

Aluminum Electrolytic Capacitors

# KZG Series

- Super low ESR/impedance capacitors due to very low resistivity electrolyte
- Rated voltage range : 6.3 to 16V, Nominal capacitance range : 470 to 3,300 $\mu$ F
- Assured lifetime: 2,000 hours at 105°C with the rated ripple current applied
- The KZG series capacitors are designed for computer motherboards
- Non solvent-proof

**Feature!**  
**For PC Motherboards**

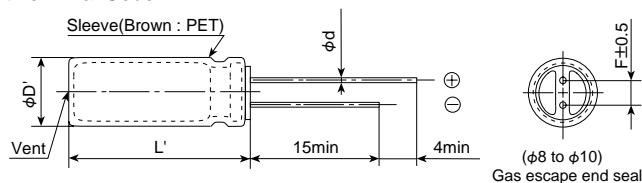


◆ SPECIFICATIONS

Items	Characteristics			
Category	-40 to +105°C			
Temperature Range	-40 to +105°C			
Rated Voltage Range	6.3 to 16V <sub>dc</sub>			
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)			
Leakage Current	I=0.01CV or 3 $\mu$ A, whichever is greater. Where, I : Max. leakage current ( $\mu$ A), C : Nominal capacitance ( $\mu$ F), V : Rated voltage (V <sub>dc</sub> ) (at 20°C after 2 minutes)			
Dissipation Factor (tan $\delta$ )	Rated voltage (V <sub>dc</sub> )	6.3V	10V	16V
	tan $\delta$ (Max.)	0.22	0.19	0.16
	When nominal capacitance exceeds 1,000 $\mu$ F, add 0.02 to the value above for each 1,000 $\mu$ F increase. (at 20°C, 120Hz)			
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (V <sub>dc</sub> )	6.3V	10V	16V
	Z (-25°C) / Z (+20°C)	2	2	2
	Z (-40°C) / Z (+20°C)	3	3	3
	(at 120Hz)			
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after subjected to DC voltage with the rated ripple current for 2,000 hours at 105°C. The sum of the DC voltage and peak AC voltage must not exceed the full rated voltage of the capacitors.			
	Capacitance change	≤±25% of the initial measured value		
	D.F. (tan $\delta$ )	≤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°C after exposing them for 1,000 hours at 105°C without voltage applied. The rated voltage shall be applied to the capacitors for a minimum of 30 minutes, at least 24 hours and not more than 48 hours before the measurements.			
	Capacitance change	≤±25% of the initial measured value		
	D.F. (tan $\delta$ )	≤200% of the initial specified value		
	Leakage current	≤The initial specified value		

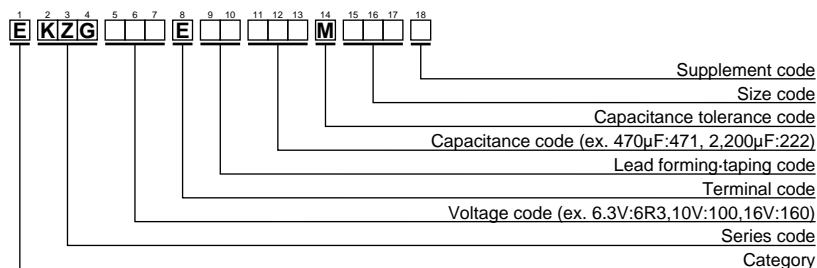
◆ DIMENSIONS [mm]

- Terminal Code : E



φD	8	10
φd	0.6	0.6
F	3.5	5.0
φD'	φD+0.5max.	
L'	L+1.5max.	

◆ PART NUMBERING SYSTEM



Specifications in this bulletin are subject to change without notice.

◆STANDARD RATINGS

WV(V <sub>dc</sub> )	Cap(μF)	Case size φD×L(mm)	Impedance (Ω <sub>max</sub> /20°C, 100kHz)	Rated ripple current (mA <sub>rms</sub> /105°C, 100kHz)	Part No.
6.3	820	8×11.5	0.036	1,140	EKZG6R3E□□821MHB5D
	1,200	8×15	0.028	1,490	EKZG6R3E□□122MH15D
	1,500	10×12.5	0.026	1,540	EKZG6R3E□□152MJC5S
	1,800	8×20	0.021	1,870	EKZG6R3E□□182MH20D
	1,800	10×16	0.019	2,000	EKZG6R3E□□182MJ16S
	2,200	10×20	0.013	2,550	EKZG6R3E□□222MJ20S
	3,300	10×25	0.012	2,800	EKZG6R3E□□332MJ25S
10	680	8×11.5	0.036	1,140	EKZG100E□□681MHB5D
	1,000	8×15	0.028	1,490	EKZG100E□□102MH15D
	1,000	10×12.5	0.026	1,540	EKZG100E□□102MJC5S
	1,500	8×20	0.021	1,870	EKZG100E□□152MH20D
	1,500	10×16	0.019	2,000	EKZG100E□□152MJ16S
	1,800	10×20	0.013	2,550	EKZG100E□□182MJ20S
	2,200	10×25	0.012	2,800	EKZG100E□□222MJ25S
16	470	8×11.5	0.036	1,140	EKZG160E□□471MHB5D
	680	8×15	0.028	1,490	EKZG160E□□681MH15D
	680	10×12.5	0.026	1,540	EKZG160E□□681MJC5S
	1,000	8×20	0.021	1,870	EKZG160E□□102MH20D
	1,000	10×16	0.019	2,000	EKZG160E□□102MJ16S
	1,500	10×20	0.013	2,550	EKZG160E□□152MJ20S
	1,800	10×25	0.012	2,800	EKZG160E□□182MJ25S

□□ : Lead forming / Taping code

◆RATED RIPPLE CURRENT MULTIPLIERS

●Frequency Multipliers

Capacitance(μF)	Frequency (Hz)			
	120	1k	10k	100k
470	0.50	0.85	0.94	1.00
680 to 1,800	0.60	0.87	0.95	1.00
2,200 to 3,300	0.75	0.90	0.95	1.00

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