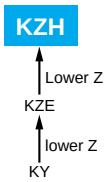
KZH Series

- Ultra Low impedance for Personal Computer and Storage Equipment
- Endurance with ripple current: 105℃ 5000 to 6000 hours
- Non solvent-proof type
- Pb-free design

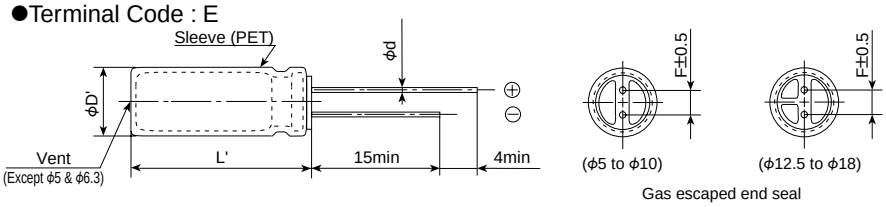


◆SPECIFICATIONS

Items	Characteristics
Category Temperature Range	−40 to +105℃
Rated Voltage Range	6.3 to 35Vdc
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 tanδ (Max.) 0.22 0.19 0.16 0.14 0.12 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 : 5000hours φ8 to φ16 : 6000hours Capacitance change: ≦±25% of the initial value (6.3, 10V : ≦±30%) 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 (6.3, 10V : ≦±30%) D.F. (tanδ): ≦200% of the initial specified value Leakage current: ≦The initial specified value

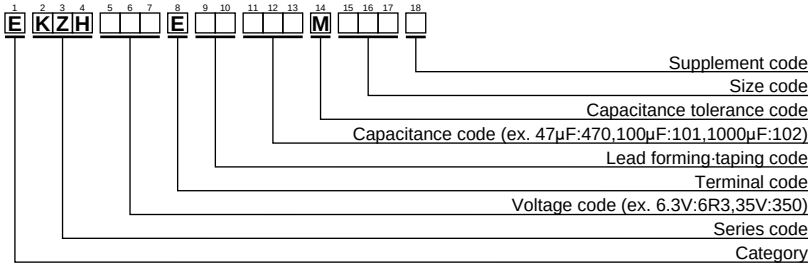
◆DIMENSIONS [mm]

- Terminal Code : E



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



Please refer to "A guide to global code (radial lead type)"

KZH Series

◆STANDARD RATINGS

WV (Vdc)	Cap (μF)	Case size φD×L(mm)	Impedance (Ωmax/100kHz)		Rated ripple current (mArms/105℃, 100kHz)	Part No.
			20℃	-10℃		
6.3	220	5×11	0.24	0.80	330	EKZH6R3E□□221ME11D
	470	6.3×11	0.11	0.35	500	EKZH6R3E□□471MF11D
	820	8×11.5	0.062	0.19	900	EKZH6R3E□□821MHB5D
	1200	8×15	0.048	0.15	1210	EKZH6R3E□□122MH15D
	1200	10×12.5	0.045	0.14	1240	EKZH6R3E□□122MJC5S
	1500	8×20	0.033	0.11	1410	EKZH6R3E□□152MH20D
	1800	10×16	0.032	0.10	1650	EKZH6R3E□□182MJ16S
	2200	10×20	0.020	0.060	1960	EKZH6R3E□□222MJ20S
	2700	10×25	0.018	0.054	2250	EKZH6R3E□□272MJ25S
	3900	12.5×20	0.017	0.043	2480	EKZH6R3E□□392MK20S
	4700	12.5×25	0.015	0.038	2900	EKZH6R3E□□472MK25S
	5600	12.5×30	0.013	0.033	3450	EKZH6R3E□□562MK30S
	6800	12.5×35	0.012	0.031	3570	EKZH6R3E□□682MK35S
	6800	16×20	0.015	0.038	3250	EKZH6R3E□□682ML20S
	8200	16×25	0.013	0.035	3630	EKZH6R3E□□822ML25S
10	150	5×11	0.24	0.80	330	EKZH100E□□151ME11D
	330	6.3×11	0.11	0.35	500	EKZH100E□□331MF11D
	680	8×11.5	0.062	0.19	900	EKZH100E□□681MHB5D
	1000	8×15	0.048	0.15	1210	EKZH100E□□102MH15D
	1000	10×12.5	0.045	0.14	1240	EKZH100E□□102MJC5S
	1500	8×20	0.033	0.11	1410	EKZH100E□□152MH20D
	1500	10×16	0.032	0.10	1650	EKZH100E□□152MJ16S
	1800	10×20	0.020	0.060	1960	EKZH100E□□182MJ20S
	2200	10×25	0.018	0.054	2250	EKZH100E□□222MJ25S
	3300	12.5×20	0.017	0.043	2480	EKZH100E□□332MK20S
	3900	12.5×25	0.015	0.038	2900	EKZH100E□□392MK25S
	4700	12.5×30	0.013	0.033	3450	EKZH100E□□472MK30S
	4700	16×20	0.015	0.038	3250	EKZH100E□□472ML20S
	5600	12.5×35	0.012	0.031	3570	EKZH100E□□562MK35S
	6800	16×25	0.013	0.035	3630	EKZH100E□□682ML25S
16	100	5×11	0.24	0.80	330	EKZH160E□□101ME11D
	220	6.3×11	0.11	0.35	500	EKZH160E□□221MF11D
	470	8×11.5	0.062	0.19	900	EKZH160E□□471MHB5D
	680	8×15	0.048	0.15	1210	EKZH160E□□681MH15D
	680	10×12.5	0.045	0.14	1240	EKZH160E□□681MJC5S
	1000	8×20	0.033	0.11	1410	EKZH160E□□102MH20D
	1000	10×16	0.032	0.10	1650	EKZH160E□□102MJ16S
	1500	10×20	0.020	0.06	1960	EKZH160E□□152MJ20S

WV (Vdc)	Cap (μF)	Case size φD×L(mm)	Impedance (Ωmax/100kHz)		Rated ripple current (mArms/105℃, 100kHz)	Part No.
			20℃	-10℃		
16	1800	10×25	0.018	0.054	2250	EKZH160E□□182MJ25S
	2200	12.5×20	0.017	0.043	2480	EKZH160E□□222MK20S
	2700	12.5×25	0.015	0.038	2900	EKZH160E□□272MK25S
	3300	12.5×30	0.013	0.033	3450	EKZH160E□□332MK30S
	3300	16×20	0.015	0.038	3250	EKZH160E□□332ML20S
	3900	12.5×35	0.012	0.031	3570	EKZH160E□□392MK35S
	4700	16×25	0.013	0.035	3630	EKZH160E□□472ML25S
25	68	5×11	0.24	0.80	330	EKZH250E□□680ME11D
	150	6.3×11	0.11	0.35	500	EKZH250E□□151MF11D
	330	8×11.5	0.062	0.19	900	EKZH250E□□331MHB5D
	390	8×15	0.048	0.15	1210	EKZH250E□□391MH15D
	470	10×12.5	0.045	0.14	1240	EKZH250E□□471MJC5S
	560	8×20	0.033	0.11	1410	EKZH250E□□561MH20D
	680	10×16	0.032	0.10	1650	EKZH250E□□681MJ16S
	820	10×20	0.020	0.060	1960	EKZH250E□□821MJ20S
	1000	10×25	0.018	0.054	2250	EKZH250E□□102MJ25S
	1500	12.5×20	0.017	0.043	2480	EKZH250E□□152MK20S
	1800	12.5×25	0.015	0.038	2900	EKZH250E□□182MK25S
	2200	12.5×30	0.013	0.033	3450	EKZH250E□□222MK30S
	2200	16×20	0.015	0.038	3250	EKZH250E□□222ML20S
	2700	12.5×35	0.012	0.031	3570	EKZH250E□□272MK35S
	3300	16×25	0.013	0.035	3630	EKZH250E□□332ML25S
35	47	5×11	0.24	0.80	330	EKZH350E□□470ME11D
	100	6.3×11	0.11	0.35	500	EKZH350E□□101MF11D
	220	8×11.5	0.062	0.19	900	EKZH350E□□221MHB5D
	270	8×15	0.048	0.15	1210	EKZH350E□□271MH15D
	330	10×12.5	0.045	0.14	1240	EKZH350E□□331MJC5S
	390	8×20	0.033	0.11	1410	EKZH350E□□391MH20D
	470	10×16	0.032	0.10	1650	EKZH350E□□471MJ16S
	560	10×20	0.020	0.060	1960	EKZH350E□□561MJ20S
	680	10×25	0.018	0.054	2250	EKZH350E□□681MJ25S
	1000	12.5×20	0.017	0.043	2480	EKZH350E□□102MK20S
	1200	12.5×25	0.015	0.038	2900	EKZH350E□□122MK25S
	1500	12.5×30	0.013	0.033	3450	EKZH350E□□152MK30S
	1500	16×20	0.015	0.038	3250	EKZH350E□□152ML20S
	1800	12.5×35	0.012	0.031	3570	EKZH350E□□182MK35S
	2200	16×25	0.013	0.035	3630	EKZH350E□□222ML25S

□□ : Lead forming / Taping code

◆RATED RIPPLE CURRENT MULTIPLIERS

●Frequency Multipliers

Capacitance(μF) \ Frequency (Hz)	120	1k	10k	100k
0.47 to 150	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 8,200	0.85	0.95	0.98	1.00