



CA53D-200°C Wet Tantalum Capacitor

(Hermetic seal)

Characteristics and Application

- ◆ Silver case, **Hermetic Seal**, tubular, Axial leads, **High temperature sleeve**, Polarized.
- ◆ Good performance of electrical, High reliability, long life, Low DF and LC.
- ◆ Small Size, **good high temperature performance, Can use at 200 °C.**
- ◆ Suit for down-hole-drilling instrumentation and high temperature electronic devices DC or pulse circuit.
- ◆ Implementation of standards: QJ/PWV308-2009, Can cross Vishay's 135D



Technical Performance:

Operation temperature: -55°C~+200°C (>85°C use derated voltage)

Capacitance Tolerance: K=±10%; M=±20%; Q=-10%~+30%

Dissipation Factor: 25°C, 100Hz (see table 2)

Leakage current:

25°C $I \leq 0.001 \text{ CRUR} (\mu\text{A})$ or $1\mu\text{A}$ (whichever is greater)

85°C $I \leq 0.008 \text{ CRUR} (\mu\text{A})$ or $8\mu\text{A}$ (whichever is greater)

200°C $I \leq 0.04 \text{ CRUR} (\mu\text{A})$ or $40\mu\text{A}$ (whichever is greater)

Diagram of Dimension (mm)

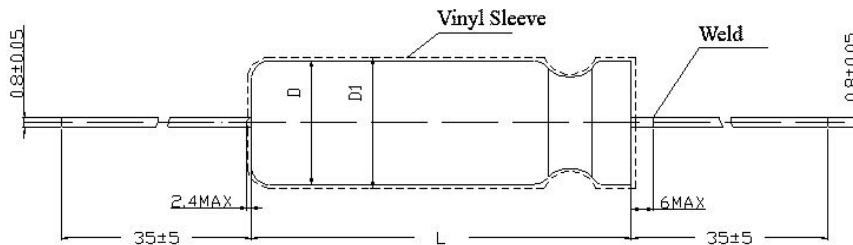


Table1 Case size and Maximum weight

Case code	Max weight (g)	Without Sleeve		With Sleeve	
		D±0.5	L±2	D ₁ max	L max
		(mm)	(mm)	(mm)	(mm)
0	3	5	12	5.8	14
1	4	5	14	5.8	16
2	4	6	15	6.8	17
3	5	8	17	8.8	19
4	7	8	22	8.8	24
5	10	10	22	10.8	24
6	14	10	25	10.8	27
7	17	10	30	10.8	32



Table2 Rated Voltage, derated voltage, capacitance, case code and dissipation factor

Rated Voltage U _R (V) 25°C,85°C	Derated Voltage U _C (V)		Case code	Cap. C _R (μF)	tgδ(%) DF 25°C	Rated Voltage U _R (V) 25°C,85°C	Derated Voltage U _C (V)		Case code	Cap. C _R (μF)	tgδ(%) DF 25°C
	125°C	200°C					125°C	200°C			
	6 (6.3)	4 (4.5)					3.6 (4.0)	0			
0			68	20	0	33		12			
2			140	35	2	70		20			
2			220	40	2	82		25			
3			270	50	2	100		30			
3			330	50	2	120		35			
3			470	70	3	170		60			
3			560	90	3	270		60			
4			820	100	3	390		65			
5			1200	120	4	540		70			
6			1500	120	5	680		75			
7			2200	160	6	820		85			
8	5	4.8	0	25	9	25	15	12	7	1000	100
			0	56	20				0	10	4.6
			2	120	35				0	22	8.3
			2	180	40				2	50	15
			2	220	45				2	56	15
			3	290	50				2	68	20
			3	430	85				2	100	25
			3	680	90				3	120	50
			4	850	100				3	160	50
			6	1500	120				3	180	50
			7	1800	120				3	270	50
			4	350	50				4	350	50
10	7	6	0	20	7	30	20	18	5	470	55
			0	47	15				6	560	60
			2	100	25				6	680	70
			2	120	30				0	8	4.5
			2	150	35				0	15	9
			2	180	45				2	40	15
			3	250	70				2	47	15
			3	390	75				2	56	15
			4	560	85				2	68	20
			4	750	90				3	100	35
			5	1200	120				3	150	35
			6	1500	120				3	220	40
30	20	18	5	470	55	30	20	18	4	300	45
			6	560	65				4	390	50



Rated Voltage U _R (V) 25°C,85°C	Derated Voltage U _C (V)		Case code	Cap. C _R (μF)	tgδ(%) DF 25°C	Rated Voltage U _R (V) 25°C,85°C	Derated Voltage U _C (V)		Case code	Cap. C _R (μF)	tgδ(%) DF 25°C
	125°C	200°C					125°C	200°C			
	35	22					21	0			
2			39	16	0	6.8		8			
2			68	20	2	15		15			
3			100	25	2	22		15			
3			120	30	3	33		20			
4			270	45	3	40		25			
5			330	45	3	47		25			
5			370	50	3	56		25			
5			470	55	3	68		25			
7			680	65	3	82		25			
50	30	30	0	5	5	100	65	60	5	110	25
			0	10	8				0	2.5	5
			2	25	12				1	4.7	6
			2	33	20				2	10	10
			2	47	25				3	22	12
			3	60	25				3	25	20
			3	82	25				3	30	20
			3	100	25				3	39	25
			4	160	28				4	43	25
			5	270	40				4	56	25
60 (63)	40 (42)	36 (38)	0	4	5	125	85	75	5	86	25
			0	8.2	8				6	120	25
			2	20	12				0	1.7	6
			2	27	15				1	3.6	6
			2	39	25				2	6.8	10
			3	50	25				2	9	13
			3	68	25				3	14	13
			3	82	25				3	18	20
			3	100	25				4	22	25
			3	130	28				4	27	25
			4	140	28				4	33	25
			5	270	40						



How to order

(Part No.: GTCA53D 477 K 0255)

GT	CA53D	477	K	025	5
Brand Name	Type	Capacitance	Tolerance	Rated voltage /DC	Case code
Green Tech	Silver case hi-temp. Wet Tantalum Capacitor	477 47X10 ⁷ (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 ... 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_r=2.2⁰_{1.0}V, U_r=1.0⁰_{0.5}V(effective value)
- 3、Measure leakage current above 85°C, please use derated voltage.
- 4、Special size and big capacitance products, please negotiate with us