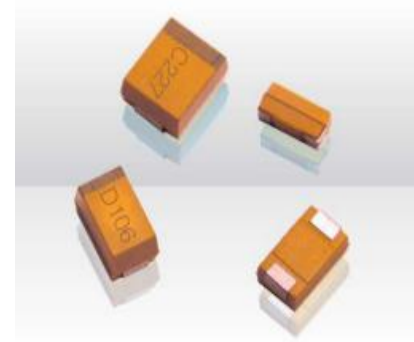


## CA55 Series

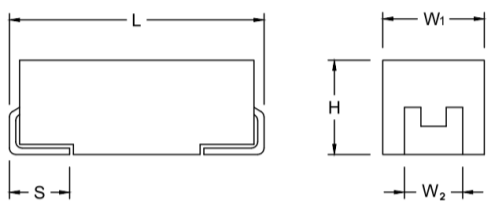
### Conductive Polymer Chip Tantalum Capacitors

#### Features

- Epoxy molded encapsulation, Chip, Easy for integration, Polarized;
- Extremely low ESR , Volumetrically efficient , Stable in electrical & storage performances , Long life-span, High reliability;
- Typical applications include DC/DC converters , notebook PCs , portable electronics , telecommunications (mobile phone and base station ) , displays ,SSD,HDD and USB;
- Operative Standard: QJ/PWV517-2013;



#### Dimensions(mm)



Case Code	EIA Code	EIA Metric	L	W <sub>1</sub>	H	W <sub>2</sub>	S
A	1206	3216-16	3.20±0.20	1.60±0.20	1.60±0.20	0.80±0.20	1.20±0.20
B	1210	3528-19	3.50±0.20	2.80±0.20	1.90±0.20	0.80±0.20	2.20±0.20
C	2312	6032-25	6.00±0.20	3.20±0.20	2.50±0.20	1.30±0.20	2.20±0.20
H	2917	7343-20	7.30±0.20	4.30±0.20	2.00±0.20	1.30±0.20	2.40±0.20
D	2917	7343-28	7.30±0.20	4.30±0.20	2.80±0.20	1.30±0.20	2.40±0.20
E	2917	7343-43	7.30±0.40	4.30±0.40	4.10±0.40	1.30±0.20	2.40±0.20
V	2924	7361-36	7.30±0.40	6.10±0.40	3.60±0.40	1.35±0.20	3.00±0.20
W	2924	7361-41	7.30±0.40	6.10±0.40	4.10±0.40	1.35±0.20	3.00±0.20

#### How to order

<b>CA55</b>	-	<b>D</b>	<b>010</b>	<b>M</b>	<b>107</b>	<b>T</b>	<b>E080</b>
Type	Separator	Case Size <small>See table above</small>	Rated DC voltage <small>2R5=2.5Vdc; 004=4Vdc; 6R3=6.3Vdc; 010=10Vdc; 016=16Vdc; 020=20Vdc; 025=25Vdc; 035=35Vdc; 050=50Vdc; 063=63Vdc; 075=75Vdc; 100=100Vdc</small>	Tolerance <small>M=±20%</small>	Capacitance Code <small>pF code: 1st two digits represent significant figures, 3rd digit represents multiplier (number of zeros to follow)</small>	Package <small>T=Reel; B=Bulk</small>	ESR <small>Last three digits specify ESR in mΩ (080=80 mΩ)</small>

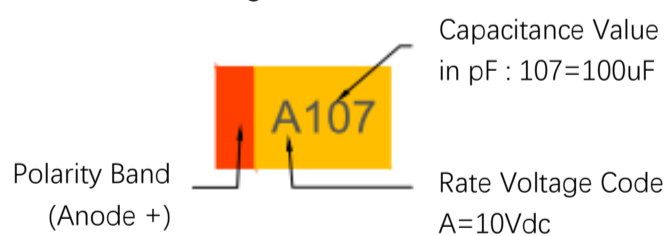
#### Environmental Compliance

RoHS Compliant (6/6) according to Directive 2002/95/EC when ordered with 100%Sn solder, Gold plated or Non-magnetic 100% Sn solder.

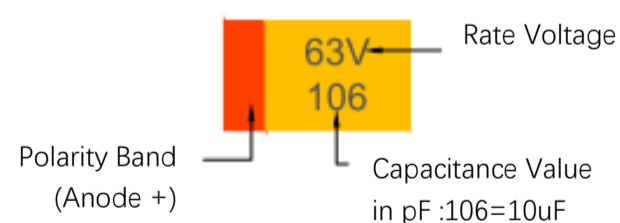


#### Marking

##### Rate Voltage less than 63Vdc



##### Rate Voltage as 63Vdc or more



#### Technical Specifications

Technical Data	All technical data relate to an ambient temperature of +25°C
Operating Temperature Range	-55°C to +105°C
Rated Capacitance Range	0.47 ~ 1000 μF at 100 Hz
Capacitance Tolerance	M tolerance (±20%);
Leakage Current DCL	0.1CV (μA) at rated voltage after 5 minutes
Equivalent Series Resistance ESR	Refer to Part Number Electrical Specifications Table
Termination Finished	Sn Plating (standard), Gold and SnPb Plating upon request
Resistance to soldering heat	3×260°C peak for max. 10s reflow

**CAPACITANCE AND RATED VOLTAGE RANGE  
(LETTER DENOTES CASE SIZE & ESR)**

Rated Voltage (V)	2.5	4	6.3	10	16
Capacitance (μF)	Case Code & ESR				
1					B(300),
1.5					B(300),
2.2					B(300),
3.3					A(250), B(150,300),
4.7				A(250),	A(250), B(100,150,300), C(150),
6.8				A(180,250),	A(200), B(100,150,300), C(150),
10			A(120,250,300),	A(80,120,300), B(100),	A(200), B(100,200,300), C(150),
15		A(120,300), B(100),	A(300), B(90),	A(80,200), B(90), C(70),	B(100,150,300), C(70,150), D(80),
22		A(300), B(90), C(70),	A(90,300), B(90), C(70),	A(80), B(90,300), C(70),	B(150), C(70,150), D(60,80), E(80),
33		A(70,300), B(90), C(70),	A(70,120,200), B(40,90,200), C(70,100),	B(40), B(90,200), C(70,100),	C(70,150), H(45,70), D(60,80), E(80),
47	A(90),	A(70,200), B(90), C(70),	A(150,200), B(40,90), C(70),	B(35,70,90), C(70,100),	C(150), H(45,80), D(35,70,90), E(50,80),
68	A(70,250),	A(250), B(25,40,80), C(70),	A(150), B(35,55,80), C(70,100), D(60),	C(45,70), H(45,60,100), D(45,60,100),	H(50,90), D(50,80), E(50,80),
100	A(200), B(25,40), B(70),	A(150,200,300), B(25,40,80), C(70),	A(70), B(25,45,70), C(25,45,70), H(45), D(60),	C(25,45,70), H(25,55), D(45,60,80),	H(50), D(60,80), E(40,80),
150	B(70),	B(25,40,70), C(25,45,100), H(25,45), D(60),	B(25,45,70), C(25,55), H(25,45), D(25,60),	C(55), H(25,55), D(25,40,60), E(50),	V(80), W(80), E(40,80),
220	B(25,55,70), C(25,45), H(25,45), D(40),	B(35,70), C(25,55), H(25,45), D(25,65),	B(25,70,200), C(25,45), H(25,50), D(40,60), E(50),	H(25,50), D(25,60), E(50),	V(40), V(80), W(80), E(35,50,80),
330	B(35,70), C(25,45), H(25,40), D(25,60),	C(25,45), H(25,50), D(25,60), E(50),	H(25,50), D(25,60), E(50),	V(40), E(35,50),	V(40), V(80), W(80), E(25,50,80),
470	C(25,45), H(25,50), D(25,40,60),	H(25,50), D(25,60), E(50),	H(35,55), D(30), V(40), E(35,50),		
680	D(25,40), E(50),	D(25), V(40), E(35,50),	E(25),		
1000	D(30), V(40), E(50),				

Continue

Rated Voltage (V)	20	25	35	50	63
Capacitance (μF)	Case Code & ESR				
0.68		B(300),	B(350),	B(350,400),	
1	B(300),	B(300)	B(350),	B(300,350)	B(300), C(200,300), D(120),
1.5	B(300),	B(300), C(150),	B(200,350), C(200),	B(300,350), C(200,300),	C(200,300), D(120),
2.2	A(250), B(150,300),	B(250,300), C(100,150),	B(200,350), C(200),	B(350), C(200,300),	C(200), D(120),
3.3	A(250), B(150,00), C(150),	B(250,300), C(100,150),	B(200,350), C(200),	C(200), D(100),	C(200), D(120),
4.7	B(150,300), C(100,150),	B(150,250,300), C(100,150),	B(200,350), C(200),	C(200), D(100),	C(200), D(75,120,300), E(120),
6.8	B(150,300), C(100,150),	B(90,150,300), C(100,150),	C(200), D(90),	C(200), H(70,90), D(70,100,120),	D(120), E(100,150),
10	B(100,150,300), C(100,150),	B(100,150,300), C(100,150), D(90),	B(200), C(200), H(70,120), D(90), E(90),	D(90,120), E(70,100),	D(120), E(50,100,150),
15	B(90), C(80,150), D(70,80),	B(100,150), C(150), H(90), D(90), E(80),	C(200), H(100,125), D(70,100), E(90),	V(100), E(70,100),	V(120), E(35,120,150),
22	C(100,150), H(45,70), H(90), D(60,80), E(50,80),	B(150), C(100,150), H(60,90), D(60,80,100), E(80),	D(70,100), E(90),	V(100), W(100), E(75,100),	W(120),
33	C(150), H(70), D(60,80), E(50,80),	H(60,100), D(60,80,100), E(80),	D(65), D(100), V(90), E(55,70,90),	V(100), W(100), E(75),	
47	C(150), H(55,70,90), D(55,80), E(50,80),	D(60,80,100), E(50,80),	V(90), W(90), E(30,55,90),	W(100),	
68	D(55,80), E(45,80),	D(80), V(80), E(50,80),	W(90),		
100	D(55), V(80), E(45,80),	V(80), W(80), E(60,80),			
150	V(80), W(80), E(80),	V(80), W(80),			
220	V(80), W(80), E(80),				

## RATING & PART NUMBER REFERENCE

Part Number	Rated Voltage	Category Voltage	capacitance	Case Code	Max. DCL	Max. DF	Max. ESR	100kHz RMS Current (mA)			Category Temperature	MSL
	V	V			@+25C°	@+25C°,100Hz	@+25C°,100KHz	+45C°	+85C°	+105C°	C°	
			μF		μA	%	mΩ					
CA55-A2R5#476TE090	2.5	2.3	47	A	11.8	8	90	850	595	212	105	3
CA55-A2R5#686TE070	2.5	2.3	68	A	17.0	8	70	964	675	241	105	3
CA55-A2R5#686TE250	2.5	2.3	68	A	17.0	6	250	510	357	127	105	3
CA55-A2R5#107TE200	2.5	2.3	100	A	25.0	6	200	570	399	143	105	3
CA55-B2R5#107TE025	2.5	2.3	100	B	25.0	8	25	1732	1212	433	105	3
CA55-B2R5#107TE040	2.5	2.3	100	B	25.0	8	40	1369	959	342	105	3
CA55-B2R5#107TE070	2.5	2.3	100	B	25.0	8	70	1035	725	259	105	3
CA55-B2R5#157TE070	2.5	2.3	150	B	37.5	6	70	1035	725	259	105	3
CA55-B2R5#227TE025	2.5	2.3	220	B	55.0	8	25	1732	1212	433	105	3
CA55-B2R5#227TE055	2.5	2.3	220	B	55.0	8	55	1168	817	292	105	3
CA55-B2R5#227TE070	2.5	2.3	220	B	55.0	8	70	1035	725	259	105	3
CA55-C2R5#227TE025	2.5	2.3	220	C	55.0	8	25	1897	1328	474	105	3
CA55-C2R5#227TE045	2.5	2.3	220	C	55.0	8	45	1414	990	354	105	3
CA55-D2R5#227TE040	2.5	2.3	220	D	55.0	10	40	1620	1134	405	105	3
CA55-H2R5#227TE025	2.5	2.3	220	H	55.0	10	25	2236	1565	559	105	3
CA55-H2R5#227TE045	2.5	2.3	220	H	55.0	10	45	1667	1167	417	105	3
CA55-B2R5#337TE035	2.5	2.3	330	B	82.5	8	35	1464	1025	366	105	3
CA55-B2R5#337TE070	2.5	2.3	330	B	82.5	8	70	1035	725	259	105	3
CA55-C2R5#337TE025	2.5	2.3	330	C	82.5	8	25	1897	1328	474	105	3
CA55-C2R5#337TE045	2.5	2.3	330	C	82.5	8	45	1414	990	354	105	3
CA55-D2R5#337TE025	2.5	2.3	330	D	82.5	10	25	2049	1435	512	105	3
CA55-D2R5#337TE060	2.5	2.3	330	D	82.5	10	60	1323	926	331	105	3
CA55-H2R5#337TE025	2.5	2.3	330	H	82.5	10	25	2236	1565	559	105	3
CA55-H2R5#337TE040	2.5	2.3	330	H	82.5	10	40	1768	1237	442	105	3
CA55-C2R5#477TE025	2.5	2.3	470	C	117.5	8	25	1897	1328	474	105	3
CA55-C2R5#477TE045	2.5	2.3	470	C	117.5	8	45	1414	990	354	105	3
CA55-D2R5#477TE025	2.5	2.3	470	D	117.5	10	25	2049	1435	512	105	3
CA55-D2R5#477TE040	2.5	2.3	470	D	117.5	6	40	1620	1134	405	105	3
CA55-D2R5#477TE060	2.5	2.3	470	D	117.5	10	60	1323	926	331	105	3
CA55-H2R5#477TE025	2.5	2.3	470	H	117.5	6	25	2236	1565	559	105	3
CA55-H2R5#477TE050	2.5	2.3	470	H	117.5	6	50	1581	1107	395	105	3
CA55-D2R5#687TE025	2.5	2.3	680	D	170.0	10	25	2049	1435	512	105	3
CA55-D2R5#687TE040	2.5	2.3	680	D	170.0	10	40	1620	1134	405	105	3
CA55-E2R5#687TE050	2.5	2.3	680	E	170.0	10	50	1581	1107	395	105	3
CA55-D2R5#108TE030	2.5	2.3	1000	D	250.0	10	30	1871	1310	468	105	3
CA55-E2R5#108TE050	2.5	2.3	1000	E	250.0	10	50	1581	1107	395	105	3
CA55-V2R5#108TE040	2.5	2.3	1000	V	250.0	10	40	1936	1356	484	105	3
CA55-A004#156TE120	4	3.6	15	A	6.0	10	120	736	515	184	105	3
CA55-A004#156TE300	4	3.6	15	A	6.0	6	300	465	326	116	105	3
CA55-B004#156TE100	4	3.6	15	B	6.0	10	100	866	606	217	105	3
CA55-A004#226TE300	4	3.6	22	A	8.8	6	300	465	326	116	105	3
CA55-B004#226TE090	4	3.6	22	B	8.8	10	90	913	639	228	105	3
CA55-C004#226TE070	4	3.6	22	C	8.8	10	70	1134	794	283	105	3
CA55-A004#336TE070	4	3.6	33	A	13.2	8	70	964	675	241	105	3
CA55-A004#336TE300	4	3.6	33	A	13.2	6	300	465	326	116	105	3
CA55-B004#336TE090	4	3.6	33	B	13.2	10	90	913	639	228	105	3
CA55-C004#336TE070	4	3.6	33	C	13.2	10	70	1134	794	283	105	3
CA55-A004#476TE070	4	3.6	47	A	18.8	8	70	964	675	241	105	3
CA55-A004#476TE200	4	3.6	47	A	18.8	6	200	570	399	143	105	3
CA55-B004#476TE090	4	3.6	47	B	18.8	10	90	913	639	228	105	3
CA55-C004#476TE070	4	3.6	47	C	18.8	10	70	1134	794	283	105	3
CA55-A004#686TE250	4	3.6	68	A	27.2	6	250	510	357	127	105	3
CA55-B004#686TE025	4	3.6	68	B	27.2	8	25	1732	1212	433	105	3
CA55-B004#686TE040	4	3.6	68	B	27.2	8	40	1369	959	342	105	3
CA55-B004#686TE080	4	3.6	68	B	27.2	8	80	968	678	242	105	3

- 1 Please do not use multimeter through the measuring procedures.
- 2 Capacitance and DF measured at :100Hz, U<sub>+</sub>=2.2°-1.0V, U<sub>-</sub>=1.0°-0.5V, Frequency=100Hz.Test only applied in series equivalent circuit.
- 3 Voltage derating is applied at +105C°. (The DCL parameter should be read after 5 minutes when it connected to the circuit) .
- 4 Special size and demand could consult with us.

## RATING & PART NUMBER REFERENCE

Part Number	Rated Voltage	Category Voltage	capacitance	Case Code	Max. DCL	Max. DF	Max. ESR	100kHz RMS Current (mA)			Category Temperature	MSL
	V	V			@+25C°	@+25C° ,100Hz	@+25C° ,100KHz	+45C°	+85C°	+105C°	C°	
			μF		μA	%	mΩ					
CA55-C004#686TE070	4	3.6	68	C	27.2	10	70	1134	794	283	105	3
CA55-A004#107TE150	4	3.6	100	A	40.0	8	150	658	461	165	105	3
CA55-A004#107TE200	4	3.6	100	A	40.0	8	200	570	399	143	105	3
CA55-A004#107TE300	4	3.6	100	A	40.0	10	300	465	326	116	105	3
CA55-B004#107TE025	4	3.6	100	B	40.0	8	25	1732	1212	433	105	3
CA55-B004#107TE040	4	3.6	100	B	40.0	8	40	1369	959	342	105	3
CA55-B004#107TE080	4	3.6	100	B	40.0	8	80	968	678	242	105	3
CA55-C004#107TE070	4	3.6	100	C	40.0	10	70	1134	794	283	105	3
CA55-B004#157TE025	4	3.6	150	B	60.0	8	25	1732	1212	433	105	3
CA55-B004#157TE040	4	3.6	150	B	60.0	8	40	1369	959	342	105	3
CA55-B004#157TE070	4	3.6	150	B	60.0	8	70	1035	725	259	105	3
CA55-C004#157TE025	4	3.6	150	C	60.0	8	25	1897	1328	474	105	3
CA55-C004#157TE045	4	3.6	150	C	60.0	8	45	1414	990	354	105	3
CA55-C004#157TE100	4	3.6	150	C	60.0	8	100	949	664	237	105	3
CA55-D004#157TE060	4	3.6	150	D	60.0	10	60	1323	926	331	105	3
CA55-H004#157TE025	4	3.6	150	H	60.0	10	25	2236	1565	559	105	3
CA55-H004#157TE045	4	3.6	150	H	60.0	6	45	1667	1167	417	105	3
CA55-B004#227TE035	4	3.6	220	B	88.0	8	35	1464	1025	366	105	3
CA55-B004#227TE070	4	3.6	220	B	88.0	8	70	1035	725	259	105	3
CA55-C004#227TE025	4	3.6	220	C	88.0	8	25	1897	1328	474	105	3
CA55-C004#227TE055	4	3.6	220	C	88.0	8	55	1279	895	320	105	3
CA55-D004#227TE025	4	3.6	220	D	88.0	10	25	2049	1435	512	105	3
CA55-D004#227TE065	4	3.6	220	D	88.0	10	65	1271	890	318	105	3
CA55-H004#227TE025	4	3.6	220	H	88.0	10	25	2236	1565	559	105	3
CA55-H004#227TE045	4	3.6	220	H	88.0	10	45	1667	1167	417	105	3
CA55-C004#337TE025	4	3.6	330	C	132.0	8	25	1897	1328	474	105	3
CA55-C004#337TE045	4	3.6	330	C	132.0	8	45	1414	990	354	105	3
CA55-D004#337TE025	4	3.6	330	D	132.0	10	25	2049	1435	512	105	3
CA55-D004#337TE060	4	3.6	330	D	132.0	10	60	1323	926	331	105	3
CA55-E004#337TE050	4	3.6	330	E	132.0	10	50	1581	1107	395	105	3
CA55-H004#337TE025	4	3.6	330	H	132.0	10	25	2236	1565	559	105	3
CA55-H004#337TE050	4	3.6	330	H	132.0	6	50	1581	1107	395	105	3
CA55-D004#477TE025	4	3.6	470	D	188.0	10	25	2049	1435	512	105	3
CA55-D004#477TE060	4	3.6	470	D	188.0	10	60	1323	926	331	105	3
CA55-E004#477TE050	4	3.6	470	E	188.0	10	50	1581	1107	395	105	3
CA55-H004#477TE025	4	3.6	470	H	188.0	6	25	2236	1565	559	105	3
CA55-H004#477TE050	4	3.6	470	H	188.0	6	50	1581	1107	395	105	3
CA55-D004#687TE025	4	3.6	680	D	272.0	10	25	2049	1435	512	105	3
CA55-E004#687TE035	4	3.6	680	E	272.0	10	35	1890	1323	472	105	3
CA55-E004#687TE050	4	3.6	680	E	272.0	10	50	1581	1107	395	105	3
CA55-V004#687TE040	4	3.6	680	V	272.0	10	40	1936	1356	484	105	3
CA55-A6R3#106TE120	6.3	5.7	10	A	6.3	10	120	736	515	184	105	3
CA55-A6R3#106TE250	6.3	5.7	10	A	6.3	10	250	510	357	127	105	3
CA55-A6R3#106TE300	6.3	5.7	10	A	6.3	6	300	465	326	116	105	3
CA55-A6R3#156TE300	6.3	5.7	15	A	9.5	6	300	465	326	116	105	3
CA55-B6R3#156TE090	6.3	5.7	15	B	9.5	10	90	913	639	228	105	3
CA55-A6R3#226TE090	6.3	5.7	22	A	13.9	8	90	850	595	212	105	3
CA55-A6R3#226TE300	6.3	5.7	22	A	13.9	6	300	465	326	116	105	3
CA55-B6R3#226TE090	6.3	5.7	22	B	13.9	10	90	913	639	228	105	3
CA55-C6R3#226TE070	6.3	5.7	22	C	13.9	10	70	1134	794	283	105	3
CA55-A6R3#336TE070	6.3	5.7	33	A	20.8	8	70	964	675	241	105	3
CA55-A6R3#336TE120	6.3	5.7	33	A	20.8	8	120	736	515	184	105	3
CA55-A6R3#336TE200	6.3	5.7	33	A	20.8	6	200	570	399	143	105	3
CA55-B6R3#336TE040	6.3	5.7	33	B	20.8	8	40	1369	959	342	105	3
CA55-B6R3#336TE090	6.3	5.7	33	B	20.8	10	90	913	639	228	105	3

- 1 Please do not use multimeter through the measuring procedures.
- 2 Capacitance and DF measured at :100Hz, U<sub>-</sub>=2.2°-1.0V, U<sub>-</sub>=1.0°-0.5V, Frequency=100Hz.Test only applied in series equivalent circuit.
- 3 Voltage derating is applied at +105C°. (The DCL parameter should be read after 5 minutes when it connected to the circuit) .
- 4 Special size and demand could consult with us.

RATING & PART NUMBER REFERENCE

Part Number	Rated Voltage	Category Voltage	capacitance	Case Code	Max. DCL	Max. DF	Max. ESR	100kHz RMS Current (mA)			Category Temperature	MSL
	V	V			@+25C°	@+25C° ,100Hz	@+25C° ,100KHz	+45C°	+85C°	+105C°	C°	
			μF		μA	%	mΩ					
CA55-B6R3#336TE200	6.3	5.7	33	B	20.8	6	200	612	429	153	105	3
CA55-C6R3#336TE070	6.3	5.7	33	C	20.8	10	70	1134	794	283	105	3
CA55-C6R3#336TE100	6.3	5.7	33	C	20.8	8	100	949	664	237	105	3
CA55-A6R3#476TE150	6.3	5.7	47	A	29.6	8	150	658	461	165	105	3
CA55-A6R3#476TE200	6.3	5.7	47	A	29.6	6	200	570	399	143	105	3
CA55-B6R3#476TE040	6.3	5.7	47	B	29.6	8	40	1369	959	342	105	3
CA55-B6R3#476TE090	6.3	5.7	47	B	29.6	10	90	913	639	228	105	3
CA55-C6R3#476TE070	6.3	5.7	47	C	29.6	10	70	1134	794	283	105	3
CA55-A6R3#686TE150	6.3	5.7	68	A	42.8	8	150	658	461	165	105	3
CA55-B6R3#686TE035	6.3	5.7	68	B	42.8	8	35	1464	1025	366	105	3
CA55-B6R3#686TE055	6.3	5.7	68	B	42.8	8	55	1168	817	292	105	3
CA55-B6R3#686TE080	6.3	5.7	68	B	42.8	8	80	968	678	242	105	3
CA55-C6R3#686TE070	6.3	5.7	68	C	42.8	10	70	1134	794	283	105	3
CA55-C6R3#686TE100	6.3	5.7	68	C	42.8	8	100	949	664	237	105	3
CA55-D6R3#686TE060	6.3	5.7	68	D	42.8	10	60	1323	926	331	105	3
CA55-A6R3#107TE070	6.3	5.7	100	A	63.0	8	70	964	675	241	105	3
CA55-B6R3#107TE025	6.3	5.7	100	B	63.0	8	25	1732	1212	433	105	3
CA55-B6R3#107TE045	6.3	5.7	100	B	63.0	8	45	1291	904	323	105	3
CA55-B6R3#107TE070	6.3	5.7	100	B	63.0	8	70	1035	725	259	105	3
CA55-C6R3#107TE025	6.3	5.7	100	C	63.0	8	25	1897	1328	474	105	3
CA55-C6R3#107TE045	6.3	5.7	100	C	63.0	8	45	1414	990	354	105	3
CA55-C6R3#107TE070	6.3	5.7	100	C	63.0	10	70	1134	794	283	105	3
CA55-D6R3#107TE060	6.3	5.7	100	D	63.0	10	60	1323	926	331	105	3
CA55-H6R3#107TE045	6.3	5.7	100	H	63.0	10	45	1667	1167	417	105	3
CA55-B6R3#157TE025	6.3	5.7	150	B	94.5	8	25	1732	1212	433	105	3
CA55-B6R3#157TE045	6.3	5.7	150	B	94.5	8	45	1291	904	323	105	3
CA55-B6R3#157TE070	6.3	5.7	150	B	94.5	8	70	1035	725	259	105	3
CA55-C6R3#157TE025	6.3	5.7	150	C	94.5	8	25	1897	1328	474	105	3
CA55-C6R3#157TE055	6.3	5.7	150	C	94.5	8	55	1279	895	320	105	3
CA55-D6R3#157TE025	6.3	5.7	150	D	94.5	10	25	2049	1435	512	105	3
CA55-D6R3#157TE060	6.3	5.7	150	D	94.5	10	60	1323	926	331	105	3
CA55-H6R3#157TE025	6.3	5.7	150	H	94.5	10	25	2236	1565	559	105	3
CA55-H6R3#157TE045	6.3	5.7	150	H	94.5	10	45	1667	1167	417	105	3
CA55-B6R3#227TE025	6.3	5.7	220	B	138.6	8	25	1732	1212	433	105	3
CA55-B6R3#227TE070	6.3	5.7	220	B	138.6	8	70	1035	725	259	105	3
CA55-B6R3#227TE200	6.3	5.7	220	B	138.6	10	200	612	429	153	105	3
CA55-C6R3#227TE025	6.3	5.7	220	C	138.6	8	25	1897	1328	474	105	3
CA55-C6R3#227TE045	6.3	5.7	220	C	138.6	8	45	1414	990	354	105	3
CA55-D6R3#227TE040	6.3	5.7	220	D	138.6	10	40	1620	1134	405	105	3
CA55-D6R3#227TE060	6.3	5.7	220	D	138.6	10	60	1323	926	331	105	3
CA55-E6R3#227TE050	6.3	5.7	220	E	138.6	10	50	1581	1107	395	105	3
CA55-H6R3#227TE025	6.3	5.7	220	H	138.6	10	25	2236	1565	559	105	3
CA55-H6R3#227TE050	6.3	5.7	220	H	138.6	6	50	1581	1107	395	105	3
CA55-D6R3#337TE025	6.3	5.7	330	D	207.9	10	25	2049	1435	512	105	3
CA55-D6R3#337TE060	6.3	5.7	330	D	207.9	10	60	1323	926	331	105	3
CA55-E6R3#337TE050	6.3	5.7	330	E	207.9	10	50	1581	1107	395	105	3
CA55-H6R3#337TE025	6.3	5.7	330	H	207.9	10	25	2236	1565	559	105	3
CA55-H6R3#337TE050	6.3	5.7	330	H	207.9	12	50	1581	1107	395	105	3
CA55-D6R3#477TE030	6.3	5.7	470	D	296.1	10	30	1871	1310	468	105	3
CA55-E6R3#477TE035	6.3	5.7	470	E	296.1	10	35	1890	1323	472	105	3
CA55-E6R3#477TE050	6.3	5.7	470	E	296.1	10	50	1581	1107	395	105	3
CA55-H6R3#477TE035	6.3	5.7	470	H	296.1	10	35	1890	1323	472	105	3
CA55-H6R3#477TE055	6.3	5.7	470	H	296.1	10	55	1508	1055	377	85	3
CA55-V6R3#477TE040	6.3	5.7	470	V	296.1	10	40	1936	1356	484	105	3
CA55-E6R3#687TE025	6.3	5.7	680	E	428.4	10	25	2236	1565	559	105	3

- 1 Please do not use multimeter through the measuring procedures.
- 2 Capacitance and DF measured at :100Hz, U<sub>r</sub>=2.2°-1.0V, U<sub>-</sub>=1.0°-0.5V, Frequency=100Hz.Test only applied in series equivalent circuit.
- 3 Voltage derating is applied at +105C°. (The DCL parameter should be read after 5 minutes when it connected to the circuit) .
- 4 Special size and demand could consult with us.

## RATING &amp; PART NUMBER REFERENCE

Part Number	Rated Voltage	Category Voltage	capacitance	Case Code	Max. DCL @+25C°	Max. DF @+25C° ,100Hz	Max. ESR @+25C° ,100KHz	100kHz RMS Current (mA)			Category Temperature C°	MSL
	V	V						μF	μA	%		
CA55-A010#475TE250	10	9.0	4.7	A	4.7	10	250	510	357	127	105	3
CA55-A010#685TE180	10	9.0	6.8	A	6.8	10	180	601	421	150	105	3
CA55-A010#685TE250	10	9.0	6.8	A	6.8	10	250	510	357	127	105	3
CA55-A010#106TE080	10	9.0	10	A	10.0	8	80	901	631	225	105	3
CA55-A010#106TE120	10	9.0	10	A	10.0	8	120	736	515	184	105	3
CA55-A010#106TE300	10	9.0	10	A	10.0	10	300	465	326	116	105	3
CA55-B010#106TE100	10	9.0	10	B	10.0	10	100	866	606	217	105	3
CA55-A010#156TE080	10	9.0	15	A	15.0	8	80	901	631	225	105	3
CA55-A010#156TE200	10	9.0	15	A	15.0	6	200	570	399	143	105	3
CA55-B010#156TE090	10	9.0	15	B	15.0	10	90	913	639	228	105	3
CA55-C010#156TE070	10	9.0	15	C	15.0	10	70	1134	794	283	105	3
CA55-A010#226TE080	10	9.0	22	A	22.0	8	80	901	631	225	105	3
CA55-B010#226TE090	10	9.0	22	B	22.0	10	90	913	639	228	105	3
CA55-B010#226TE300	10	9.0	22	B	22.0	6	300	500	350	125	105	3
CA55-C010#226TE070	10	9.0	22	C	22.0	10	70	1134	794	283	105	3
CA55-B010#336TE040	10	9.0	33	B	33.0	8	40	1369	959	342	105	3
CA55-B010#336TE090	10	9.0	33	B	33.0	10	90	913	639	228	105	3
CA55-B010#336TE200	10	9.0	33	B	33.0	6	200	612	429	153	105	3
CA55-C010#336TE070	10	9.0	33	C	33.0	10	70	1134	794	283	105	3
CA55-C010#336TE100	10	9.0	33	C	33.0	6	100	949	664	237	105	3
CA55-B010#476TE035	10	9.0	47	B	47.0	8	35	1464	1025	366	105	3
CA55-B010#476TE070	10	9.0	47	B	47.0	8	70	1035	725	259	105	3
CA55-B010#476TE090	10	9.0	47	B	47.0	10	90	913	639	228	105	3
CA55-C010#476TE070	10	9.0	47	C	47.0	10	70	1134	794	283	105	3
CA55-C010#476TE100	10	9.0	47	C	47.0	8	100	949	664	237	105	3
CA55-C010#686TE045	10	9.0	68	C	68.0	8	45	1414	990	354	105	3
CA55-C010#686TE070	10	9.0	68	C	68.0	10	70	1134	794	283	105	3
CA55-D010#686TE045	10	9.0	68	D	68.0	6	45	1528	1069	382	105	3
CA55-D010#686TE060	10	9.0	68	D	68.0	10	60	1323	926	331	105	3
CA55-D010#686TE100	10	9.0	68	D	68.0	10	100	1025	717	256	105	3
CA55-H010#686TE045	10	9.0	68	H	68.0	10	45	1667	1167	417	105	3
CA55-H010#686TE060	10	9.0	68	H	68.0	10	60	1443	1010	361	105	3
CA55-H010#686TE100	10	9.0	68	H	68.0	10	100	1118	783	280	105	3
CA55-C010#107TE025	10	9.0	100	C	100.0	8	25	1897	1328	474	105	3
CA55-C010#107TE045	10	9.0	100	C	100.0	8	45	1414	990	354	105	3
CA55-C010#107TE070	10	9.0	100	C	100.0	10	70	1134	794	283	105	3
CA55-D010#107TE045	10	9.0	100	D	100.0	6	45	1528	1069	382	105	3
CA55-D010#107TE060	10	9.0	100	D	100.0	10	60	1323	926	331	105	3
CA55-D010#107TE080	10	9.0	100	D	100.0	10	80	1146	802	286	105	3
CA55-H010#107TE025	10	9.0	100	H	100.0	10	25	2236	1565	559	105	3
CA55-H010#107TE055	10	9.0	100	H	100.0	10	55	1508	1055	377	105	3
CA55-C010#157TE055	10	9.0	150	C	150.0	8	55	1279	895	320	105	3
CA55-D010#157TE025	10	9.0	150	D	150.0	10	25	2049	1435	512	105	3
CA55-D010#157TE040	10	9.0	150	D	150.0	10	40	1620	1134	405	105	3
CA55-D010#157TE060	10	9.0	150	D	150.0	10	60	1323	926	331	105	3
CA55-E010#157TE050	10	9.0	150	E	150.0	10	50	1581	1107	395	105	3
CA55-H010#157TE025	10	9.0	150	H	150.0	10	25	2236	1565	559	105	3
CA55-H010#157TE055	10	9.0	150	H	150.0	6	55	1508	1055	377	105	3
CA55-D010#227TE025	10	9.0	220	D	220.0	10	25	2049	1435	512	105	3
CA55-D010#227TE060	10	9.0	220	D	220.0	10	60	1323	926	331	105	3
CA55-E010#227TE050	10	9.0	220	E	220.0	10	50	1581	1107	395	105	3
CA55-H010#227TE025	10	9.0	220	H	220.0	10	25	2236	1565	559	105	3
CA55-H010#227TE050	10	9.0	220	H	220.0	6	50	1581	1107	395	105	3
CA55-E010#337TE025	10	9.0	330	E	330.0	10	35	1890	1323	472	105	3
CA55-E010#337TE050	10	9.0	330	E	330.0	10	50	1581	1107	395	105	3

- 1 Please do not use multimeter through the measuring procedures.
- 2 Capacitance and DF measured at :100Hz, U<sub>+</sub>=2.2°-1.0V, U<sub>-</sub>=1.0°-0.5V, Frequency=100Hz.Test only applied in series equivalent circuit.
- 3 Voltage derating is applied at +105C°. (The DCL parameter should be read after 5 minutes when it connected to the circuit) .
- 4 Special size and demand could consult with us.

## RATING &amp; PART NUMBER REFERENCE

Part Number	Rated Voltage	Category Voltage	capacitance	Case Code	Max. DCL @+25C°	Max. DF @+25C°.100Hz	Max. ESR @+25C°.100KHz	100kHz RMS Current (mA)			Category Temperature C°	MSL
	V	V						μF	μA	%		
CA55-V010#337TE040	10	9.0	330	V	330.0	10	40	1936	1356	484	105	3
CA55-B016#105TE300	16	12.8	1	B	1.6	10	300	500	350	125	105	3
CA55-B016#155TE300	16	12.8	1.5	B	2.4	10	300	500	350	125	105	3
CA55-B016#225TE300	16	12.8	2.2	B	3.5	10	300	500	350	125	105	3
CA55-A016#335TE250	16	12.8	3.3	A	5.3	10	250	510	357	127	105	3
CA55-B016#335TE150	16	12.8	3.3	B	5.3	10	150	707	495	177	105	3
CA55-B016#335TE300	16	12.8	3.3	B	5.3	10	300	500	350	125	105	3
CA55-A016#475TE250	16	12.8	4.7	A	7.5	10	250	510	357	127	105	3
CA55-B016#475TE100	16	12.8	4.7	B	7.5	10	100	866	606	217	105	3
CA55-B016#475TE150	16	12.8	4.7	B	7.5	10	150	707	495	177	105	3
CA55-B016#475TE300	16	12.8	4.7	B	7.5	10	300	500	350	125	105	3
CA55-C016#475TE150	16	12.8	4.7	C	7.5	10	150	775	542	194	105	3
CA55-A016#685TE200	16	12.8	6.8	A	10.9	6	200	570	399	143	105	3
CA55-B016#685TE100	16	12.8	6.8	B	10.9	10	100	866	606	217	105	3
CA55-B016#685TE150	16	12.8	6.8	B	10.9	10	150	707	495	177	105	3
CA55-B016#685TE300	16	12.8	6.8	B	10.9	10	300	500	350	125	105	3
CA55-C016#685TE150	16	12.8	6.8	C	10.9	10	150	775	542	194	105	3
CA55-A016#106TE200	16	12.8	10	A	16.0	6	200	570	399	143	105	3
CA55-B016#106TE100	16	12.8	10	B	16.0	10	100	866	606	217	105	3
CA55-B016#106TE200	16	12.8	10	B	16.0	6	200	612	429	153	105	3
CA55-B016#106TE300	16	12.8	10	B	16.0	10	300	500	350	125	105	3
CA55-C016#106TE150	16	12.8	10	C	16.0	10	150	775	542	194	105	3
CA55-B016#156TE100	16	12.8	15	B	24.0	10	100	866	606	217	105	3
CA55-B016#156TE150	16	12.8	15	B	24.0	6	150	707	495	177	105	3
CA55-B016#156TE300	16	12.8	15	B	24.0	10	300	500	350	125	105	3
CA55-C016#156TE070	16	12.8	15	C	24.0	10	70	1134	794	283	105	3
CA55-C016#156TE150	16	12.8	15	C	24.0	10	150	775	542	194	105	3
CA55-D016#156TE080	16	12.8	15	D	24.0	10	80	1146	802	286	105	3
CA55-B016#226TE150	16	12.8	22	B	35.2	6	150	707	495	177	105	3
CA55-C016#226TE070	16	12.8	22	C	35.2	10	70	1134	794	283	105	3
CA55-C016#226TE150	16	12.8	22	C	35.2	10	150	775	542	194	105	3
CA55-D016#226TE060	16	12.8	22	D	35.2	10	60	1323	926	331	105	3
CA55-D016#226TE080	16	12.8	22	D	35.2	10	80	1146	802	286	105	3
CA55-E016#226TE080	16	12.8	22	E	35.2	10	80	1250	875	313	105	3
CA55-C016#336TE070	16	12.8	33	C	52.8	10	70	1134	794	283	105	3
CA55-C016#336TE150	16	12.8	33	C	52.8	10	150	775	542	194	105	3
CA55-D016#336TE060	16	12.8	33	D	52.8	10	60	1323	926	331	105	3
CA55-D016#336TE080	16	12.8	33	D	52.8	10	80	1146	802	286	105	3
CA55-E016#336TE080	16	12.8	33	E	52.8	10	80	1250	875	313	105	3
CA55-H016#336TE045	16	12.8	33	H	52.8	10	45	1667	1167	417	105	3
CA55-H016#336TE070	16	12.8	33	H	52.8	10	70	1336	935	334	105	3
CA55-C016#476TE150	16	12.8	47	C	75.2	10	150	775	542	194	105	3
CA55-D016#476TE035	16	12.8	47	D	75.2	10	35	1732	1212	433	105	3
CA55-D016#476TE070	16	12.8	47	D	75.2	10	70	1225	857	306	105	3
CA55-D016#476TE090	16	12.8	47	D	75.2	10	90	1080	756	270	105	3
CA55-E016#476TE050	16	12.8	47	E	75.2	10	50	1581	1107	395	105	3
CA55-E016#476TE080	16	12.8	47	E	75.2	10	80	1250	875	313	105	3
CA55-H016#476TE045	16	12.8	47	H	75.2	10	45	1667	1167	417	105	3
CA55-H016#476TE080	16	12.8	47	H	75.2	10	80	1250	875	313	105	3
CA55-D016#686TE050	16	12.8	68	D	108.8	10	50	1449	1014	362	105	3
CA55-D016#686TE080	16	12.8	68	D	108.8	10	80	1146	802	286	105	3
CA55-E016#686TE050	16	12.8	68	E	108.8	10	50	1581	1107	395	105	3
CA55-E016#686TE080	16	12.8	68	E	108.8	10	80	1250	875	313	105	3
CA55-H016#686TE050	16	12.8	68	H	108.8	10	50	1581	1107	395	105	3
CA55-H016#686TE090	16	12.8	68	H	108.8	10	90	1179	825	295	105	3

- 1 Please do not use multimeter through the measuring procedures.
- 2 Capacitance and DF measured at :100Hz,  $U_{DC}=2.2V-1.0V$ ,  $U_{AC}=1.0V-0.5V$ , Frequency=100Hz.Test only applied in series equivalent circuit.
- 3 Voltage derating is applied at +105C°. (The DCL parameter should be read after 5 minutes when it connected to the circuit) .
- 4 Special size and demand could consult with us.

## RATING & PART NUMBER REFERENCE

Part Number	Rated Voltage	Category Voltage	capacitance	Case Code	Max. DCL	Max. DF	Max. ESR	100kHz RMS Current (mA)			Category Temperature	MSL
	V	V			@+25C°	@+25C° 100Hz	@+25C° 100KHz	+45C°	+85C°	+105C°	C°	
			μF		μA	%	mΩ					
CA55-D016#107TE060	16	12.8	100	D	160.0	10	60	1323	926	331	105	3
CA55-D016#107TE080	16	12.8	100	D	160.0	10	80	1146	802	286	105	3
CA55-E016#107TE040	16	12.8	100	E	160.0	6	40	1768	1237	442	105	3
CA55-E016#107TE080	16	12.8	100	E	160.0	10	80	1250	875	313	105	3
CA55-H016#107TE050	16	12.8	100	H	160.0	10	50	1581	1107	395	105	3
CA55-E016#157TE040	16	12.8	150	E	240.0	10	40	1768	1237	442	105	3
CA55-E016#157TE080	16	12.8	150	E	240.0	10	80	1250	875	313	105	3
CA55-V016#157TE080	16	12.8	150	V	240.0	10	80	1369	959	342	105	3
CA55-W016#157TE080	16	12.8	150	W	240.0	10	80	1581	1107	395	105	3
CA55-E016#227TE035	16	12.8	220	E	352.0	10	35	1890	1323	472	105	3
CA55-E016#227TE050	16	12.8	220	E	352.0	10	50	1581	1107	395	105	3
CA55-E016#227TE080	16	12.8	220	E	352.0	10	80	1250	875	313	105	3
CA55-V016#227TE040	16	12.8	220	V	352.0	10	40	1936	1356	484	105	3
CA55-V016#227TE080	16	12.8	220	V	352.0	10	80	1369	959	342	105	3
CA55-W016#227TE080	16	12.8	220	W	352.0	10	80	1581	1107	395	105	3
CA55-E016#337TE025	16	12.8	330	E	528.0	10	25	2236	1565	559	105	3
CA55-E016#337TE050	16	12.8	330	E	528.0	10	50	1581	1107	395	105	3
CA55-E016#337TE080	16	12.8	330	E	528.0	10	80	1250	875	313	105	3
CA55-V016#337TE040	16	12.8	330	V	528.0	10	40	1936	1356	484	105	3
CA55-V016#337TE080	16	12.8	330	V	528.0	10	80	1369	959	342	105	3
CA55-W016#337TE080	16	12.8	330	W	528.0	10	80	1581	1107	395	105	3
CA55-B020#105TE300	20	16.0	1	B	2.0	10	300	500	350	125	105	3
CA55-B020#155TE300	20	16.0	1.5	B	3.0	10	300	500	350	125	105	3
CA55-A020#225TE250	20	16.0	2.2	A	4.4	10	250	510	357	127	105	3
CA55-B020#225TE150	20	16.0	2.2	B	4.4	10	150	707	495	177	105	3
CA55-B020#225TE300	20	16.0	2.2	B	4.4	10	300	500	350	125	105	3
CA55-A020#335TE250	20	16.0	3.3	A	6.6	10	250	510	357	127	105	3
CA55-B020#335TE150	20	16.0	3.3	B	6.6	10	150	707	495	177	105	3
CA55-B020#335TE300	20	16.0	3.3	B	6.6	10	300	500	350	125	105	3
CA55-C020#335TE150	20	16.0	3.3	C	6.6	10	150	775	542	194	105	3
CA55-B020#475TE150	20	16.0	4.7	B	9.4	10	150	707	495	177	105	3
CA55-B020#475TE300	20	16.0	4.7	B	9.4	10	300	500	350	125	105	3
CA55-C020#475TE100	20	16.0	4.7	C	9.4	10	100	949	664	237	105	3
CA55-C020#475TE150	20	16.0	4.7	C	9.4	10	150	775	542	194	105	3
CA55-B020#685TE150	20	16.0	6.8	B	13.6	10	150	707	495	177	105	3
CA55-B020#685TE300	20	16.0	6.8	B	13.6	10	300	500	350	125	105	3
CA55-C020#685TE100	20	16.0	6.8	C	13.6	10	100	949	664	237	105	3
CA55-C020#685TE150	20	16.0	6.8	C	13.6	10	150	775	542	194	105	3
CA55-B020#106TE100	20	16.0	10	B	20.0	8	100	866	606	217	105	3
CA55-B020#106TE150	20	16.0	10	B	20.0	10	150	707	495	177	105	3
CA55-B020#106TE300	20	16.0	10	B	20.0	10	300	500	350	125	105	3
CA55-C020#106TE100	20	16.0	10	C	20.0	10	100	949	664	237	105	3
CA55-C020#106TE150	20	16.0	10	C	20.0	10	150	775	542	194	105	3
CA55-B020#156TE090	20	16.0	15	B	30.0	10	90	913	639	228	105	3
CA55-C020#156TE080	20	16.0	15	C	30.0	10	80	1061	742	265	105	3
CA55-C020#156TE150	20	16.0	15	C	30.0	10	150	775	542	194	105	3
CA55-D020#156TE070	20	16.0	15	D	30.0	10	70	1225	857	306	105	3
CA55-D020#156TE080	20	16.0	15	D	30.0	10	80	1146	802	286	105	3
CA55-C020#226TE100	20	16.0	22	C	44.0	10	100	949	664	237	105	3
CA55-C020#226TE150	20	16.0	22	C	44.0	10	150	775	542	194	105	3
CA55-D020#226TE060	20	16.0	22	D	44.0	10	60	1323	926	331	105	3
CA55-D020#226TE080	20	16.0	22	D	44.0	10	80	1146	802	286	105	3
CA55-E020#226TE050	20	16.0	22	E	44.0	10	50	1581	1107	395	105	3
CA55-E020#226TE080	20	16.0	22	E	44.0	10	80	1250	875	313	105	3
CA55-H020#226TE045	20	16.0	22	H	44.0	10	45	1667	1167	417	105	3

- 1 Please do not use multimeter through the measuring procedures.
- 2 Capacitance and DF measured at :100Hz, U<sub>+</sub>=2.2<sup>o</sup>-1.0V, U<sub>-</sub>=1.0<sup>o</sup>-0.5V, Frequency=100Hz.Test only applied in series equivalent circuit.
- 3 Voltage derating is applied at +105C°. (The DCL parameter should be read after 5 minutes when it connected to the circuit) .
- 4 Special size and demand could consult with us.



## RATING &amp; PART NUMBER REFERENCE

Part Number	Rated Voltage	Category Voltage	capacitance	Case Code	Max. DCL	Max. DF	Max. ESR	100kHz RMS Current (mA)			Category Temperature	MSL
	V	V			@+25C°	@+25C° ,100Hz	@+25C° ,100KHz	+45C°	+85C°	+105C°	C°	
			μF		μA	%	mΩ					
CA55-H020#226TE070	20	16.0	22	H	44.0	6	70	1336	935	334	105	3
CA55-H020#226TE090	20	16.0	22	H	44.0	10	90	1179	825	295	105	3
CA55-C020#336TE150	20	16.0	33	C	66.0	10	150	775	542	194	105	3
CA55-D020#336TE060	20	16.0	33	D	66.0	10	60	1323	926	331	105	3
CA55-D020#336TE080	20	16.0	33	D	66.0	10	80	1146	802	286	105	3
CA55-E020#336TE050	20	16.0	33	E	66.0	10	50	1581	1107	395	105	3
CA55-E020#336TE080	20	16.0	33	E	66.0	10	80	1250	875	313	105	3
CA55-H020#336TE070	20	16.0	33	H	66.0	6	70	1336	935	334	105	3
CA55-C020#476TE150	20	16.0	47	C	94.0	10	150	775	542	194	105	3
CA55-D020#476TE055	20	16.0	47	D	94.0	10	55	1382	967	345	105	3
CA55-D020#476TE080	20	16.0	47	D	94.0	10	80	1146	802	286	105	3
CA55-E020#476TE050	20	16.0	47	E	94.0	10	50	1581	1107	395	105	3
CA55-E020#476TE080	20	16.0	47	E	94.0	10	80	1250	875	313	105	3
CA55-H020#476TE055	20	16.0	47	H	94.0	10	55	1508	1055	377	105	3
CA55-H020#476TE070	20	16.0	47	H	94.0	6	70	1336	935	334	105	3
CA55-H020#476TE090	20	16.0	47	H	94.0	10	90	1179	825	295	105	3
CA55-D020#686TE055	20	16.0	68	D	136.0	6	55	1382	967	345	105	3
CA55-D020#686TE080	20	16.0	68	D	136.0	10	80	1146	802	286	105	3
CA55-E020#686TE045	20	16.0	68	E	136.0	6	45	1667	1167	417	105	3
CA55-E020#686TE080	20	16.0	68	E	136.0	10	80	1250	875	313	105	3
CA55-D020#107TE055	20	16.0	100	D	200.0	10	55	1382	967	345	105	3
CA55-E020#107TE045	20	16.0	100	E	200.0	6	45	1667	1167	417	105	3
CA55-E020#107TE080	20	16.0	100	E	200.0	10	80	1250	875	313	105	3
CA55-V020#107TE080	20	16.0	100	V	200.0	10	80	1369	959	342	105	3
CA55-E020#157TE080	20	16.0	150	E	300.0	10	80	1250	875	313	105	3
CA55-V020#157TE080	20	16.0	150	V	300.0	10	80	1369	959	342	105	3
CA55-W020#157TE080	20	16.0	150	W	300.0	10	80	1581	1107	395	105	3
CA55-E020#227TE080	20	16.0	220	E	440.0	10	80	1250	875	313	105	3
CA55-V020#227TE080	20	16.0	220	V	440.0	10	80	1369	959	342	105	3
CA55-W020#227TE080	20	16.0	220	W	440.0	10	80	1581	1107	395	105	3
CA55-B025#684TE300	25	20.0	0.68	B	1.7	10	300	500	350	125	105	3
CA55-B025#105TE300	25	20.0	1	B	2.5	10	300	500	350	125	105	3
CA55-B025#155TE300	25	20.0	1.5	B	3.8	10	300	500	350	125	105	3
CA55-C025#155TE150	25	20.0	1.5	C	3.8	10	150	775	542	194	105	3
CA55-B025#225TE250	25	20.0	2.2	B	5.5	10	250	548	383	137	105	3
CA55-B025#225TE300	25	20.0	2.2	B	5.5	10	300	500	350	125	105	3
CA55-C025#225TE100	25	20.0	2.2	C	5.5	10	100	949	664	237	105	3
CA55-C025#225TE150	25	20.0	2.2	C	5.5	10	150	775	542	194	105	3
CA55-B025#335TE250	25	20.0	3.3	B	8.3	10	250	548	383	137	105	3
CA55-B025#335TE300	25	20.0	3.3	B	8.3	10	300	500	350	125	105	3
CA55-C025#335TE100	25	20.0	3.3	C	8.3	10	100	949	664	237	105	3
CA55-C025#335TE150	25	20.0	3.3	C	8.3	10	150	775	542	194	105	3
CA55-B025#475TE150	25	20.0	4.7	B	11.8	6	150	707	495	177	105	3
CA55-B025#475TE250	25	20.0	4.7	B	11.8	10	250	548	383	137	105	3
CA55-B025#475TE300	25	20.0	4.7	B	11.8	10	300	500	350	125	105	3
CA55-C025#475TE100	25	20.0	4.7	C	11.8	10	100	949	664	237	105	3
CA55-C025#475TE150	25	20.0	4.7	C	11.8	10	150	775	542	194	105	3
CA55-B025#685TE090	25	20.0	6.8	B	17.0	6	90	913	639	228	105	3
CA55-B025#685TE150	25	20.0	6.8	B	17.0	6	150	707	495	177	105	3
CA55-B025#685TE300	25	20.0	6.8	B	17.0	10	300	500	350	125	105	3
CA55-C025#685TE100	25	20.0	6.8	C	17.0	10	100	949	664	237	105	3
CA55-C025#685TE150	25	20.0	6.8	C	17.0	10	150	775	542	194	105	3
CA55-B025#106TE100	25	20.0	10	B	25.0	8	100	866	606	217	105	3
CA55-B025#106TE150	25	20.0	10	B	25.0	6	150	707	495	177	105	3
CA55-B025#106TE300	25	20.0	10	B	25.0	10	300	500	350	125	105	3

- 1 Please do not use multimeter through the measuring procedures.
- 2 Capacitance and DF measured at :100Hz,  $U_{-}=2.2^{\circ}-1.0V$ ,  $U_{-}=1.0^{\circ}-0.5V$ , Frequency=100Hz.Test only applied in series equivalent circuit.
- 3 Voltage derating is applied at +105C°. (The DCL parameter should be read after 5 minutes when it connected to the circuit) .
- 4 Special size and demand could consult with us.

## RATING & PART NUMBER REFERENCE

Part Number	Rated Voltage	Category Voltage	capacitance	Case Code	Max. DCL	Max. DF	Max. ESR	100kHz RMS Current (mA)			Category Temperature	MSL
	V	V			@+25C°	@+25C° ,100Hz	@+25C° ,100KHz	+45C°	+85C°	+105C°	C°	
			μF		μA	%	mΩ					
CA55-C025#106TE100	25	20.0	10	C	25.0	10	100	949	664	237	105	3
CA55-C025#106TE150	25	20.0	10	C	25.0	10	150	775	542	194	105	3
CA55-D025#106TE090	25	20.0	10	D	25.0	10	90	1080	756	270	105	3
CA55-B025#156TE100	25	20.0	15	B	37.5	6	100	866	606	217	105	3
CA55-B025#156TE150	25	20.0	15	B	37.5	6	150	707	495	177	105	3
CA55-C025#156TE150	25	20.0	15	C	37.5	10	150	775	542	194	105	3
CA55-D025#156TE090	25	20.0	15	D	37.5	10	90	1080	756	270	105	3
CA55-E025#156TE080	25	20.0	15	E	37.5	10	80	1250	875	313	105	3
CA55-H025#156TE090	25	20.0	15	H	37.5	10	90	1179	825	295	105	3
CA55-B025#226TE150	25	20.0	22	B	55.0	6	150	707	495	177	105	3
CA55-C025#226TE100	25	20.0	22	C	55.0	6	100	949	664	237	105	3
CA55-C025#226TE150	25	20.0	22	C	55.0	10	150	775	542	194	105	3
CA55-D025#226TE060	25	20.0	22	D	55.0	6	60	1323	926	331	105	3
CA55-D025#226TE080	25	20.0	22	D	55.0	10	80	1146	802	286	105	3
CA55-D025#226TE100	25	20.0	22	D	55.0	6	100	1025	717	256	105	3
CA55-E025#226TE080	25	20.0	22	E	55.0	10	80	1250	875	313	105	3
CA55-H025#226TE060	25	20.0	22	H	55.0	10	60	1443	1010	361	105	3
CA55-H025#226TE090	25	20.0	22	H	55.0	10	90	1179	825	295	105	3
CA55-D025#336TE060	25	20.0	33	D	82.5	10	60	1323	926	331	105	3
CA55-D025#336TE080	25	20.0	33	D	82.5	10	80	1146	802	286	105	3
CA55-D025#336TE100	25	20.0	33	D	82.5	6	100	1025	717	256	105	3
CA55-E025#336TE080	25	20.0	33	E	82.5	10	80	1250	875	313	105	3
CA55-H025#336TE060	25	20.0	33	H	82.5	10	60	1443	1010	361	105	3
CA55-H025#336TE100	25	20.0	33	H	82.5	6	100	1118	783	280	105	3
CA55-D025#476TE060	25	20.0	47	D	117.5	6	60	1323	926	331	105	3
CA55-D025#476TE080	25	20.0	47	D	117.5	10	80	1146	802	286	105	3
CA55-D025#476TE100	25	20.0	47	D	117.5	6	100	1025	717	256	105	3
CA55-E025#476TE050	25	20.0	47	E	117.5	6	50	1581	1107	395	105	3
CA55-E025#476TE080	25	20.0	47	E	117.5	10	80	1250	875	313	105	3
CA55-D025#686TE080	25	20.0	68	D	170.0	10	80	1146	802	286	105	3
CA55-E025#686TE050	25	20.0	68	E	170.0	6	50	1581	1107	395	105	3
CA55-E025#686TE080	25	20.0	68	E	170.0	10	80	1250	875	313	105	3
CA55-V025#686TE080	25	20.0	68	V	170.0	10	80	1369	959	342	105	3
CA55-E025#107TE060	25	20.0	100	E	250.0	10	60	1443	1010	361	105	3
CA55-E025#107TE080	25	20.0	100	E	250.0	10	80	1250	875	313	105	3
CA55-V025#107TE080	25	20.0	100	V	250.0	10	80	1369	959	342	105	3
CA55-W025#107TE080	25	20.0	100	W	250.0	10	80	1581	1107	395	105	3
CA55-V025#157TE080	25	20.0	150	V	375.0	10	80	1369	959	342	105	3
CA55-W025#157TE080	25	20.0	150	W	375.0	10	80	1581	1107	395	105	3
CA55-B035#684TE350	35	28.0	0.68	B	2.4	10	350	463	324	116	105	3
CA55-B035#105TE350	35	28.0	1	B	3.5	10	350	463	324	116	105	3
CA55-B035#155TE200	35	28.0	1.5	B	5.3	6	200	612	429	153	105	3
CA55-B035#155TE350	35	28.0	1.5	B	5.3	10	350	463	324	116	105	3
CA55-C035#155TE200	35	28.0	1.5	C	5.3	10	200	671	470	168	105	3
CA55-B035#225TE200	35	28.0	2.2	B	7.7	6	200	612	429	153	105	3
CA55-B035#225TE350	35	28.0	2.2	B	7.7	10	350	463	324	116	105	3
CA55-C035#225TE200	35	28.0	2.2	C	7.7	10	200	671	470	168	105	3
CA55-B035#335TE200	35	28.0	3.3	B	11.6	6	200	612	429	153	105	3
CA55-B035#335TE350	35	28.0	3.3	B	11.6	10	350	463	324	116	105	3
CA55-C035#335TE200	35	28.0	3.3	C	11.6	10	200	671	470	168	105	3
CA55-B035#475TE200	35	28.0	4.7	B	16.5	6	200	612	429	153	105	3
CA55-B035#475TE350	35	28.0	4.7	B	16.5	10	350	463	324	116	105	3
CA55-C035#475TE200	35	28.0	4.7	C	16.5	10	200	671	470	168	105	3
CA55-C035#685TE200	35	28.0	6.8	C	23.8	10	200	671	470	168	105	3
CA55-D035#685TE090	35	28.0	6.8	D	23.8	10	90	1080	756	270	105	3

- 1 Please do not use multimeter through the measuring procedures.
- 2 Capacitance and DF measured at :100Hz, U<sub>r</sub>=2.2~-1.0V, U<sub>w</sub>=1.0~-0.5V, Frequency=100Hz.Test only applied in series equivalent circuit.
- 3 Voltage derating is applied at +105C°. (The DCL parameter should be read after 5 minutes when it connected to the circuit) .
- 4 Special size and demand could consult with us.

## RATING & PART NUMBER REFERENCE

Part Number	Rated Voltage	Category Voltage	capacitance	Case Code	Max. DCL	Max. DF	Max. ESR	100kHz RMS Current (mA)			Category Temperature	MSL
	V	V			@+25C°	@+25C°,100Hz	@+25C°,100KHz	+45C°	+85C°	+105C°	C°	
			μF		μA	%	mΩ					
CA55-B035#106TE200	35	28.0	10	B	35.0	6	200	612	429	153	105	3
CA55-C035#106TE200	35	28.0	10	C	35.0	10	200	671	470	168	105	3
CA55-D035#106TE090	35	28.0	10	D	35.0	10	90	1080	756	270	105	3
CA55-E035#106TE090	35	28.0	10	E	35.0	10	90	1179	825	295	105	3
CA55-H035#106TE070	35	28.0	10	H	35.0	6	70	1336	935	334	105	3
CA55-H035#106TE120	35	28.0	10	H	35.0	10	120	1021	714	255	105	3
CA55-C035#156TE200	35	28.0	15	C	52.5	6	200	671	470	168	105	3
CA55-D035#156TE070	35	28.0	15	D	52.5	6	70	1225	857	306	105	3
CA55-D035#156TE100	35	28.0	15	D	52.5	6	100	1025	717	256	105	3
CA55-E035#156TE090	35	28.0	15	E	52.5	10	90	1179	825	295	105	3
CA55-H035#156TE100	35	28.0	15	H	52.5	10	100	1118	783	280	105	3
CA55-H035#156TE125	35	28.0	15	H	52.5	10	125	1000	700	250	105	3
CA55-D035#226TE070	35	28.0	22	D	77.0	6	70	1225	857	306	105	3
CA55-D035#226TE100	35	28.0	22	D	77.0	6	100	1025	717	256	105	3
CA55-E035#226TE090	35	28.0	22	E	77.0	10	90	1179	825	295	105	3
CA55-D035#336TE065	35	28.0	33	D	115.5	10	65	1271	890	318	105	3
CA55-D035#336TE100	35	28.0	33	D	115.5	6	100	1025	717	256	105	3
CA55-E035#336TE055	35	28.0	33	E	115.5	6	55	1508	1055	377	105	3
CA55-E035#336TE070	35	28.0	33	E	115.5	6	70	1336	935	334	105	3
CA55-E035#336TE090	35	28.0	33	E	115.5	10	90	1179	825	295	105	3
CA55-V035#336TE090	35	28.0	33	V	115.5	10	90	1291	904	323	105	3
CA55-E035#476TE030	35	28.0	47	E	164.5	10	30	2041	1429	510	105	3
CA55-E035#476TE055	35	28.0	47	E	164.5	6	55	1508	1055	377	105	3
CA55-E035#476TE090	35	28.0	47	E	164.5	10	90	1179	825	295	105	3
CA55-V035#476TE090	35	28.0	47	V	164.5	10	90	1291	904	323	105	3
CA55-W035#476TE090	35	28.0	47	W	164.5	10	90	1491	1043	373	105	3
CA55-W035#686TE090	35	28.0	68	W	238.0	10	90	1491	1043	373	105	3
CA55-B050#684TE350	50	40.0	0.68	B	3.4	10	350	463	324	116	105	3
CA55-B050#684TE400	50	40.0	0.68	B	3.4	6	400	433	303	108	105	3
CA55-B050#105TE300	50	40.0	1	B	5.0	6	300	500	350	125	105	3
CA55-B050#105TE350	50	40.0	1	B	5.0	10	350	463	324	116	105	3
CA55-B050#155TE300	50	40.0	1.5	B	7.5	6	300	500	350	125	105	3
CA55-B050#155TE350	50	40.0	1.5	B	7.5	10	350	463	324	116	105	3
CA55-C050#155TE200	50	40.0	1.5	C	7.5	10	200	671	470	168	105	3
CA55-C050#155TE300	50	40.0	1.5	C	7.5	6	300	548	383	137	105	3
CA55-B050#225TE350	50	40.0	2.2	B	11.0	10	350	463	324	116	105	3
CA55-C050#225TE200	50	40.0	2.2	C	11.0	10	200	671	470	168	105	3
CA55-C050#225TE300	50	40.0	2.2	C	11.0	6	300	548	383	137	105	3
CA55-C050#335TE200	50	40.0	3.3	C	16.5	10	200	671	470	168	105	3
CA55-D050#335TE100	50	40.0	3.3	D	16.5	10	100	1025	717	256	105	3
CA55-C050#475TE200	50	40.0	4.7	C	23.5	10	200	671	470	168	105	3
CA55-D050#475TE100	50	40.0	4.7	D	23.5	10	100	1025	717	256	105	3
CA55-C050#685TE200	50	40.0	6.8	C	34.0	10	200	671	470	168	105	3
CA55-D050#685TE070	50	40.0	6.8	D	34.0	10	70	1225	857	306	105	3
CA55-D050#685TE100	50	40.0	6.8	D	34.0	10	100	1025	717	256	105	3
CA55-D050#685TE120	50	40.0	6.8	D	34.0	10	120	935	655	234	105	3
CA55-H050#685TE070	50	40.0	6.8	H	34.0	10	70	1336	935	334	105	3
CA55-H050#685TE090	50	40.0	6.8	H	34.0	10	90	1179	825	295	105	3
CA55-D050#106TE090	50	40.0	10	D	50.0	10	90	1080	756	270	105	3
CA55-D050#106TE120	50	40.0	10	D	50.0	10	120	935	655	234	105	3
CA55-E050#106TE070	50	40.0	10	E	50.0	6	70	1336	935	334	105	3
CA55-E050#106TE100	50	40.0	10	E	50.0	10	100	1118	783	280	105	3
CA55-E050#156TE070	50	40.0	15	E	75.0	6	70	1336	935	334	105	3
CA55-E050#156TE100	50	40.0	15	E	75.0	10	100	1118	783	280	105	3
CA55-V050#156TE100	50	40.0	15	V	75.0	10	100	1225	857	306	105	3

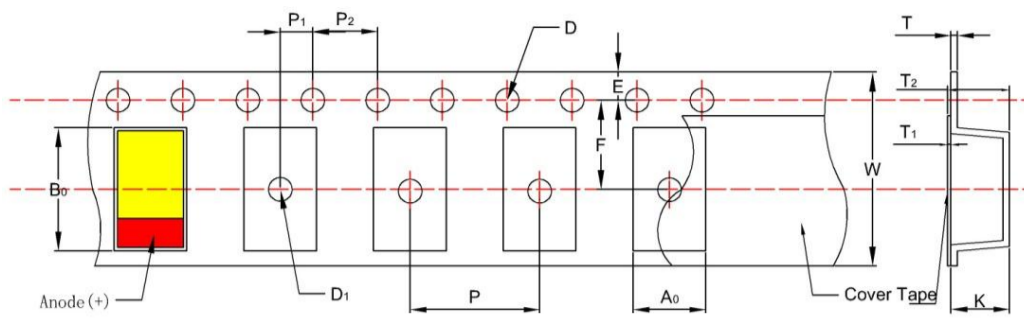
- 1 Please do not use multimeter through the measuring procedures.
- 2 Capacitance and DF measured at :100Hz, U<sub>r</sub>=2.2°-1.0V, U<sub>-</sub>=1.0°-0.5V, Frequency=100Hz.Test only applied in series equivalent circuit.
- 3 Voltage derating is applied at +105C°. (The DCL parameter should be read after 5 minutes when it connected to the circuit) .
- 4 Special size and demand could consult with us.

RATING & PART NUMBER REFERENCE

Part Number	Rated Voltage	Category Voltage	capacitance	Case Code	Max. DCL	Max. DF	Max. ESR	100kHz RMS Current (mA)			Category Temperature	MSL
	V	V			@+25C°	@+25C°,100Hz	@+25C°,100KHz	+45C°	+85C°	+105C°	C°	
			μF		μA	%	mΩ					
CA55-E050#226TE075	50	40.0	22	E	110.0	10	75	1291	904	323	105	3
CA55-E050#226TE100	50	40.0	22	E	110.0	10	100	1118	783	280	105	3
CA55-V050#226TE100	50	40.0	22	V	110.0	10	100	1225	857	306	105	3
CA55-W050#226TE100	50	40.0	22	W	110.0	10	100	1414	990	354	105	3
CA55-E050#336TE075	50	40.0	33	E	165.0	10	75	1291	904	323	105	3
CA55-V050#336TE100	50	40.0	33	V	165.0	10	100	1225	857	306	105	3
CA55-W050#336TE100	50	40.0	33	W	165.0	10	100	1414	990	354	105	3
CA55-W050#476TE100	50	40.0	47	W	235.0	10	100	1414	990	354	105	3
CA55-B063#105TE300	63	50.4	1	B	6.3	8	300	500	350	125	105	3
CA55-C063#105TE200	63	50.4	1	C	6.3	10	200	671	470	168	105	3
CA55-C063#105TE300	63	50.4	1	C	6.3	6	300	548	383	137	105	3
CA55-D063#105TE120	63	50.4	1	D	6.3	10	120	935	655	234	105	3
CA55-C063#155TE200	63	50.4	1.5	C	9.5	10	200	671	470	168	105	3
CA55-C063#155TE300	63	50.4	1.5	C	9.5	6	300	548	383	137	105	3
CA55-D063#155TE120	63	50.4	1.5	D	9.5	10	120	935	655	234	105	3
CA55-C063#225TE200	63	50.4	2.2	C	13.9	10	200	671	470	168	105	3
CA55-D063#225TE120	63	50.4	2.2	D	13.9	10	120	935	655	234	105	3
CA55-C063#335TE200	63	50.4	3.3	C	20.8	10	200	671	470	168	105	3
CA55-D063#335TE120	63	50.4	3.3	D	20.8	10	120	935	655	234	105	3
CA55-C063#475TE200	63	50.4	4.7	C	29.6	6	200	671	470	168	105	3
CA55-D063#475TE075	63	50.4	4.7	D	29.6	10	75	1183	828	296	105	3
CA55-D063#475TE120	63	50.4	4.7	D	29.6	10	120	935	655	234	105	3
CA55-D063#475TE300	63	50.4	4.7	D	29.6	10	300	592	414	148	105	3
CA55-E063#475TE120	63	50.4	4.7	E	29.6	10	120	1021	714	255	105	3
CA55-D063#685TE120	63	50.4	6.8	D	42.8	10	120	935	655	234	105	3
CA55-E063#685TE100	63	50.4	6.8	E	42.8	6	100	1118	783	280	105	3
CA55-E063#685TE150	63	50.4	6.8	E	42.8	6	150	913	639	228	105	3
CA55-D063#106TE120	63	50.4	10	D	63.0	10	120	935	655	234	105	3
CA55-E063#106TE050	63	50.4	10	E	63.0	10	50	1581	1107	395	105	3
CA55-E063#106TE100	63	50.4	10	E	63.0	6	100	1118	783	280	105	3
CA55-E063#106TE150	63	50.4	10	E	63.0	6	150	913	639	228	105	3
CA55-E063#156TE035	63	50.4	15	E	94.5	10	35	1890	1323	472	105	3
CA55-E063#156TE120	63	50.4	15	E	94.5	10	120	1021	714	255	105	3
CA55-E063#156TE150	63	50.4	15	E	94.5	10	150	913	639	228	105	3
CA55-V063#156TE120	63	50.4	15	V	94.5	10	120	1118	783	280	105	3
CA55-W063#226TE120	63	50.4	22	W	138.6	10	120	1291	904	323	105	3

- 1 Please do not use multimeter through the measuring procedures.
- 2 Capacitance and DF measured at :100Hz, U<sub>DC</sub>=2.2~-1.0V, U<sub>AC</sub>~1.0~-0.5V, Frequency=100Hz.Test only applied in series equivalent circuit.
- 3 Voltage derating is applied at +105C°. (The DCL parameter should be read after 5 minutes when it connected to the circuit) .
- 4 Special size and demand could consult with us.

### A,B,C,D,E,V,W Case Product Packaging



Embossed (Plastic) Carrier Tape Dimensions

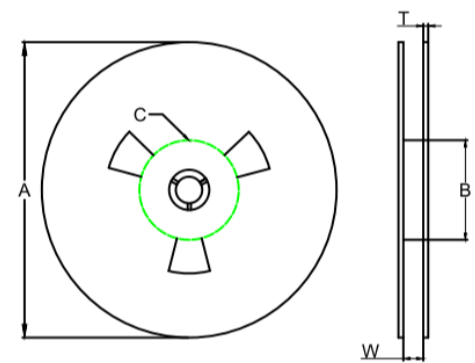
#### Diagram of Taping Dimensions

Case	A <sub>0</sub> ±0.10	B <sub>0</sub> ±0.10	K±0.10	W±0.30	E±0.10	F±0.05	P±0.10	P <sub>1</sub> ±0.05	P <sub>2</sub> ±0.10	D+0.20	D <sub>1</sub> +0.25
A	1.83	3.57	1.65	8	1.75	3.5	4	2	4	1.5	1
B	3.15	3.77	2.22	8	1.75	3.5	4	2	4	1.5	1
C	3.45	6.4	2.92	12	1.75	5.5	8	2	4	1.5	1.5
D	4.48	7.62	3.22	12	1.75	5.5	8	2	4	1.5	1.5
E	4.5	7.5	4.5	12	1.75	5.5	8	2	4	1.5	1.5
V	6.4	7.6	4.4	12	1.75	5.5	8	2	4	1.5	1.5
W	7.2	8.1	4.75	16	1.75	7.5	12	2	4	1.5	1.5

±0.2mm over 10 sprocket hole spaces

#### Reel Dimensions

Reel Size	Tape Wide	A	B	C	W	T
180mm (7")	8mm	178±2.00	50 min	13.0±0.50	8.4+1.5/-0	1.50±0.50
180mm (7")	12mm	178±2.00	50 min	13.0±0.50	12.4+1.5/-0	1.50±0.50
180mm (7")	16mm	178±2.00	50 min	13.0±0.50	16.4+1.5/-1	1.50±0.50



Reel Dimensions

#### Packaging Quantity

Case size	A	B	C	D	E	V	W
Quantity (pcs / plate)	2000	2000	500	500	400	400	400

### Land Dimension /Courtyard

Case code	Metric Size Code	Density Level A: Maximum (Most) Land Protrusion (mm)					Density Level B : Median (Nominal) Land Protrusion (mm)					Density Level C: Minimum (Least) Land Protrusion (mm)				
		W	L	S	V1	V2	W	L	S	V1	V2	W	L	S	V1	V2
A	3216-18	1.35	2.20	0.62	6.02	2.8	1.23	1.8	0.82	4.92	2.3	1.13	1.42	0.98	4.06	2.04
B	3528-21	2.35	2.21	0.92	6.32	4.0	2.23	1.8	1.12	5.22	3.5	2.13	1.42	1.28	4.36	3.24
C	6032-25	2.35	2.77	2.37	8.92	4.5	2.23	2.37	2.57	7.82	4	2.13	1.99	2.73	6.96	3.74
D	7343-31	2.55	2.77	3.67	10.22	5.6	2.43	2.37	3.87	9.12	5.1	2.33	1.99	4.03	8.26	4.84
E	7343-43	2.55	2.77	3.67	10.22	5.6	2.43	2.37	3.87	9.12	5.1	2.33	1.99	4.03	8.26	4.84

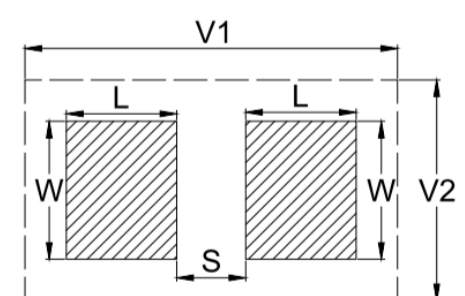
**Density Level A:** For low-density product applications. Recommended for wave solder applications and provides a wider process window for reflow solder processes.

**Density Level B:** For products with a moderate level of component density. Provides a robust solder attachment condition for reflow solder processes.

**Density Level C:** For high component density product applications. Before adapting the minimum land pattern variations the user should perform qualification testing based on the conditions outlined in IPC standard 7351 (IPC-7351).

1 Height of these chips may create problems in wave soldering.

2 Land pattern geometry is too small for silkscreen outline.



Surface Mount Footprints

## Soldering Process

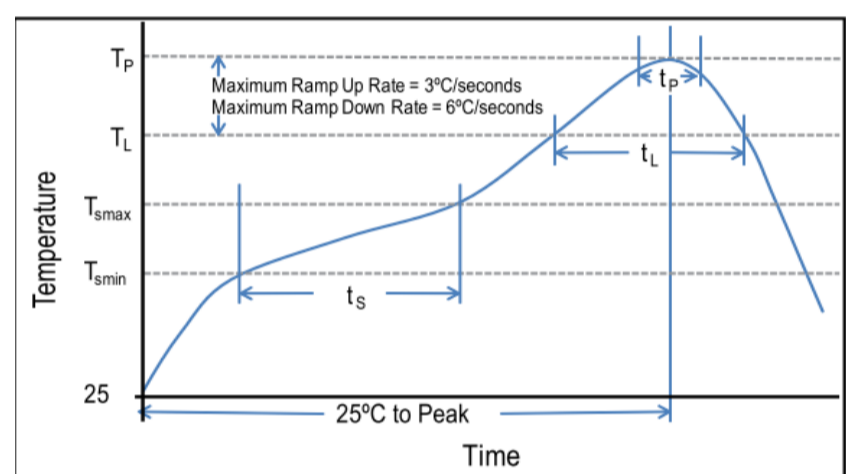
XIANGYEE tantalum capacitors are compatible with wave (single or dual), convection, IR, or vapor phase reflow techniques.

Preheating of these components is recommended to avoid extreme thermal stress. XIANGYEE's recommended profile conditions for convection and IR reflow reflect the profile conditions of the IPC/J-STD-020D standard for moisture sensitivity testing. The devices can safely withstand a maximum of three reflow passes at these conditions.

Hand soldering should be performed with care due to the difficulty in process control. If performed, care should be taken to avoid contact of the soldering iron to the molded case. The iron should be used to heat the solder pad, applying solder between the pad and the termination, until reflow occurs. Once reflow occurs, the iron should be removed immediately. "Wiping" the edges of a chip and heating the top surface is not recommended.

During typical reflow operations, a slight darkening of the gold-colored epoxy may be observed. This slight darkening is normal and not harmful to the product. Marking permanency is not affected by this change.

Profile Feature	SnPb Assembly	Pb-Free Assembly
Preheat/Soak		
Temperature Minimum ( $T_{smin}$ )	100°C	150°C
Temperature Maximum ( $T_{smax}$ )	150°C	200°C
Time ( $t_s$ ) from $T_{smin}$ to $T_{smax}$	60 – 120 seconds	60 – 120 seconds
Ramp-up Rate ( $T_L$ to $T_P$ )	3°C/seconds maximum	3°C/seconds maximum
Liquidous Temperature ( $T_L$ )	183°C	217°C
Time Above Liquidous ( $t_L$ )	60 – 150 seconds	60 – 150 seconds
Peak Temperature ( $T_P$ )	220°C* , 235°C**	250°C* , 260°C**
Time within 5°C of Maximum Peak Temperature ( $t_P$ )	20 seconds maximum	30 seconds maximum
Ramp-down Rate ( $T_P$ to $T_L$ )	6°C/seconds maximum	6°C/seconds maximum
Time 25°C to Peak Temperature	6 minutes maximum	8 minutes maximum



Recommended Reflow Profile

Note: All temperatures refer to the center of the package, measured on the package body surface that is facing up during assembly reflow.

\*Case Size D, E      \*\*Case Size A, B, C

## Storage

Tantalum dielectric chip capacitors are unaffected by the following storage condition for 2 years:

Temperature: -10°C – +50°C Humidity: 75% RH maximum

Atmospheric pressure: 860 mbar ~ 1060mbar

Tantalum capacitors exhibit a very low random failure rate after long periods of storage and apart from this there are no known modes of failure under normal storage conditions. All capacitors will withstand any environmental conditions within their ratings for the periods given in the detail specifications. Storage for longer periods under high humidity conditions may affect the leakage current of resin protected capacitors. Solderability of solder coated surfaces may be affected by storage of excess of 2 years.