

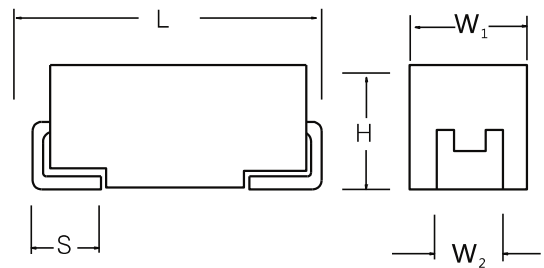
## CA45 Chip Tantalum Capacitors (SMD Tantalum Capacitors)

### ◆ Brief Introduction

General purpose SMT chip tantalum series  
 General low power DC/DC and LDO  
 Operating Standard: QJ/PWV109-2003  
 Factory quality control system: Military Standard GJB9001C-2017  
 Meets RoHS , Reach requirement

### ◆ Specifications

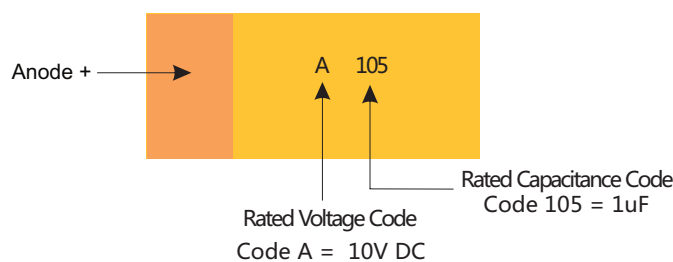
Operating Temperature Range: -55°C ~ +125°C; >85°C(with rated voltage derating);  
 DC Leakage at 25°C:  $I_0 \leq 0.01C_R U_R$  or 0.5uA (Choose the greater one)  
 Capacitance Range: 1uF~1000uF  
 Voltage Range: 6.3V, 10V, 16V, 25V, 35V, 50V, 63V, 75V, 100V  
 Capacitance Tolerance: K: +/-10%; M: +/-20% (+/-20% tolerance is standard)  
 SPQ: A,B case: 2000pcs/reel; C,D case: 500pcs/reel; E case: 400pcs/reel  
 How to order, please refer to Part Number System



◆ Table 1 Dimensions (Unit: mm)

Case Size		L±0.2	W <sub>1</sub> ±0.2	H±0.4	S±0.2	W <sub>2</sub> ±0.2
A	3216	3.20	1.60	1.60	0.80	1.20
B	3528	3.50	2.80	1.90	0.80	2.20
C	6032	6.00	3.20	2.50	1.30	2.20
D	7343	7.30	4.30	2.80	1.30	2.40
E	7343	7.30	4.30	4.10	1.30	2.40

### ◆ Marking on Chip Tantalum Capacitor Body



Voltage Code Table for Chip Tantalum Capacitors

Voltage Code	G	J	A	C	D	E	V	H	T
Rated Voltage	4V	6.3V	10V	16V	20V	25V	35V	40V	50V

## CA45 Chip Tantalum Capacitors (SMD Tantalum Capacitors)

◆Table 2 Temperature Characteristics

Max					
tgδ(%)				DCL (μA)	
-55°C	25°C	85°C	125°C	85°C	125°C
6	4	6		8 I <sub>o</sub>	10 I <sub>o</sub>
8	6	8			
10	8	10			
12	10	12			
14	12	14			
18	16	18			

◆ How to order

<u>CA45</u>	<u>T</u>	<u>106</u>	<u>M</u>	<u>0025</u>	<u>000B</u>	<u>R</u>	<u>000</u>
<b>Type</b>	<b>Material Code</b>	<b>Capacitance Code</b>	<b>Tolerance</b>	<b>For DC Voltage</b>	<b>Size Code</b>	<b>Package</b>	<b>Suffix Indicate Special Requirement</b>
CA45	T: Tantalum Cap For CA45	pF Code: 1st two digits represent significant figures 3rd digit represents multiplier (number of zeros to follow) 106 = 10uF 105 = 1uF	K: +/-10% M: +/-20%	0006: 6.3VDC 0010: 10VDC 0035: 35VDC 0050: 50VDC	Code for Case Size 000A: A case 000B: B case 000C: C case 000D: D case 000E: E case	R: Tape & Reel	000: Indicating Standard

## CA45 Chip Tantalum Capacitors (SMD Tantalum Capacitors)

◆ Table 3 Electrical Characteristics

Part Number	Rated Voltage	Nominal Capacitance	Case Code	Rated Temperature	Category Temperature	Category Voltage	Max DCL at +25°C	Max DF at +25°C 100Hz	Max ESR +25°C Ω 100KHz	Ripple Current (mA)		
										100KHz	Max	
	V	uF	C	C	C	V	Ua	%	Ω	25C	85C	125C
CA45T336#0002000A	2.5	33	A	85	125	1.7	0.8	8	3	158	142	63
CA45T476#0002000A	2.5	47	A	85	125	1.7	1.2	6	3	158	142	63
CA45T686#0002000A	2.5	68	A	85	125	1.7	1.7	8	2.5	173	156	69
CA45T107#0002000A	2.5	100	A	85	125	1.7	2.5	20	3	158	142	63
CA45T107#0002000B	2.5	100	B	85	125	1.7	2.5	8	2	206	186	82
CA45T157#0002000B	2.5	150	B	85	125	1.7	3.8	10	1.8	217	196	87
CA45T227#0002000B	2.5	220	B	85	125	1.7	5.5	16	1.6	230	207	92
CA45T227#0002000D	2.5	220	D	85	125	1.7	5.5	8	0.8	433	390	173
CA45T337#0002000D	2.5	330	D	85	125	1.7	8.3	8	0.3	707	636	283
CA45T477#0002000C	2.5	470	C	85	125	1.7	12	12	0.5	469	422	188
CA45T477#0002000D	2.5	470	D	85	125	1.7	12	8	0.4	612	551	245
CA45T687#0002000C	2.5	680	C	85	125	1.7	17	18	0.6	428	385	171
CA45T687#0002000D	2.5	680	D	85	125	1.7	17	16	0.5	548	493	219
CA45T687#0002000E	2.5	680	E	85	125	1.7	17	10	0.5	574	517	230
CA45T108#0002000D	2.5	1000	D	85	125	1.7	25	18	0.5	548	493	219
CA45T108#0002000E	2.5	1000	E	85	125	1.7	25	14	0.4	642	578	257
CA45T158#0002000D	2.5	1500	D	85	125	1.7	38	20	0.4	612	551	245
CA45T158#0002000E	2.5	1500	E	85	125	1.7	38	14	0.3	742	667	297
CA45T158#0002000V	2.5	1500	V	85	125	1.7	38	14	0.2	1118	1006	447
CA45T228#0002000V	2.5	2200	V	85	125	1.7	55	20	0.4	791	712	316
CA45T225#0004000A	4	2.2	A	85	125	2.7	0.5	6	3	158	142	63
CA45T335#0004000A	4	3.3	A	85	125	2.7	0.5	6	3	158	142	63
CA45T475#0004000A	4	4.7	A	85	125	2.7	0.5	6	3	158	142	63
CA45T475#0004000B	4	4.7	B	85	125	2.7	0.5	6	2	206	186	82
CA45T685#0004000A	4	6.8	A	85	125	2.7	0.5	6	2.5	173	156	69
CA45T685#0004000B	4	6.8	B	85	125	2.7	0.5	6	2	206	186	82
CA45T106#0004000A	4	10	A	85	125	2.7	0.5	6	3	158	142	63
CA45T106#0004000B	4	10	B	85	125	2.7	0.5	6	2.5	184	166	74
CA45T156#0004000A	4	15	A	85	125	2.7	0.6	6	3	158	142	63
CA45T156#0004000B	4	15	B	85	125	2.7	0.6	6	2.5	184	166	74
CA45T156#0004000C	4	15	C	85	125	2.7	0.6	6	1.5	271	244	108
CA45T226#0004000A	4	22	A	85	125	2.7	0.9	6	3	158	142	63
CA45T226#0004000B	4	22	B	85	125	2.7	0.9	6	2.5	184	166	74
CA45T226#0004000C	4	22	C	85	125	2.7	0.9	6	1.5	271	244	108
CA45T336#0004000A	4	33	A	85	125	2.7	1.3	8	3	158	142	63
CA45T336#0004000B	4	33	B	85	125	2.7	1.3	6	2.5	184	166	74
CA45T336#0004000C	4	33	C	85	125	2.7	1.3	6	1.5	271	244	108
CA45T476#0004000A	4	47	A	85	125	2.7	1.9	8	3	158	142	63
CA45T476#0004000B	4	47	B	85	125	2.7	1.9	6	2.5	184	166	74
CA45T476#0004000C	4	47	C	85	125	2.7	1.9	6	1.5	271	244	108
CA45T686#0004000A	4	68	A	85	125	2.7	2.7	14	2.5	173	156	69
CA45T686#0004000B	4	68	B	85	125	2.7	2.7	6	1.8	217	196	87
CA45T686#0004000C	4	68	C	85	125	2.7	2.7	6	1.5	271	244	108
CA45T107#0004000A	4	100	A	85	125	2.7	4	18	3	158	142	63
CA45T107#0004000B	4	100	B	85	125	2.7	4	14	2	206	186	82
CA45T107#0004000C	4	100	C	85	125	2.7	4	8	1.5	271	244	108
CA45T157#0004000B	4	150	B	85	125	2.7	6	16	1.8	217	196	87
CA45T157#0004000C	4	150	C	85	125	2.7	6	8	1.2	303	272	121
CA45T157#0004000D	4	150	D	85	125	2.7	6	8	0.8	433	390	173
CA45T227#0004000B	4	220	B	85	125	2.7	8.8	18	1.6	230	207	92
CA45T227#0004000C	4	220	C	85	125	2.7	8.8	10	1.2	303	272	121
CA45T227#0004000D	4	220	D	85	125	2.7	8.8	8	0.8	433	390	173
CA45T337#0004000C	4	330	C	85	125	2.7	13	10	1.2	303	272	121
CA45T337#0004000D	4	330	D	85	125	2.7	13	8	0.9	408	367	163

## CA45 Chip Tantalum Capacitors (SMD Tantalum Capacitors)

◆ **Table 3 Electrical Characteristics**

Part Number	Rated Voltage	Nominal Capacitance	Case Code	Rated Temperature	Category Temperature	Category Voltage	Max DCL at +25°C	Max DF at +25°C 100Hz	Max ESR +25°C Ω 100KHz	Ripple Current (mA) 100KHz Max		
										25C	85C	125C
CA45T337#0004000E	4	330	E	85	125	2.7	13	12	0.8	454	409	182
CA45T477#0004000C	4	470	C	85	125	2.7	19	14	0.5	469	422	188
CA45T477#0004000D	4	470	D	85	125	2.7	19	10	0.4	612	551	245
CA45T477#0004000E	4	470	E	85	125	2.7	19	10	0.4	642	578	257
CA45T687#0004000D	4	680	D	85	125	2.7	27	12	0.5	548	493	219
CA45T687#0004000E	4	680	E	85	125	2.7	27	14	0.5	574	517	230
CA45T108#0004000D	4	1000	D	85	125	2.7	40	20	0.5	548	493	219
CA45T108#0004000E	4	1000	E	85	125	2.7	40	14	0.4	642	578	257
CA45T108#0004000V	4	1000	V	85	125	2.7	40	12	0.3	913	822	365
CA45T158#0004000E	4	1500	E	85	125	2.7	60	14	0.3	742	667	297
CA45T158#0004000V	4	1500	V	85	125	2.7	60	18	0.2	1118	1006	447
CA45T155#0006000A	6.3	1.5	A	85	125	4	0.5	6	3	158	142	63
CA45T225#0006000A	6.3	2.2	A	85	125	4	0.5	6	3	158	142	63
CA45T335#0006000A	6.3	3.3	A	85	125	4	0.5	6	3	158	142	63
CA45T335#0006000B	6.3	3.3	B	85	125	4	0.5	6	2.5	184	166	74
CA45T475#0006000A	6.3	4.7	A	85	125	4	0.5	6	3	158	142	63
CA45T475#0006000B	6.3	4.7	B	85	125	4	0.5	6	2	206	186	82
CA45T685#0006000A	6.3	6.8	A	85	125	4	0.5	6	2.5	173	156	69
CA45T685#0006000B	6.3	6.8	B	85	125	4	0.5	6	2	206	186	82
CA45T106#0006000A	6.3	10	A	85	125	4	0.6	6	3	158	142	63
CA45T106#0006000B	6.3	10	B	85	125	4	0.6	6	2.5	184	166	74
CA45T106#0006000C	6.3	10	C	85	125	4	0.6	6	1.5	271	244	108
CA45T156#0006000A	6.3	15	A	85	125	4	0.9	6	3	158	142	63
CA45T156#0006000B	6.3	15	B	85	125	4	0.9	6	2.5	184	166	74
CA45T156#0006000C	6.3	15	C	85	125	4	0.9	6	1.5	271	244	108
CA45T226#0006000A	6.3	22	A	85	125	4	1.4	8	3	158	142	63
CA45T226#0006000B	6.3	22	B	85	125	4	1.4	6	2.5	184	166	74
CA45T226#0006000C	6.3	22	C	85	125	4	1.4	6	1.5	271	244	108
CA45T336#0006000A	6.3	33	A	85	125	4	2.1	8	3	158	142	63
CA45T336#0006000B	6.3	33	B	85	125	4	2.1	6	2.5	184	166	74
CA45T336#0006000C	6.3	33	C	85	125	4	2.1	6	1.5	271	244	108
CA45T476#0006000A	6.3	47	A	85	125	4	3	10	3	158	142	63
CA45T476#0006000B	6.3	47	B	85	125	4	3	8	2.5	184	166	74
CA45T476#0006000C	6.3	47	C	85	125	4	3	6	1.5	271	244	108
CA45T686#0006000A	6.3	68	A	85	125	4	4.3	14	3	158	142	63
CA45T686#0006000B	6.3	68	B	85	125	4	4.3	10	1.5	238	214	95
CA45T686#0006000C	6.3	68	C	85	125	4	4.3	8	1	332	298	133
CA45T107#0006000A	6.3	100	A	85	125	4	10	26	3	158	142	63
CA45T107#0006000B	6.3	100	B	85	125	4	6.3	14	2	206	186	82
CA45T107#0006000C	6.3	100	C	85	125	4	6.3	8	1.5	271	244	108
CA45T157#0006000B	6.3	150	B	85	125	4	9.5	18	1.8	217	196	87
CA45T157#0006000C	6.3	150	C	85	125	4	9.5	10	1.2	303	272	121
CA45T157#0006000D	6.3	150	D	85	125	4	9.5	8	0.8	433	390	173
CA45T227#0006000B	6.3	220	B	85	125	4	14	18	1.6	230	207	92
CA45T227#0006000C	6.3	220	C	85	125	4	14	14	1.2	303	272	121
CA45T227#0006000D	6.3	220	D	85	125	4	14	8	0.8	433	390	173
CA45T337#0006000C	6.3	330	C	85	125	4	21	14	1.2	303	272	121
CA45T337#0006000D	6.3	330	D	85	125	4	21	8	0.9	408	367	163
CA45T337#0006000E	6.3	330	E	85	125	4	21	8	0.8	454	409	182
CA45T477#0006000D	6.3	470	D	85	125	4	30	14	0.4	612	551	245
CA45T477#0006000E	6.3	470	E	85	125	4	30	10	0.4	642	578	257
CA45T477#0006000V	6.3	470	V	85	125	4	30	10	0.4	791	712	316
CA45T687#0006000E	6.3	680	E	85	125	4	43	10	0.5	574	517	230
CA45T687#0006000V	6.3	680	V	85	125	4	43	10	0.4	791	712	316

## CA45 Chip Tantalum Capacitors (SMD Tantalum Capacitors)

◆ **Table 3 Electrical Characteristics**

Part Number	Rated Voltage	Nominal Capacitance	Case Code	Rated Temperature	Category Temperature	Category Voltage	Max DCL at +25°C	Max DF at +25°C 100Hz	Max ESR +25°C.Ω 100KHz	Ripple Current (mA) 100KHz Max		
	V	uF	C	C	C	V	Ua	%	Ω	25C	85C	125C
CA45T108#0006000E	6.3	1000	E	85	125	4	63	14	0.4	642	578	257
CA45T108#0006000V	6.3	1000	V	85	125	4	63	14	0.3	913	822	365
CA45T105#0010000A	10	1	A	85	125	6.3	0.5	4	3	158	142	63
CA45T105#0010000B	10	1	B	85	125	6.3	0.5	4	2.5	184	166	74
CA45T155#0010000A	10	1.5	A	85	125	6.3	0.5	6	3	158	142	63
CA45T225#0010000A	10	2.2	A	85	125	6.3	0.5	6	3	158	142	63
CA45T225#0010000B	10	2.2	B	85	125	6.3	0.5	6	2.5	184	166	74
CA45T335#0010000A	10	3.3	A	85	125	6.3	0.5	6	3	158	142	63
CA45T335#0010000B	10	3.3	B	85	125	6.3	0.5	6	2.5	184	166	74
CA45T475#0010000A	10	4.7	A	85	125	6.3	0.5	6	3	158	142	63
CA45T475#0010000B	10	4.7	B	85	125	6.3	0.5	6	2	206	186	82
CA45T685#0010000A	10	6.8	A	85	125	6.3	0.7	6	2.5	173	156	69
CA45T685#0010000B	10	6.8	B	85	125	6.3	0.7	6	2	206	186	82
CA45T685#0010000C	10	6.8	C	85	125	6.3	0.7	6	1.5	271	244	108
CA45T106#0010000A	10	10	A	85	125	6.3	1	6	3	158	142	63
CA45T106#0010000B	10	10	B	85	125	6.3	1	6	2.5	184	166	74
CA45T106#0010000C	10	10	C	85	125	6.3	1	6	1.5	271	244	108
CA45T156#0010000A	10	15	A	85	125	6.3	1.5	6	3	158	142	63
CA45T156#0010000B	10	15	B	85	125	6.3	1.5	6	2.5	184	166	74
CA45T156#0010000C	10	15	C	85	125	6.3	1.5	6	1.5	271	244	108
CA45T226#0010000A	10	22	A	85	125	6.3	2.2	8	3	158	142	63
CA45T226#0010000B	10	22	B	85	125	6.3	2.2	6	2.5	184	166	74
CA45T226#0010000C	10	22	C	85	125	6.3	2.2	6	1.5	271	244	108
CA45T336#0010000A	10	33	A	85	125	6.3	3.3	14	3	158	142	63
CA45T336#0010000B	10	33	B	85	125	6.3	3.3	6	2.5	184	166	74
CA45T336#0010000C	10	33	C	85	125	6.3	3.3	6	1.5	271	244	108
CA45T476#0010000A	10	47	A	85	125	6.3	10	26	3	158	142	63
CA45T476#0010000B	10	47	B	85	125	6.3	4.7	8	2	206	186	82
CA45T476#0010000C	10	47	C	85	125	6.3	4.7	6	1	332	298	133
CA45T686#0010000A	10	68	A	85	125	6.3	6.8	26	2.5	173	156	69
CA45T686#0010000B	10	68	B	85	125	6.3	6.8	10	1.4	246	222	99
CA45T686#0010000C	10	68	C	85	125	6.3	6.8	6	1.5	271	244	108
CA45T686#0010000D	10	68	D	85	125	6.3	6.8	6	0.8	433	390	173
CA45T107#0010000A	10	100	A	85	125	6.3	10	26	3	158	142	63
CA45T107#0010000B	10	100	B	85	125	6.3	10	18	2	206	186	82
CA45T107#0010000C	10	100	C	85	125	6.3	10	8	1.5	271	244	108
CA45T107#0010000D	10	100	D	85	125	6.3	10	8	1	387	349	155
CA45T157#0010000C	10	150	C	85	125	6.3	15	10	1.2	303	272	121
CA45T157#0010000D	10	150	D	85	125	6.3	15	8	0.8	433	390	173
CA45T157#0010000E	10	150	E	85	125	6.3	15	8	0.6	524	472	210
CA45T227#0010000C	10	220	C	85	125	6.3	22	14	1.2	303	272	121
CA45T227#0010000D	10	220	D	85	125	6.3	22	8	0.8	433	390	173
CA45T227#0010000E	10	220	E	85	125	6.3	22	8	0.6	524	472	210
CA45T337#0010000D	10	330	D	85	125	6.3	33	14	0.9	408	367	163
CA45T337#0010000E	10	330	E	85	125	6.3	33	8	0.8	454	409	182
CA45T337#0010000V	10	330	V	85	125	6.3	33	10	0.8	559	503	224
CA45T477#0010000E	10	470	E	85	125	6.3	47	14	0.4	642	578	257
CA45T477#0010000V	10	470	V	85	125	6.3	47	14	0.4	791	712	316
CA45T687#0010000E	10	680	E	85	125	6.3	68	14	0.5	574	517	230
CA45T105#0016000A	16	1	A	85	125	10	0.5	4	6	112	101	45
CA45T105#0016000B	16	1	B	85	125	10	0.5	4	2.5	184	166	74
CA45T155#0016000A	16	1.5	A	85	125	10	0.5	6	5	122	110	49

## CA45 Chip Tantalum Capacitors (SMD Tantalum Capacitors)

◆ Table 3 Electrical Characteristics

Part Number	Rated Voltage	Nominal Capacitance	Case Code	Rated Temperature	Category Temperature	Category Voltage	Max DCL at +25°C	Max DF at +25°C 100Hz	Max ESR +25°C Ω 100KHz	Ripple Current (mA) 100KHz Max		
										25C	85C	125C
CA45T155#0016000B	16	1.5	B	85	125	10	0.5	6	2.5	184	166	74
CA45T225#0016000A	16	2.2	A	85	125	10	0.5	6	5	122	110	49
CA45T225#0016000B	16	2.2	B	85	125	10	0.5	6	2.5	184	166	74
CA45T335#0016000A	16	3.3	A	85	125	10	0.5	6	5	122	110	49
CA45T335#0016000B	16	3.3	B	85	125	10	0.5	6	2.5	184	166	74
CA45T475#0016000A	16	4.7	A	85	125	10	0.8	6	5	122	110	49
CA45T475#0016000B	16	4.7	B	85	125	10	0.8	6	3	168	151	67
CA45T475#0016000C	16	4.7	C	85	125	10	0.8	6	1.8	247	222	99
CA45T685#0016000A	16	6.8	A	85	125	10	1.1	6	4	137	123	55
CA45T685#0016000B	16	6.8	B	85	125	10	1.1	6	2	206	186	82
CA45T685#0016000C	16	6.8	C	85	125	10	1.1	6	1.5	271	244	108
CA45T106#0016000A	16	10	A	85	125	10	1.6	6	3	158	142	63
CA45T106#0016000B	16	10	B	85	125	10	1.6	6	2.5	184	166	74
CA45T106#0016000C	16	10	C	85	125	10	1.6	6	1.5	271	244	108
CA45T156#0016000A	16	15	A	85	125	10	2.4	6	3	158	142	63
CA45T156#0016000B	16	15	B	85	125	10	2.4	6	2.5	184	166	74
CA45T156#0016000C	16	15	C	85	125	10	2.4	6	1.5	271	244	108
CA45T226#0016000A	16	22	A	85	125	10	3.5	15	3	158	142	63
CA45T226#0016000B	16	22	B	85	125	10	3.5	6	2.5	184	166	74
CA45T226#0016000C	16	22	C	85	125	10	3.5	6	1.5	271	244	108
CA45T336#0016000B	16	33	B	85	125	10	5.3	8	2.5	184	166	74
CA45T336#0016000C	16	33	C	85	125	10	5.3	6	1.5	271	244	108
CA45T336#0016000D	16	33	D	85	125	10	5.3	6	1	387	349	155
CA45T476#0016000B	16	47	B	85	125	10	7.5	10	2.5	184	166	74
CA45T476#0016000C	16	47	C	85	125	10	7.5	6	1.5	271	244	108
CA45T476#0016000D	16	47	D	85	125	10	7.5	6	0.8	433	390	173
CA45T476#0016000E	16	47	E	85	125	10	7.5	6	0.6	524	472	210
CA45T686#0016000B	16	68	B	85	125	10	11	12	1.5	238	214	95
CA45T686#0016000C	16	68	C	85	125	10	11	6	1.5	271	244	108
CA45T686#0016000D	16	68	D	85	125	10	11	6	0.8	433	390	173
CA45T686#0016000E	16	68	E	85	125	10	11	6	0.7	486	437	194
CA45T107#0016000C	16	100	C	85	125	10	16	12	1.5	271	244	108
CA45T107#0016000D	16	100	D	85	125	10	16	8	1	387	349	155
CA45T107#0016000E	16	100	E	85	125	10	16	6	0.7	486	437	194
CA45T157#0016000D	16	150	D	85	125	10	24	8	0.8	433	390	173
CA45T157#0016000E	16	150	E	85	125	10	24	8	0.6	524	472	210
CA45T157#0016000V	16	150	V	85	125	10	24	8	0.4	791	712	316
CA45T227#0016000D	16	220	D	85	125	10	35	14	0.8	433	390	173
CA45T227#0016000E	16	220	E	85	125	10	35	10	0.6	524	472	210
CA45T227#0016000V	16	220	V	85	125	10	35	8	0.5	707	636	283
CA45T337#0016000E	16	330	E	85	125	10	53	14	0.8	454	409	182
CA45T337#0016000V	16	330	V	85	125	10	53	12	0.8	559	503	224
CA45T477#0016000E	16	470	E	85	125	10	75	16	0.4	642	578	257
CA45T474#0020000A	20	0.47	A	85	125	15	0.5	4	10	87	78	35
CA45T684#0020000A	20	0.68	A	85	125	15	0.5	4	6	112	101	45
CA45T105#0020000A	20	1	A	85	125	15	0.5	4	6	112	101	45
CA45T105#0020000B	20	1	B	85	125	15	0.5	4	2.5	184	166	74
CA45T155#0020000A	20	1.5	A	85	125	15	0.5	6	5	122	110	49
CA45T155#0020000B	20	1.5	B	85	125	15	0.5	6	2.5	184	166	74
CA45T225#0020000A	20	2.2	A	85	125	15	0.5	6	4	137	123	55
CA45T225#0020000B	20	2.2	B	85	125	15	0.5	6	2.5	184	166	74
CA45T335#0020000A	20	3.3	A	85	125	15	0.7	6	4.5	129	116	52

## CA45 Chip Tantalum Capacitors (SMD Tantalum Capacitors)

◆ Table 3 Electrical Characteristics

Part Number	Rated Voltage	Nominal Capacitance	Case Code	Rated Temperature	Category Temperature	Category Voltage	Max DCL at +25°C	Max DF at +25°C 100Hz	Max ESR +25°CΩ 100KHz	Ripple Current (mA) 100KHz Max		
	V	μF	C	C	C	V	Ua	%	Ω	25C	85C	125C
CA45T335#0020000B	20	3.3	B	85	125	15	0.7	6	2.5	184	166	74
CA45T335#0020000C	20	3.3	C	85	125	15	0.7	6	2	235	211	94
CA45T475#0020000A	20	4.7	A	85	125	15	0.9	6	3	158	142	63
CA45T475#0020000B	20	4.7	B	85	125	15	0.9	6	2	206	186	82
CA45T475#0020000C	20	4.7	C	85	125	15	0.9	6	1.8	247	222	99
CA45T685#0020000A	20	6.8	A	85	125	15	1.4	6	2.5	173	156	69
CA45T685#0020000B	20	6.8	B	85	125	15	1.4	6	2	206	186	82
CA45T685#0020000C	20	6.8	C	85	125	15	1.4	6	1.5	271	244	108
CA45T106#0020000A	20	10	A	85	125	15	2	8	3	158	142	63
CA45T106#0020000B	20	10	B	85	125	15	2	6	2.5	184	166	74
CA45T106#0020000C	20	10	C	85	125	15	2	6	1.5	271	244	108
CA45T156#0020000B	20	15	B	85	125	15	3	6	2.5	184	166	74
CA45T156#0020000C	20	15	C	85	125	15	3	6	1.5	271	244	108
CA45T156#0020000D	20	15	D	85	125	15	3	6	1	387	349	155
CA45T226#0020000B	20	22	B	85	125	15	4.4	7	2.5	184	166	74
CA45T226#0020000C	20	22	C	85	125	15	4.4	6	1.5	271	244	108
CA45T226#0020000D	20	22	D	85	125	15	4.4	6	0.8	433	390	173
CA45T336#0020000C	20	33	C	85	125	15	6.6	6	1.5	271	244	108
CA45T336#0020000D	20	33	D	85	125	15	6.6	6	1	387	349	155
CA45T476#0020000C	20	47	C	85	125	15	9.4	8	1.5	271	244	108
CA45T476#0020000D	20	47	D	85	125	15	9.4	6	0.8	433	390	173
CA45T476#0020000E	20	47	E	85	125	15	9.4	6	0.6	524	472	210
CA45T686#0020000C	20	68	C	85	125	15	14	8	1.5	271	244	108
CA45T686#0020000D	20	68	D	85	125	15	14	6	0.8	433	390	173
CA45T686#0020000E	20	68	E	85	125	15	14	6	0.7	486	437	194
CA45T107#0020000D	20	100	D	85	125	15	20	6	1	387	349	155
CA45T107#0020000E	20	100	E	85	125	15	20	6	0.7	486	437	194
CA45T107#0020000V	20	100	V	85	125	15	20	8	0.5	707	636	283
CA45T157#0020000D	20	150	D	85	125	15	30	10	0.8	433	390	173
CA45T157#0020000E	20	150	E	85	125	15	30	8	0.6	524	472	210
CA45T157#0020000V	20	150	V	85	125	15	30	8	0.4	791	712	316
CA45T227#0020000E	20	220	E	85	125	15	44	12	0.6	524	472	210
CA45T227#0020000V	20	220	V	85	125	15	44	12	0.5	707	636	283
CA45T337#0020000E	20	330	E	85	125	15	66	12	0.8	454	409	182
CA45T337#0020000V	20	330	V	85	125	15	66	12	0.8	559	503	224
CA45T334#0025000A	25	0.33	A	85	125	17	0.5	4	10	87	78	35
CA45T474#0025000A	25	0.47	A	85	125	17	0.5	4	10	87	78	35
CA45T684#0025000A	25	0.68	A	85	125	17	0.5	4	6	112	101	45
CA45T684#0025000B	25	0.68	B	85	125	17	0.5	4	4	146	131	58
CA45T105#0025000A	25	1	A	85	125	17	0.5	4	6	112	101	45
CA45T105#0025000B	25	1	B	85	125	17	0.5	4	2.5	184	166	74
CA45T155#0025000A	25	1.5	A	85	125	17	0.5	6	5	122	110	49
CA45T155#0025000B	25	1.5	B	85	125	17	0.5	6	2.5	184	166	74
CA45T225#0025000A	25	2.2	A	85	125	17	0.6	6	4	137	123	55
CA45T225#0025000B	25	2.2	B	85	125	17	0.6	6	2.5	184	166	74
CA45T225#0025000C	25	2.2	C	85	125	17	0.6	6	1.5	271	244	108
CA45T335#0025000A	25	3.3	A	85	125	17	0.8	6	3	158	142	63
CA45T335#0025000B	25	3.3	B	85	125	17	0.8	6	2.5	184	166	74
CA45T335#0025000C	25	3.3	C	85	125	17	0.8	6	2	235	211	94
CA45T475#0025000A	25	4.7	A	85	125	17	1.2	6	3	158	142	63
CA45T475#0025000B	25	4.7	B	85	125	17	1.2	6	2	206	186	82
CA45T475#0025000C	25	4.7	C	85	125	17	1.2	6	1.8	247	222	99

## CA45 Chip Tantalum Capacitors (SMD Tantalum Capacitors)

◆ **Table 3 Electrical Characteristics**

Part Number	Rated Voltage	Nominal Capacitance	Case Code	Rated Temperature	Category Temperature	Category Voltage	Max DCL at +25°C	Max DF at +25°C 100Hz	Max ESR +25°CΩ 100KHz	Ripple Current (mA) 100KHz Max		
										25C	85C	125C
CA45T685#0025000B	25	6.8	B	85	125	17	1.7	6	2	206	186	82
CA45T685#0025000C	25	6.8	C	85	125	17	1.7	6	1.5	271	244	108
CA45T685#0025000D	25	6.8	D	85	125	17	1.7	6	1.2	354	318	141
CA45T106#0025000B	25	10	B	85	125	17	2.5	6	2.5	184	166	74
CA45T106#0025000C	25	10	C	85	125	17	2.5	6	1.5	271	244	108
CA45T106#0025000D	25	10	D	85	125	17	2.5	6	1	387	349	155
CA45T156#0025000B	25	15	B	85	125	17	3.8	8	2.5	184	166	74
CA45T156#0025000C	25	15	C	85	125	17	3.8	6	1.5	271	244	108
CA45T156#0025000D	25	15	D	85	125	17	3.8	6	1	387	349	155
CA45T226#0025000C	25	22	C	85	125	17	5.5	6	1.5	271	244	108
CA45T226#0025000D	25	22	D	85	125	17	5.5	6	0.8	433	390	173
CA45T336#0025000D	25	33	D	85	125	17	8.3	6	1	387	349	155
CA45T336#0025000E	25	33	E	85	125	17	8.3	6	0.8	454	409	182
CA45T476#0025000D	25	47	D	85	125	17	12	6	0.8	433	390	173
CA45T476#0025000E	25	47	E	85	125	17	12	6	0.6	524	472	210
CA45T686#0025000D	25	68	D	85	125	17	17	8	0.8	433	390	173
CA45T686#0025000E	25	68	E	85	125	17	17	6	0.7	486	437	194
CA45T686#0025000V	25	68	V	85	125	17	17	6	0.5	707	636	283
CA45T107#0025000E	25	100	E	85	125	17	25	10	0.7	486	437	194
CA45T107#0025000V	25	100	V	85	125	17	25	8	0.5	707	636	283
CA45T157#0025000E	25	150	E	85	125	17	38	10	0.6	524	472	210
CA45T157#0025000V	25	150	V	85	125	17	38	10	0.4	791	712	316
CA45T154#0035000A	35	0.15	A	85	125	23	0.5	4	15	71	64	28
CA45T224#0035000A	35	0.22	A	85	125	23	0.5	4	15	71	64	28
CA45T334#0035000A	35	0.33	A	85	125	23	0.5	4	10	87	78	35
CA45T474#0035000A	35	0.47	A	85	125	23	0.5	4	10	87	78	35
CA45T474#0035000B	35	0.47	B	85	125	23	0.5	4	6	119	107	48
CA45T684#0035000A	35	0.68	A	85	125	23	0.5	4	6	112	101	45
CA45T684#0035000B	35	0.68	B	85	125	23	0.5	4	4	146	131	58
CA45T105#0035000A	35	1	A	85	125	23	0.5	4	6	112	101	45
CA45T105#0035000B	35	1	B	85	125	23	0.5	4	2.5	184	166	74
CA45T155#0035000A	35	1.5	A	85	125	23	0.5	6	6	112	101	45
CA45T155#0035000B	35	1.5	B	85	125	23	0.5	6	2.5	184	166	74
CA45T155#0035000C	35	1.5	C	85	125	23	0.5	6	1.5	271	244	108
CA45T225#0035000A	35	2.2	A	85	125	23	0.8	6	5	122	110	49
CA45T225#0035000B	35	2.2	B	85	125	23	0.8	6	2.5	184	166	74
CA45T225#0035000C	35	2.2	C	85	125	23	0.8	6	1.5	271	244	108
CA45T335#0035000B	35	3.3	B	85	125	23	1.2	6	2.5	184	166	74
CA45T335#0035000C	35	3.3	C	85	125	23	1.2	6	2	235	211	94
CA45T475#0035000B	35	4.7	B	85	125	23	1.6	6	2	206	186	82
CA45T475#0035000C	35	4.7	C	85	125	23	1.6	6	1.8	247	222	99
CA45T475#0035000D	35	4.7	D	85	125	23	1.6	6	1.2	354	318	141
CA45T685#0035000B	35	6.8	B	85	125	23	2.4	6	1.8	217	196	87
CA45T685#0035000C	35	6.8	C	85	125	23	2.4	6	1.5	271	244	108
CA45T685#0035000D	35	6.8	D	85	125	23	2.4	6	1.2	354	318	141
CA45T106#0035000C	35	10	C	85	125	23	3.5	6	1.5	271	244	108
CA45T106#0035000D	35	10	D	85	125	23	3.5	6	1	387	349	155
CA45T106#0035000E	35	10	E	85	125	23	3.5	6	0.8	454	409	182
CA45T156#0035000C	35	15	C	85	125	23	5.3	6	1.5	271	244	108
CA45T156#0035000D	35	15	D	85	125	23	5.3	6	1	387	349	155
CA45T156#0035000E	35	15	E	85	125	23	5.3	6	0.8	454	409	182
CA45T226#0035000C	35	22	C	85	125	23	7.7	6	1.5	271	244	108



## CA45 Chip Tantalum Capacitors (SMD Tantalum Capacitors)

◆ Table 3 Electrical Characteristics

Part Number	Rated Voltage	Nominal Capacitance	Case Code	Rated Temperature	Category Temperature	Category Voltage	Max DCL at +25°C	Max DF at +25°C 100Hz	Max ESR +25°CΩ 100KHz	Ripple Current (mA) 100KHz Max		
										25C	85C	125C
CA45T226#0035000D	35	22	D	85	125	23	7.7	6	0.8	433	390	173
CA45T226#0035000E	35	22	E	85	125	23	7.7	6	0.5	574	517	230
CA45T336#0035000D	35	33	D	85	125	23	12	6	1	387	349	155
CA45T336#0035000E	35	33	E	85	125	23	12	6	0.8	454	409	182
CA45T336#0035000V	35	33	V	85	125	23	12	6	0.5	707	636	283
CA45T476#0035000D	35	47	D	85	125	23	17	10	0.8	433	390	173
CA45T476#0035000E	35	47	E	85	125	23	17	10	0.6	524	472	210
CA45T476#0035000V	35	47	V	85	125	23	17	8	0.4	791	712	316
CA45T686#0035000E	35	68	E	85	125	23	24	8	0.7	486	437	194
CA45T686#0035000V	35	68	V	85	125	23	24	6	0.5	707	636	283
CA45T154#0050000A	50	0.15	A	85	125	33	0.5	4	15	71	64	28
CA45T154#0050000B	50	0.15	B	85	125	33	0.5	4	14	78	70	31
CA45T224#0050000A	50	0.22	A	85	125	33	0.5	4	15	71	64	28
CA45T224#0050000B	50	0.22	B	85	125	33	0.5	4	14	78	70	31
CA45T334#0050000A	50	0.33	A	85	125	33	0.5	4	10	87	78	35
CA45T334#0050000B	50	0.33	B	85	125	33	0.5	4	8	103	93	41
CA45T474#0050000B	50	0.47	B	85	125	33	0.5	4	6	119	107	48
CA45T474#0050000C	50	0.47	C	85	125	33	0.5	4	3	191	172	77
CA45T684#0050000A	50	0.68	A	85	125	33	0.5	4	6	112	101	45
CA45T684#0050000B	50	0.68	B	85	125	33	0.5	4	4	146	131	58
CA45T684#0050000C	50	0.68	C	85	125	33	0.5	4	3	191	172	77
CA45T105#0050000A	50	1	A	85	125	33	0.5	4	6	112	101	45
CA45T105#0050000B	50	1	B	85	125	33	0.5	6	2.5	184	166	74
CA45T105#0050000C	50	1	C	85	125	33	0.5	4	2	235	211	94
CA45T155#0050000B	50	1.5	B	85	125	33	0.8	8	2.5	184	166	74
CA45T155#0050000C	50	1.5	C	85	125	33	0.8	6	1.5	271	244	108
CA45T155#0050000D	50	1.5	D	85	125	33	0.8	6	1.2	354	318	141
CA45T225#0050000B	50	2.2	B	85	125	33	1.1	8	2.5	184	166	74
CA45T225#0050000C	50	2.2	C	85	125	33	1.1	6	2.5	210	189	84
CA45T225#0050000D	50	2.2	D	85	125	33	1.1	6	2.5	245	220	98
CA45T335#0050000C	50	3.3	C	85	125	33	1.7	6	2	235	211	94
CA45T335#0050000D	50	3.3	D	85	125	33	1.7	6	1.5	316	285	126
CA45T475#0050000C	50	4.7	C	85	125	33	2.4	6	1.8	247	222	99
CA45T475#0050000D	50	4.7	D	85	125	33	2.4	6	1.2	354	318	141
CA45T685#0050000C	50	6.8	C	85	125	33	3.4	6	1.5	271	244	108
CA45T685#0050000D	50	6.8	D	85	125	33	3.4	6	1.2	354	318	141
CA45T685#0050000E	50	6.8	E	85	125	33	3.4	6	1	406	366	162
CA45T106#0050000D	50	10	D	85	125	33	5	6	1	387	349	155
CA45T106#0050000E	50	10	E	85	125	33	5	6	0.8	454	409	182
CA45T106#0050000V	50	10	V	85	125	33	5	6	0.7	598	538	239
CA45T156#0050000D	50	15	D	85	125	33	7.5	6	1	387	349	155
CA45T156#0050000E	50	15	E	85	125	33	7.5	6	0.8	454	409	182
CA45T156#0050000V	50	15	V	85	125	33	7.5	6	0.7	598	538	239
CA45T226#0050000E	50	22	E	85	125	33	11	8	0.5	574	517	230
CA45T226#0050000V	50	22	V	85	125	33	11	8	0.4	791	712	316

### Important Note

1. Please do not use multimeter to test tantalum capacitors.
2. Capacitance and DF measured at :100Hz ,  $U_{-} = 2.2^{\circ} V$  ,  $U_{\sim} = 1.0^{\circ} V$  , Frequency = 100Hz. Test only applied to series equivalent circuit.
3. Please refer to derating voltage or category voltage if temperature  $> 85^{\circ} C$
4. The DCL parameter should be read after 5 minutes when it connected to the circuit.
5. For special requirement please consult to our sales.