

ZA Series

● Low ESR ● High Voltage, Long Life. ● 105℃, 5,000~10,000hrs.

● RoHS compliant

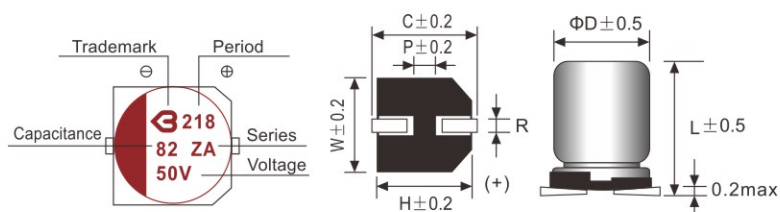
◆ Specifications



Items	Characteristics		
Category Temperture Range	-55 ~ +105℃		
Rated Voltage Range	16~125V		
Capacitance tolerance	±20%(M) (at 20℃,120Hz)		
Leakage Current	I≤0.05CV or 100μA (The bigger) After 2 minutes applied for rated voltage at 20℃, less than or equal to the specified value.		
tan δ Dissipation Factor	Less than or equal to the specified (at 20℃,120Hz)		
Low Temperture Characteristics (Max.Impedance Ratio)	Z(-55℃)/Z(+20℃)	≅0.75 to 1.5	(100KHz)
	Z(+105℃)/Z(+20℃)	≅0.75 to 2.0	
Endurance	ΦD=Φ6.3=5,000hrs,ΦD≧Φ8=10,000hrs; The following specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage is applied for 5,000 to 10,000 hours at 105℃.ΦD=Φ6.3=5,000hrs, ΦD≧Φ8=10,000hrs ;		
	Appearance	No significant damage	
	Capacitance change	≅±30% of the initial value	
	D.F.(tan δ)	≅200% of the specified value	
	ESR	≅200% 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℃ after the rated voltage is applied for 1000 hours at 60℃, 90% ~ 95% RH.		
	Appearance	No significant damage	
	Capacitance change	≅±30% of the initial value	
	D.F.(tan δ)	≅200% of the specified value	
	ESR	≅200% 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 30 seconds		
	Appearance	No significant damage	
	Capacitance change	≅±30% of the initial value	
	D.F.(tan δ)	≅200% of the specified value	
	ESR	≅200% of the specified value	
	Leakage current	≅The specified value	

◆ Dimensions (mm)

(Unit:mm)



Size	ΦD	L	W	H	C	R	P
6.3*7.7	6.3	7.7	6.6	6.6	7.3	0.5~0.8	2.1
8*10.5	8	10.5	8.3	8.3	9	0.7~1.1	3.2
10*10.5	10	10.5	10.3	10.3	11	0.7~1.3	4.6
10*12.5	10	12.5	10.3	10.3	11	0.7~1.3	4.6

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◆ Standard Ratings

Rated voltage (V)	Rated capacitance(μF)	Case size ΦD×L(mm)	Leakage current (μA)	ESR(mΩ) at 20℃, 100 kHz	Rated ripple current (mA _{rms} /105℃/100kHz)	Tan δ (120Hz)
16	120	6.3*7.7	100.0	40	1500	0.16
	270	8*10.5	216.0	26	2000	0.16
	470	10*10.5	376.0	21	2600	0.16
	560	10*12.5	448.0	15	3000	0.16
25	68	6.3*7.7	100.0	45	1400	0.16
	150	8*10.5	187.5	27	1900	0.16
	270	10*10.5	337.5	22	2500	0.16
	330	10*12.5	412.5	16	2900	0.16
35	47	6.3*7.7	100.0	60	1300	0.16
	100	8*10.5	175.0	30	1800	0.16
	150	10*10.5	262.5	23	2400	0.16
	220	10*12.5	385.0	17	2800	0.16
40	27	6.3*7.7	100.0	70	1200	0.16
	56	8*10.5	112.0	32	1700	0.16
	100	10*10.5	200.0	24	2400	0.16
	120	10*12.5	240.0	18	2700	0.16
50	15	6.3*7.7	100.0	80	1200	0.16
	33	8*10.5	82.5	35	1600	0.16
	56	10*10.5	140.0	25	2300	0.16
	82	10*12.5	205.0	19	2600	0.16
63	10	6.3*7.7	100.0	100	1000	0.16
	22	8*10.5	100.0	40	1500	0.16
	33	8*10.5	104.0	40	1500	0.16
	33	10*10.5	104.0	30	2100	0.16
	47	10*10.5	148.1	30	2100	0.16
	56	10*12.5	176.4	22	2400	0.16
80	12	10*10.5	100.0	70	1600	0.16
	15	10*10.5	100.0	70	1600	0.16
	18	10*12.5	100.0	50	1800	0.16
100	10	10*10.5	100.0	80	1400	0.16
	12	10*10.5	100.0	80	1400	0.16
125	15	10*12.5	100.0	60	1600	0.16
	10	10*10.5	100.0	90	1200	0.16

◆ Rated Ripple Current Coefficient

Frequency(Hz)	100Hz≤f<1kHz	1kHz≤f<10kHz	10kHz≤f<100kHz	100kHz≤f
4.7 < C ≤ 33	0.05	0.32	0.67	1.00
33 < C	0.10	0.35	0.70	1.00