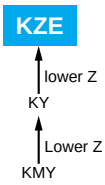
MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

Low impedance, 105℃

KZE Series

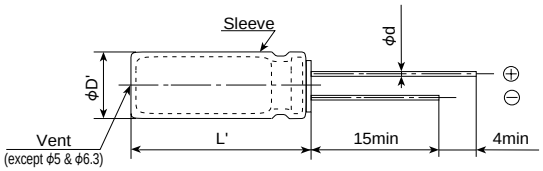
- Ultra Low impedance for Personal Computer and Storage Equipment
- Endurance with ripple current: 105℃ 2000 to 5000 hours
- Non solvent-proof

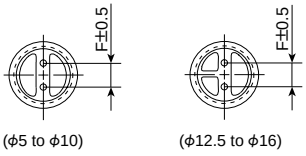


◆SPECIFICATIONS

Items	Characteristics
Category Temperature Range	−40 to +105℃
Rated Voltage Range	6.3 to 50Vdc
Capacitance Tolerance	±20% (M) (at 20℃, 120Hz)
Leakage Current	I=0.01CV or 3μA, whichever is greater. Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20℃ after 2 minutes)
Dissipation Factor (tanδ)	Rated voltage (Vdc) 6.3V 10V 16V 25V 35V 50V tanδ (Max.) 0.22 0.19 0.16 0.14 0.12 0.10 When nominal capacitance exceeds 1000μF, add 0.02 to the value above for each 1000μF increase. (at 20℃, 120Hz)
Low Temperature Characteristics (Max. Impedance Ratio)	Z (-25℃) / Z (+20℃) 2max. Z (-40℃) / Z (+20℃) 3max. (at 120Hz)
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20℃ after subjected to DC voltage with the rated ripple current is applied for the specified period of time at 105℃. Time: φ5 & φ6.3 : 2000hours φ8 : 3000hours φ10 : 4000hours φ12.5 & φ16 : 5000hours Capacitance change: ≦±25% of the initial value D.F. (tanδ): ≦200% of the initial specified value Leakage current: ≦The initial specified value
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20℃ after exposing them for 500 hours at 105℃ without voltage applied. Capacitance change: ≦±25% of the initial value D.F. (tanδ): ≦200% of the initial specified value Leakage current: ≦The initial specified value

◆DIMENSIONS (Radial Lead Type=VB) [mm]





Gas escaped end seal

φD	5	6.3	8	10	12.5	16
φd	0.5	0.5	0.6	0.6	0.6	0.8
F	2.0	2.5	3.5	5.0	5.0	7.5
φD'	φD+0.5max.					
L'	L+1.5max.					

◆PART NUMBERING SYSTEM

KZE 6.3 VB 1500 M J20

- J20 : Case code
- M : Cap tolerance (±20%)
- 1500 : Nominal cap code
- VB : Radial lead type
- 6.3 : Rated voltage in volts
- KZE : Series name

Capacitance	Code
4.7μF	4R7
10μF	10
100μF	100
2200μF	2200

CAT. No. E1001B

KZE Series

◆STANDARD RATINGS

Case size φD×L(mm)	Case code	Vdc	6.3			10			16		
		Capacitance (μF)	Impedance (Ωmax/100kHz) 20℃	Impedance (Ωmax/100kHz) -10℃	Rated ripple current (mArms/105℃ 100kHz)	Capacitance (μF)	Impedance (Ωmax/100kHz) 20℃	Impedance (Ωmax/100kHz) -10℃	Rated ripple current (mArms/105℃ 100kHz)	Capacitance (μF)	Impedance (Ωmax/100kHz) 20℃	Impedance (Ωmax/100kHz) -10℃	Rated ripple current (mArms/105℃ 100kHz)
5×11	E11	150	0.30	1.0	250	100	0.30	1.0	250	56	0.30	1.0	250
6.3×11	F11	330	0.13	0.41	405	220	0.13	0.41	405	120	0.13	0.41	405
8×11.5	H11	560	0.072	0.22	760	470	0.072	0.22	760	330	0.072	0.22	760
8×15	H15	820	0.056	0.17	995	680	0.056	0.17	995	470	0.056	0.17	995
8×20	H20	1,200	0.041	0.13	1,250	1,000	0.041	0.13	1,250	680	0.041	0.13	1,250
10×12.5	J12	1,000	0.053	0.16	1,030	680	0.053	0.16	1,030	470	0.053	0.16	1,030
10×16	J16	1,200	0.038	0.12	1,430	1,000	0.038	0.12	1,430	680	0.038	0.12	1,430
10×20	J20	1,500	0.023	0.069	1,820	1,200	0.023	0.069	1,820	1,000	0.023	0.069	1,820
10×25	J25	2,200	0.022	0.066	2,150	1,500	0.022	0.066	2,150	1,200	0.022	0.066	2,150
12.5×20	K20	3,300	0.021	0.053	2,360	2,200	0.021	0.053	2,360	1,500	0.021	0.053	2,360
12.5×25	K25	3,900	0.018	0.045	2,770	3,300	0.018	0.045	2,770	2,200	0.018	0.045	2,770
12.5×30	K30	4,700	0.016	0.041	3,290	3,900	0.016	0.041	3,290	2,700	0.016	0.041	3,290
12.5×35	K35	5,600	0.015	0.039	3,400	4,700	0.015	0.039	3,400	3,300	0.015	0.039	3,400
16×20	L20	5,600	0.018	0.045	3,140	3,900	0.018	0.045	3,140	2,700	0.018	0.045	3,140
16×25	L25	6,800	0.016	0.043	3,460	5,600	0.016	0.043	3,460	3,900	0.016	0.043	3,460

Case size φD×L (mm)	Case code	Vdc	25			35			50		
		Capacitance (μF)	Impedance (Ωmax/100kHz) 20℃	Impedance (Ωmax/100kHz) -10℃	Rated ripple current (mArms/105℃ 100kHz)	Capacitance (μF)	Impedance (Ωmax/100kHz) 20℃	Impedance (Ωmax/100kHz) -10℃	Rated ripple current (mArms/105℃ 100kHz)	Capacitance (μF)	Impedance (Ωmax/100kHz) 20℃	Impedance (Ωmax/100kHz) -10℃	Rated ripple current (mArms/105℃ 100kHz)
5×11	E11	47	0.30	1.0	250	33	0.30	1.0	250	22	0.34	1.18	238
6.3×11	F11	100	0.13	0.41	405	56	0.13	0.41	405	56	0.14	0.50	385
8×11.5	H11	220	0.072	0.22	760	150	0.072	0.22	760	100	0.074	0.22	724
8×15	H15	330	0.056	0.17	995	220	0.056	0.17	995	120	0.061	0.18	950
8×20	H20	470	0.041	0.13	1,250	270	0.041	0.13	1,250	180	0.046	0.14	1,190
10×12.5	J12	330	0.053	0.16	1,030	220	0.053	0.16	1,030	150	0.061	0.18	979
10×16	J16	470	0.038	0.12	1,430	330	0.038	0.12	1,430	220	0.042	0.12	1,370
10×20	J20	680	0.023	0.069	1,820	470	0.023	0.069	1,820	270	0.030	0.090	1,580
10×25	J25	820	0.022	0.066	2,150	560	0.022	0.066	2,150	330	0.028	0.085	1,870
12.5×20	K20	1,000	0.021	0.053	2,360	680	0.021	0.053	2,360	470	0.027	0.068	2,050
12.5×25	K25	1,500	0.018	0.045	2,770	1,000	0.018	0.045	2,770	560	0.023	0.059	2,410
12.5×30	K30	1,800	0.016	0.041	3,290	1,200	0.016	0.041	3,290	680	0.021	0.052	2,860
12.5×35	K35	2,200	0.015	0.039	3,400	1,500	0.015	0.039	3,400	820	0.019	0.051	2,960
16×20	L20	1,800	0.018	0.045	3,140	1,200	0.018	0.045	3,140	820	0.023	0.059	2,730
16×25	L25	2,700	0.016	0.043	3,460	1,800	0.016	0.043	3,460	1,000	0.021	0.056	3,010

◆RATED RIPPLE CURRENT MULTIPLIERS

●Frequency Multipliers

Capacitance(μF) \ Frequency (Hz)	120	1k	10k	100k
22 to 180	0.40	0.75	0.90	1.00
220 to 560	0.50	0.85	0.94	1.00
680 to 1,800	0.60	0.87	0.95	1.00
2,200 to 3,900	0.75	0.90	0.95	1.00
4,700 to	0.85	0.95	0.98	1.00