CB Series
Tantalum Capacitor

RoHS Compliant

Features:

- Lead-Free
- Specially designed of general purpose
- Highly reliable resin dipped type
- Excellent frequency and temperature characteristics
- Non-flammable epoxy resin

Technical Specifications:

Item	Performance Characteristics
Operating Temperature Range	-55°C to +125°C (>85°C with rated voltage derating)
Rated Working Voltage Range	6.3V DC to 50V DC
Nominal Capacitance Range	0.1μF to 220μF
Capacitance Tolerance	± 20%
Leakage Current	Not more than 0.01 $C_R V_R$ or 0.5μA whichever is greater
Dissipation Factor	Capacitance: ≤1μF | 1.5 to 6.8 μF | 10 to 68 μF | ≥100 μF Max. tan δ: 0.04 | 0.06 | 0.08 | 0.1

Temperature Characteristics:

Cap. (μF)	Change in Cap. (%)			DF Max. (%)				DCL max. (μA)		
	-55°C	+85°C	+125°C	-55°C	+20°C	+85°C	+125°C	+20°C	+85°C	+125°C
≤1	±10	±15	±25	6	4	6	6	Io=0.01$C_R V_R$ 0.5μA(whichever is greater)	10Io	12.5Io
1.5 ~ 6.8				8	6	8	8			
10 ~ 68				10	8	10	10			
100 ~ 680				12	10	12	12			

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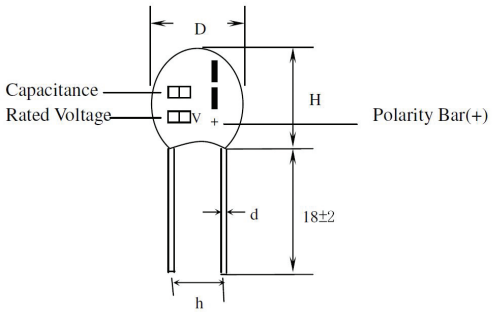
Appearance & Dimensions:



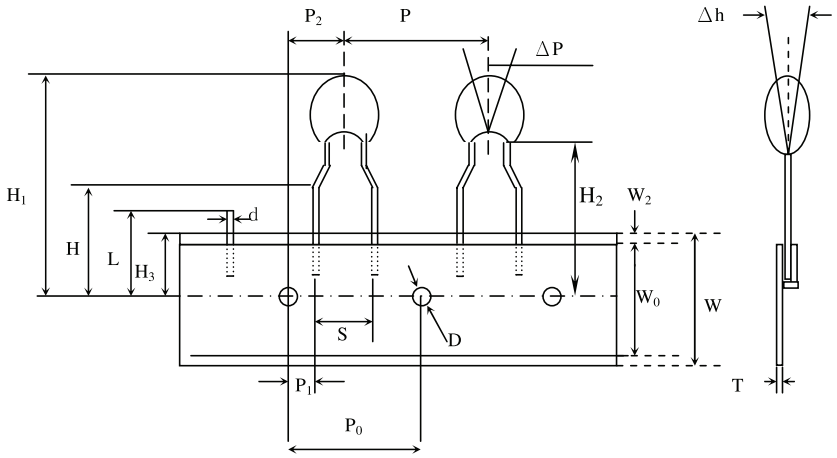
Case Size	D Max.	H Max.	h(±0.5mm)	d(±0.05mm)
A	4.5	7	2.5	0.5
B	5	8		
C	5.5	9.5		
D	6.5	11		
E	8.5	13	5	
F	9.5	16.5		

Dimensions : Millimetres

The Range of the Capacitance and Case:

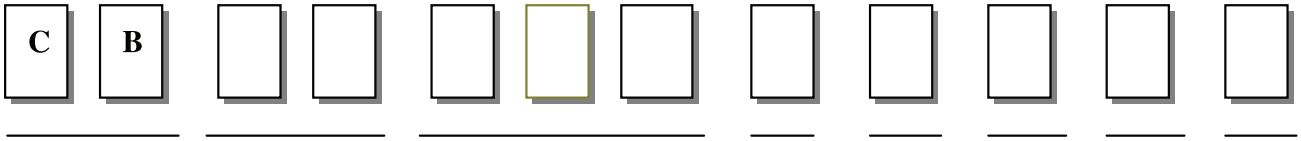
Capacitance μF	Rated voltage								
	3V	4V	6.3V	10V	16V	20V	25V	35V	50V
0.1								A	A
0.15								A	A
0.22								A	A
0.33								A	A
0.47								A	A
0.68								A	A
1.0					A	A	A	A	B
1.5					A	A	A	A	C
2.2				A	A	A	A	B	C
3.3			A	A	A	B	B	B	D
4.7	A	A	A	A	B	B	B	C	D
6.8	A	A	A	B	B	C	C	D	E
10	A	A	B	B	B	C	C	D	E
15	A	A	B	C	C	D	D	E	F
22	B	B	C	C	C	D	D	E	F
33	B	B	C	D	D	E	E	F	
47	C	C	D	D	D	E	E	F	
68	D	D	D	D	E	F	F		
100	D	D	E	E	E	F	F		
150	D	E	E	E	F				
220	E	E	E	F					

Taping Dimension:



Symbol	Dimension (mm)	
P	12.7 ±1	
P_0	12.7 ±0.3	
W	$18^{+1}_{-0.5}$	
W_0	12 ±0.5	
H_3	$9^{+0.75}_{-0.5}$	
W_2	3 max.	
H_1	32.5 max	
ΔP	±1.3 max	
D	4 ±0.3	
T	0.5 ±0.2	
Δh	±2 max	
L	11 max	
H	16 ±0.5	
S	2.5 ±0.5	5 ±0.5
P_1	5.1 ±0.5	3.85 ±0.7
P_2	6.35 ±0.4	
H_2	18-22	
d	0.5 ±0.05	

Taping Dimension:



1. CB represents series number of epoxy-coated solid electrolytic tantalum capacitors.
2. Rated DC voltage Code is expressed in two digits.

Rated Voltage	6.3V	10V	16V	25V	35V	50V
Code	0J	1A	1C	1E	1V	1H

3. Capacitance code: Expressed in Pico farad, 1st two digits represent significant figures and 3rd digit represents multiplier (number of zeros to follow).
4. Capacitance tolerance code is listed as follows:

Allowable Tolerance	Tolerance Code
±20	M

5. Lead Space:

Lead Space	Symbol
2.54m/m ±0.5	1
5.08m/m ±0.5	2

6. Case Code is specified in Appearance & Dimensions in Page 2
7. Wire Length: Wire Length (L) code is listed as follows

Wire Length (L)	(+)20(-)18 ±1m/m
Code	C

Pack Style	Packing Code: B	Bulk T	Ammo
CB	Δ C/C±20%	35V10μF	CB1V106M1DCB

Part Number Table

Description	Part Number
Capacitor, 4.7µF, 6.3V	CB0J475M2ACB
Capacitor, 6.8µF, 6.3V	CB0J685M2ACB
Capacitor, 15µF, 6.3V	CB0J156M2BCB
Capacitor, 33µF, 6.3V	CB0J336M2CCB
Capacitor, 150µF, 6.3V	CB0J157M2ECB
Capacitor, 220µF, 6.3V	CB0J227M2ECB
Capacitor, 6.8µF, 10V	CB1A685M2BCB
Capacitor, 15µF, 10V	CB1A156M2CCB
Capacitor, 68µF, 10V	CB1A686M2DCB
Capacitor, 150µF, 10V	CB1A157M2ECB
Capacitor, 220µF, 10V	CB1A227M2FCB
Capacitor, 3.3µF, 16V	CB1C335M2ACB
Capacitor, 15µF, 16V	CB1C156M2CCB
Capacitor, 150µF, 16V	CB1C157M2FCB
Capacitor, 1.5µF, 25V	CB1E155M2ACB
Capacitor, 3.3µF, 25V	CB1E335M2BCB
Capacitor, 47µF, 25V	CB1E476M2ECB
Capacitor, 68µF, 25V	CB1E686M2FCB
Capacitor, 100µF, 25V	CB1E107M2FCB
Capacitor, 0.15µF, 35V	CB1V154M2ACB
Capacitor, 0.68µF, 35V	CB1V684M2ACB
Capacitor, 1.5µF, 35V	CB1V155M2ACB
Capacitor, 33µF, 35V	CB1V336M2FCB
Capacitor, 0.1µF, 50V	CB1H104M2ACB
Capacitor, 0.22µF, 50V	CB1H224N2ACB
Capacitor, 0.33µF, 50V	CB1H334M2ACB
Capacitor, 0.47µF, 50V	CB1H474M2ACB
Capacitor, 0.68µF, 50V	CB1H684M2ACB
Capacitor, 1µF, 50V	CB1H105M2BCB
Capacitor, 1.5µF, 50V	CB1H155M2CCB
Capacitor, 2.2µF, 50V	CB1H225M2CCB
Capacitor, 3.3µF, 50V	CB1H335M2DCB

Description	Part Number
Capacitor, 4.7µF, 50V	CB1H475M2DCB
Capacitor, 6.8µF, 50V	CB1H685M2ECB
Capacitor, 10µF, 50V	CB1H106M2ECB
Capacitor, 10µF, 6.3V	CB0J106M2BCB
Capacitor, 22µF, 6.3V	CB0J226M2CCB
Capacitor, 47µF, 6.3V	CB0J476M2DCB
Capacitor, 68µF, 6.3V	CB0J686M2DCB
Capacitor, 100µF, 6.3V	CB0J107M2ECB
Capacitor, 4.7µF, 10V	CB1A475M2ACB
Capacitor, 10µF, 10V	CB1A106M2BCB
Capacitor, 22µF, 10V	CB1A226M2CCB
Capacitor, 33µF, 10V	CB1A336M2DCB
Capacitor, 47µF, 10V	CB1A476M2DCB
Capacitor, 100µF, 10V	CB1A107M2ECB
Capacitor, 2.2µF, 16V	CB1C225M2ACB
Capacitor, 4.7µF, 16V	CB1C475M2BCB
Capacitor, 6.8µF, 16V	CB1C685M2BCB
Capacitor, 10µF, 16V	CB1C106M2BCB
Capacitor, 22µF, 16V	CB1C226M2CCB
Capacitor, 33µF, 16V	CB1C336M2DCB
Capacitor, 47µF, 16V	CB1C476M2DCB
Capacitor, 68µF, 16V	CB1C686M2ECB
Capacitor, 100µF, 16V	CB1C107M2ECB
Capacitor, 1µF, 25V	CB1E105M2ACB
Capacitor, 2.2µF, 25V	CB1E225M2ACB
Capacitor, 4.7µF, 25V	CB1E475M2BCB
Capacitor, 6.8µF, 25V	CB1E685M2CCB
Capacitor, 10µF, 25V	CB1E106M2CCB
Capacitor, 15µF, 25V	CB1E156M2DCB
Capacitor, 22µF, 25V	CB1E226M2DCB
Capacitor, 33µF, 25V	CB1E336M2ECB
Capacitor, 0.1µF, 35V	CB1V104M2ACB

Description	Part Number
Capacitor, 0.22µF, 35V	CB1V224M2ACB
Capacitor, 0.33µF, 35V	CB1V334M2ACB
Capacitor, 0.47µF, 35V	CB1V474M2ACB
Capacitor, 1µF, 35V	CB1V105M2ACB
Capacitor, 2.2µF, 35V	CB1V225M2BCB
Capacitor, 3.3µF, 35V	CB1V335M2BCB
Capacitor, 4.7µF, 35V	CB1V475M2CCB
Capacitor, 6.8µF, 35V	CB1V685M2DCB
Capacitor, 10µF, 35V	CB1V106M2DCB
Capacitor, 15µF, 35V	CB1V156M2ECB
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