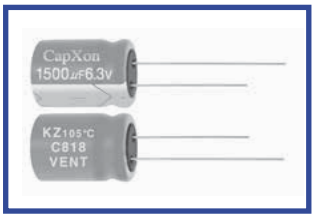
KZ Series Low Impedance



Features

◆Used in communication equipments,swtiching power supply,industrial measuring instruments,etc.
◆Endurance 1000~2000 hours
◆Safety vent construction design.
◆ROHS Compliant

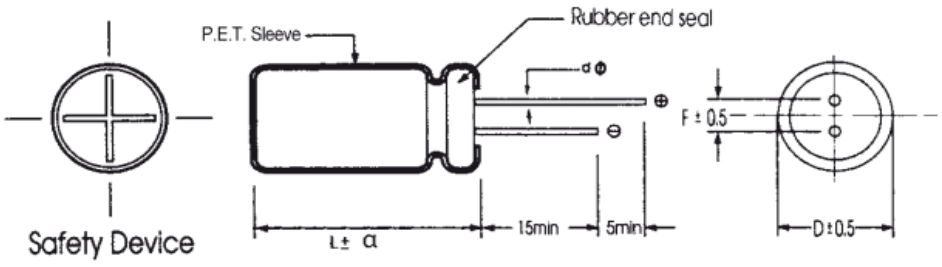
Specifications

Item	Performance Characteristics
Operating Temperature Range	-40 to +105℃
Rated Voltage Range	6.3 to 50 VDC
Capacitance Range	0.47 to 6800 μF
Capacitance Tolerance	±20% (120Hz, +20℃)
Leakage Current (+20℃,max.)	I≦0.01CV or 3(μA) After 2 minutes whichever is greater measured with rated working voltage applied.
Dissipation Factor (tanδ，at 20℃，120Hz)	Rated Voltage(VDC) 6.3 10 16 25 35 50 D.F. (%)max. 18 16 14 12 10 9 For capacitance>1000μF,add 2% per another 1000μF.
Low Temperature Characteristics (at 120Hz)	Impedance ratio max Rated Voltage(VDC) 6.3 10 16 25 35 50 Z-25℃ / Z+20℃ 4 3 3 3 3 3 Z-40℃ / Z+20℃ 8 6 4 3 3 3 For capacitance>1000μF, add 0.5 per another 1000μF for -25℃/+20℃ add 1 per another 1000μF for -40℃/+20℃
Endurance	Test conditions Dutation time :as right Ambient temperature :+105℃ Applied voltage :Rated DC working voltage After test requirement at +20℃ Capacitance change :≦±20% of the initial measured value Dissipation factor :≦ 200% of the initial specified value Leakage current :≦ The initial specified value Dφ / Life hours: 5-6.3φ 1000; ≧8φ 2000
Shelf Life	Test conditions Duration time :1000Hrs Ambient temperature :+105℃ Applied voltage :None After test requirement at +20℃:Same limits as Endurance. Pre-treatment for measurements shall be conducted after application of DC working voltage for 30 minutes.

Multiplier for Ripple Current vs. Frequency

CAP(μF) / Frequency(Hz)	50(60)	120	400	1K	10K	50K~100K
CAP≦10	0.47	0.59	0.76	0.85	0.97	1.0
10＜CAP≦100	0.52	0.62	0.80	0.89	0.97	1.0
100＜CAP≦1000	0.58	0.72	0.84	0.90	0.98	1.0
1000＜CAP	0.63	0.78	0.87	0.91	0.98	1.0

Diagram of Dimensions:(unit:mm)



Dφ	5	6.3	8		10	13	16	18
F	2.0	2.5	3.5		5.0	5.0	7.5	7.5
dφ	0.5		L＜20	L≧20	0.6		0.8	
			0.5	0.6				

α	D < 16	D=16		D=18		D > 18
		L: 25~35.5	L < 25 and L≧40	L: 25~31.5	L < 25 and L≧35.5	
	1.5	1.5	2.0	1.5	2.0	2.0

Case Size

WV (Vdc)	Cap (uF)	Size mm	Rated Ripple current (mArms/105℃ /100KHz)	Max ESR(Ω) at 20℃ /100kHz
6.3	22	5×11	80	3.00
6.3	33	5×11	90	2.00
6.3	47	5×11	140	1.50
6.3	56	5×11	150	1.50
6.3	68	5×11	160	1.10
6.3	100	5×11	170	1.00
6.3	120	5×11	173	0.90
6.3	150	5×11	178	0.85
6.3	180	6.3×11	215	0.72
6.3	220	6.3×11	295	0.62
6.3	270	6.3×11	320	0.50
6.3	330	6.3×11	380	0.45
6.3	470	8×11.5	460	0.22
6.3	560	8×11.5	490	0.22
6.3	680	8×11.5	520	0.19
6.3	820	8×11.5	605	0.19
6.3	1000	8×11.5	680	0.18
6.3	1200	10×12.5	750	0.15
6.3	1500	10×12.5	820	0.14
6.3	1800	10×16	920	0.12
6.3	2200	10×20	1150	0.10
6.3	2700	10×20	1500	0.075
6.3	3300	10×20	1620	0.060
6.3	3900	13×25	1820	0.058
6.3	4700	13×25	1920	0.040
6.3	5600	13×30	2210	0.038
6.3	6800	16×25	2380	0.032
10	22	5×11	90	2.50
10	33	5×11	105	2.00
10	47	5×11	155	1.30
10	56	5×11	165	1.20
10	68	5×11	175	1.00
10	100	5×11	215	0.75
10	120	6.3×11	240	0.73
10	150	6.3×11	225	0.60
10	180	6.3×11	280	0.58
10	220	6.3×11	300	0.43
10	270	8×11.5	405	0.28
10	330	8×11.5	465	0.25
10	470	8×11.5	500	0.22
10	560	8×11.5	620	0.17
10	680	8×11.5	750	0.12
10	820	10×12.5	805	0.10
10	1000	10×12.5	1050	0.08
10	1200	10×16	1150	0.065
10	1500	10×16	1210	0.062
10	1800	10×20	1280	0.060
10	2200	10×20	1520	0.050
10	2700	13×20	1580	0.048
10	3300	13×20	1700	0.043
10	3900	13×25	1860	0.040
10	4700	13×25	1950	0.038
10	5600	16×25	2290	0.033
10	6800	16×25	2480	0.028
16	10	5×11	80	4.00
16	22	5×11	110	2.00
16	33	5×11	114	1.80
16	47	5×11	160	1.00
16	56	5×11	180	0.80
16	68	5×11	200	0.65

WV (Vdc)	Cap (uF)	Size mm	Rated Ripple current (mArms/105℃ /100KHz)	Max ESR(Ω) at 20℃ /100kHz
16	100	5×11	255	0.55
16	120	6.3×11	270	0.45
16	150	6.3×11	292	0.40
16	180	6.3×11	380	0.32
16	220	6.3×11	430	0.25
16	270	8×11.5	480	0.20
16	330	8×11.5	595	0.15
16	470	8×11.5	650	0.15
16	560	8×11.5	730	0.12
16	680	10×12.5	890	0.09
16	820	10×12.5	980	0.085
16	1000	10×16	1180	0.070
16	1200	10×20	1320	0.060
16	1500	10×20	1450	0.056
16	1800	10×20	1510	0.053
16	2200	13×20	1820	0.040
16	2700	13×20	2050	0.035
16	3300	13×25	2300	0.033
16	3900	16×25	2550	0.033
16	4700	16×25	2580	0.032
16	5600	16×31.5	2650	0.030
16	6800	16×31.5	2900	0.024
25	4.7	5×11	72	3.50
25	5.6	5×11	75	3.50
25	6.8	5×11	83	2.80
25	10	5×11	87	2.50
25	22	5×11	118	1.80
25	33	5×11	155	1.40
25	47	5×11	183	0.90
25	56	5×11	207	0.83
25	68	5×11	210	0.69
25	100	6.3×11	378	0.34
25	120	6.3×11	380	0.33
25	150	8×11.5	390	0.325
25	180	8×11.5	430	0.25
25	220	8×11.5	550	0.15
25	270	8×11.5	520	0.15
25	330	8×11.5	710	0.13
25	470	8×11.5	980	0.078
25	470	8×16	1050	0.070
25	560	10×16	1080	0.065
25	680	10×16	1100	0.065
25	820	10×20	1350	0.050
25	1000	10×20	1580	0.045
25	1200	13×20	1720	0.040
25	1500	13×20	1780	0.040
25	1800	13×20	1980	0.035
25	2200	13×25	2000	0.033
25	2700	13×25	2250	0.032
25	3300	16×25	2580	0.027
25	4700	16×31.5	2850	0.025
25	5600	16×35.5	3000	0.025
25	6800	18×35.5	3550	0.025
35	4.7	5×11	87	3.50
35	5.6	5×11	95	3.00
35	6.8	5×11	98	2.70
35	10	5×11	107	2.20
35	22	5×11	150	1.50
35	33	5×11	180	1.20
35	47	5×11	257	0.75

Case Size

WV (Vdc)	Cap (uF)	Size mm	Rated Ripple current (mArms/105℃ /100KHz)	Max ESR(Ω) at 20℃ /100kHz
35	56	6.3×11	283	0.60
35	68	6.3×11	290	0.55
35	100	6.3×11	430	0.26
35	120	8×11.5	470	0.20
35	150	8×11.5	510	0.20
35	180	8×11.5	570	0.18
35	220	8×11.5	620	0.13
35	270	10×12.5	850	0.12
35	330	8×16	1050	0.08
35	470	10×16	1100	0.065
35	560	13×20	1300	0.060
35	680	13×20	1570	0.056
35	820	13×20	1700	0.048
35	1000	13×20	1820	0.042
35	1200	13×25	2130	0.038
35	1500	13×25	2150	0.038
35	1800	13×25	2450	0.035
35	2200	16×25	2650	0.034
35	2700	16×31.5	2690	0.030
35	3300	16×35.5	2750	0.027
35	4700	18×35.5	2940	0.025
35	5600	18×35.5	3050	0.024
50	0.47	5×11	28	5.00
50	1	5×11	42	3.80
50	2.2	5×11	55	2.80
50	3.3	5×11	62	2.00
50	4.7	5×11	90	2.00
50	5.6	5×11	108	1.80
50	6.8	5×11	112	1.80
50	10	5×11	120	1.75
50	22	5×11	150	1.50
50	33	6.3×11	233	0.78
50	47	6.3×11	270	0.65
50	56	6.3×11	290	0.60
50	68	6.3×11	310	0.50
50	100	8×11.5	480	0.17
50	120	10×12.5	500	0.164
50	150	10×12.5	560	0.16
50	180	10×12.5	580	0.14
50	220	10×16	640	0.09
50	270	10×16	905	0.08
50	330	10×16	1050	0.07
50	470	13×20	1450	0.05
50	560	13×20	1510	0.05
50	680	13×20	1750	0.05
50	820	13×25	1980	0.04
50	1000	13×25	2000	0.04
50	1200	16×25	2200	0.038
50	1500	16×25	2300	0.038
50	1800	16×31.5	2610	0.036
50	2200	16×31.5	2900	0.033
50	2700	18×35.5	3000	0.028
50	3300	18×35.5	3050	0.026

WV (Vdc)	Cap (uF)	Size mm	Rated Ripple current (mArms/105℃ /100KHz)	Max ESR(Ω) at 20℃ /100kHz