0.68	0.33	0.33	0.22	0.22	0.22	0.22	0.047
	1.5	1.0	0.47	0.47	0.33	0.33	0.33	0.33	0.068
	2.2	1.5	0.68	0.68	0.47	0.47	0.47		0.1
	3.3	2.2	1.0	1.0	0.68	0.68			0.15
	4.7	3.3	1.5	1.5	1.0	1.0			0.22
	6.8	4.7	2.2	2.2	1.5				0.33
	10	6.8	3.3						
2	15	10	4.7	3.3	2.2	1.5	0.68	0.47	
	22	15	6.8	4.7	3.3	2.2	1.0	0.68	0.47
	33	22	10	6.8	4.7	3.3	1.5	1.0	0.68
	47	33	15	10	6.8	4.7	2.2	1.5	1.0
	68	47	22	15	10	6.8	3.3	2.2	1.5
			33						
3	100	68	47	22	15	10	4.7	3.3	2.2
		100	68	33		15		4.7	3.3
4	150	150	100	47	22	22	6.8		
	220			68	33	33	10		
5	330	220	150	100	47	47	15		
	470	330	220		68		22		
6	680	470	330	150	100	68	33		
	1000	680	470	220	150	100	47		



5,How to order

(Part No.: GTGCA 105 K 0161)

GT	GCA	105	K	016	1
Brand Name	Type	Capacitance	Tolerance	DC voltage	Case code
Green Tech	Military Solid Electrolyte Tantalum Capacitor	105 10X10 ⁵ (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%	Rated voltage 6.3V=006 10V=010 16V=016 25V=025 32V=032 40V=040 63V=063 75V=075 100V=100	See table 2

Notes:

- 1、Tantalum capacitors can't been measured by multimeter (Easily cause irreversible damage and lead to reject)
- 2、Capacitance, DF measure frequency: 100Hz, $U=2.2_{-1.0}^0V$, $U_{\sim}=1.0_{-0.5}^0V$ (effective value)
- 3、Measure leakage current above 85℃,please use derated voltage.
- 4、Special size and big capacitance products, please negotiate with us.