CS Series

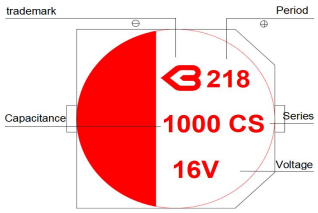
CU ← high voltag — CS — high temp → CT

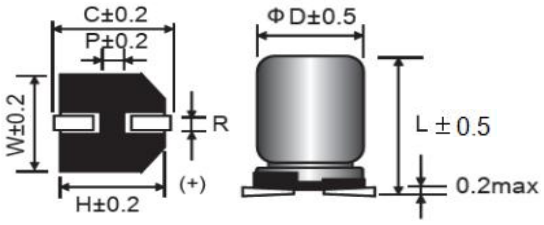
- Super low impedance, High ripple, miniaturized
- SMD type: lead free reflow soldering condition at 260℃ peak correspondence
- RoHS Compliant

◆ Specifications

Items	Characteristics		
Category Temperture Range	-55 ~ +105℃		
Rated Voltage Range	2.5 ~ 25V		
Capacitance tolerance	±20%(M) (at 20℃,120Hz)		
Leakage Current	After 2 minutes applied for rated voltage at 20℃, less than or equal to the specified value.		
tanδ Dissipation Factor	Less than or equal to the specified		(at 20℃,120Hz)
Low Temperture Characteristics (Max.Impedance Ratio)	Z(-25℃)/Z(+20℃)	≤1.25	(100KHz)
	Z(-55℃)/Z(+20℃)	≤1.25	
Endurence	The specifications listed below shall be satisfied when the capacitors are restored to 20℃ after applying rated is applied for 2000 hours at 105℃.		
	Appearance	No significant damage	
	Capacitance change	≦±20% of the initial value	
	D.F.(tanδ)	≦150% of the specified value	
	ESR	≦150% of the specified value	
	Leakage current	≦The specified value	
Damp Heat (Steady State)	The specifications listed below shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 1000 hours at 60℃, 90%～ 95% RH.		
	Appearance	No significant damage	
	Capacitance change	≦±20% of the initial value	
	D.F.(tanδ)	≦150% of the specified value	
	ESR	≦150% of the specified value	
	Leakage current	≦The specified value	
(Surge Voltage)	Surge Voltage=Rated voltage * 1.15(V) The capacitors shall be subjected to 1,000 cycles each consisting of charge with the surge voltages specified at 15~35℃ for 30 seconds through aprotective resistor (R=1kΩ) and discharge for 5 minutes 30seconds		
	Appearance	No significant damage	
	Capacitance change	≦±20% of the initial value	
	D.F.(tanδ)	≦150% of the specified value	
	ESR	≦150% of the specified value	
	Leakage current	≦The specified value	
Resistance to soldering heat	After soldering the capacitor shall meet the specifications listed below.		
	Capacitance change	≦±10% of the initial value	
	D.F.(tanδ)	≦130% of the specified value	
	ESR	≦130% of the specified value	
	Leakage current	≦The specified value	

◆ Dimensions (mm)





ΦD	5	6.3	8	8	10	10
L	6	7	7	12.0	10.0	12.6
W	5.3	6.6	8.3	8.3	10.3	10.3
H	5.3	6.6	8.3	8.3	10.3	10.3
C	6	7.3	9.0	9.0	11.0	11.0
R	0.5~0.8	0.5~0.8	0.8~1.1	0.8~1.1	0.8~1.1	0.8~1.1
P	1.4	2.1	3.2	3.2	4.6	4.6

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◆ Standard Ratings

Rated voltage (V)	Rated capacitance(uF)	Case size ΦD*L(mm)	Leakage carrent (uA)	tanδ （120Hz）	ESR(mΩ) at 20℃,100 KHz	Rated ripple carrent (mArms/105℃\100kHz)
2.5	82	5*6	500.0	0.12	25	2800
	180	6.3*6	500.0	0.12	25	2690
	330	6.3*6	500.0	0.12	25	2400
	390	6.3*7	500.0	0.12	20	2800
	470	6.3*7	500.0	0.12	20	3200
	560	6.3*8	500.0	0.12	20	3200
	560	6.3*7	500.0	0.12	25	2350
	680	6.3*9.7	500.0	0.12	20	4300
	820	6.3*9.7	500.0	0.12	20	3500
	1000	8*9.7	500.0	0.12	15	4260
	1200	8*9.7	600.0	0.12	15	5100
	1500	8*9.7	750.0	0.12	15	5200
	2700	10*12.5	1350.0	0.12	13	5200
4	68	5*6	500.0	0.12	20	2730
	150	6.3*6	500.0	0.12	22	2570
	270	6.3*7	500.0	0.12	22	3220
	560	8*7.5	500.0	0.12	22	3220
	680	6.3*9.7	544.0	0.12	19	3200
	680	8*9.7	544.0	0.12	16	3800
	820	8*9.7	656.0	0.12	19	3800
	1000	8*9.7	800.0	0.12	13	5200
	1200	8*9.7	960.0	0.12	13	5200
	1500	10*12.5	1200.0	0.12	13	5400
6.3	47	5*6	500.0	0.12	30	1500
	100	5*6	500.0	0.12	25	1700
	120	6.3*6	500.0	0.12	25	2570
	150	6.3*6	500.0	0.12	22	2500
	180	6.3*6	500.0	0.12	22	2800
	220	6.3*6	500.0	0.12	22	2800
	330	6.3*7	500.0	0.12	20	2600
	390	8*9.7	500.0	0.12	30	3220
	470	8*7.5	592.2	0.12	18	3220
	560	6.3*9.7	706.0	0.12	20	3000
	560	8*9.7	706.0	0.12	15	5000
	680	8*9.7	856.8	0.12	15	5000
	820	8*9.7	1033.2	0.12	12	3350
	1000	8*9.7	1260.0	0.12	12	4700
	1200	8*9.7	1512.0	0.12	12	4700
	1500	10*12.5	1890.0	0.12	12	4300

◆ Rated Ripple Current Coefficient

Frequency(Hz)	120Hz≤f<1kHz	1kHz≤f<10kHz	10kHz≤f<100kHz	100kHz≤f<500kHz
Coefficient	0.05	0.30	0.70	1.00

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◆ Standard Ratings

Rated voltage (V)	Rated capacitance(uF)	Case size ΦD*L(mm)	Leakage carrent (uA)	tanδ （120Hz）	ESR(mΩ) at 20℃,100 KHz	Rated ripple carrent (mArms/105℃\100kHz)
10	68	6.3*6	500.0	0.12	50	2200
	150	6.3*6	500.0	0.12	45	2400
	220	8*9.7	500.0	0.12	20	3500
	270	8*9.7	540.0	0.12	20	3600
	330	8*9.7	660.0	0.12	17	3500
	330	6.3*9.7	660.0	0.12	20	3200
	680	10*12.5	660.0	0.12	13	3500
16	39	6.3*6	500.0	0.12	35	2040
	82	6.3*6	500.0	0.12	30	2400
	100	6.3*6	500.0	0.12	30	2500
	180	8*7.5	576.0	0.12	25	2500
	180	6.3*9.5	576.0	0.12	25	2500
	220	8*9.7	704.0	0.12	20	3700
	220	6.3*9.7	704.0	0.12	20	3200
	270	6.3*9.7	864.0	0.12	20	3200
	270	8*9.7	864.0	0.12	20	4200
	330	8*9.7	1056.0	0.12	20	3900
	470	8*9.7	1504.0	0.12	20	3800
	470	10*12.5	1504.0	0.12	20	4000
	560	8*12.5	1792.0	0.12	20	3900
	560	10*12.5	1792.0	0.12	20	4100
	680	10*10	2176.0	0.12	20	4200
	680	10*12.5	2176.0	0.12	20	4200
	820	10*12.5	2624.0	0.12	20	4200
	1000	10*12.5	3200.0	0.12	20	4300
20	22	6.3*6	500.0	0.12	60	1450
	47	8*7	500.0	0.12	45	1890
	68	10*8	500.0	0.12	40	2400
	100	8*12.5	500.0	0.12	24	3320
	150	10*12.5	600.0	0.12	20	4220
25	33	6.3*6	500.0	0.12	50	1000
	47	6.3*6	500.0	0.12	40	1200
	56	8*9.7	500.0	0.12	75	1300
	100	8*9.7	500.0	0.12	30	3300
	220	8*12.5	1100.0	0.12	28	3500
	220	10*12.5	1100.0	0.12	28	3800
	270	10*12.5	1350.0	0.12	50	3800
	330	10*12.5	1650.0	0.12	35	2800
	470	10*12.5	2350.0	0.12	30	2800

◆ Rated Ripple Current Coefficient

Frequency(Hz)	120Hz≤f＜1kHz	1kHz≤f＜10kHz	10kHz≤f＜100kHz	100kHz≤f＜500kHz
Coefficient	0.05	0.30	0.70	1.00