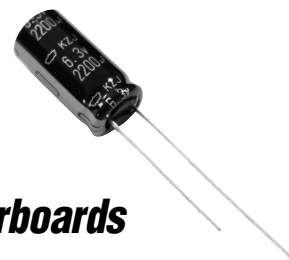


Aluminum Electrolytic Capacitors

KZJ 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 μ F
- Endurance with ripple current : 105 $^{\circ}$ C 2,000 hours
- The KZJ series capacitors are designed for computer motherboards
- Pb-free design
- Non solvent-proof

Feature!
For PC Motherboards

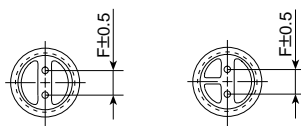
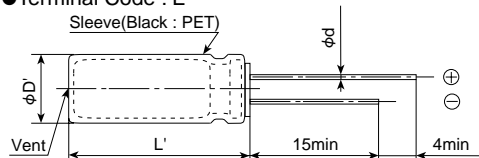


◆ SPECIFICATIONS

Items	Characteristics				
Category					
Temperature Range	-40 to +105 $^{\circ}$ C				
Rated Voltage Range	6.3 to 16V _{dc}				
Capacitance Tolerance	\pm 20% (M) (at 20 $^{\circ}$ C, 120Hz)				
Leakage Current	I=0.01CV or 3 μ A, whichever is greater. Where, I : Max. leakage current (μ A), C : Nominal capacitance (μ F), V : Rated voltage (V _{dc}) (at 20 $^{\circ}$ C after 2 minutes)				
Dissipation Factor (tan δ)	Rated voltage (V _{dc})	6.3V	10V	16V	
	tan δ (Max.)	0.22	0.19	0.16	
	When nominal capacitance exceeds 1,000 μ F, add 0.02 to the value above for each 1,000 μ F increase. (at 20 $^{\circ}$ C, 120Hz)				
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (V _{dc})	6.3V	10V	16V	
	Z (-25 $^{\circ}$ C) / Z (+20 $^{\circ}$ C)	2	2	2	
	Z (-40 $^{\circ}$ C) / Z (+20 $^{\circ}$ C)	3	3	3	(at 120Hz)
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20 $^{\circ}$ C after subjected to DC voltage with the rated ripple current for 2,000 hours at 105 $^{\circ}$ C. The sum of the DC voltage and peak AC voltage must not exceed the full rated voltage of the capacitors.				
	Capacitance change	\leq \pm 25% of the initial measured value			
	D.F. (tan δ)	\leq 200% of the initial specified value			
	Leakage current	\leq The initial specified value			
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20 $^{\circ}$ C after exposing them for 500 hours at 105 $^{\circ}$ 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	\leq \pm 25% of the initial measured value			
	D.F. (tan δ)	\leq 200% of the initial specified value			
	Leakage current	\leq The initial specified value			

◆ DIMENSIONS [mm]

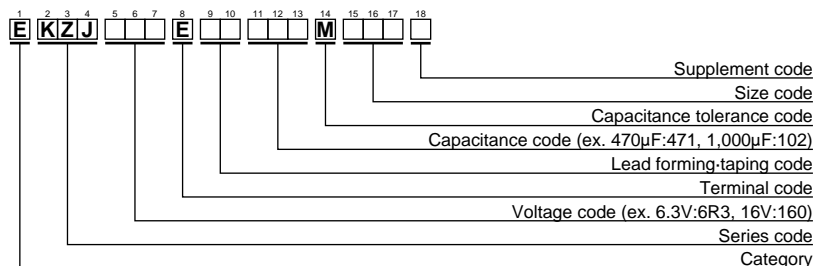
- Terminal Code : E



Gas escaped end seal

ϕ D	8	10	12.5
ϕ d	0.6	0.6	0.6
F	3.5	5.0	5.0
ϕ D'	ϕ D+0.5max.		
L'	L+1.5max.		

◆ PART NUMBERING SYSTEM



Specifications in this bulletin are subject to change without notice.

◆STANDARD RATINGS

WV(V _{dc})	Cap(μF)	Case size φD×L(mm)	Impedance (Ω _{max} /20°C, 100kHz)	Rated ripple current (mA _{rms} /105°C, 100kHz)	Part No.
6.3	1,000	8×11.5	0.021	1,310	EKZJ6R3E□□102MHB5D
	1,200	8×15	0.018	1,850	EKZJ6R3E□□122MH15D
	1,500	8×20	0.012	2,350	EKZJ6R3E□□152MH20D
	1,500	10×12.5	0.018	1,960	EKZJ6R3E□□152MJC5S
	1,800	8×20	0.012	2,350	EKZJ6R3E□□182MH20D
	1,800	10×16	0.0125	2,460	EKZJ6R3E□□182MJ16S
	2,200	8×20	0.012	2,350	EKZJ6R3E□□222MH20D
	2,200	8×25	0.011	2,710	EKZJ6R3E□□222MH25D
	2,200	10×16	0.0125	2,460	EKZJ6R3E□□222MJ16S
	2,200	10×20	0.011	2,920	EKZJ6R3E□□222MJ20S
	2,700	10×20	0.011	2,920	EKZJ6R3E□□272MJ20S
3,300	10×25	0.009	3,230	EKZJ6R3E□□332MJ25S	
10	680	8×11.5	0.021	1,310	EKZJ100E□□681MHB5D
	1,000	8×15	0.018	1,850	EKZJ100E□□102MH15D
	1,000	10×12.5	0.018	1,960	EKZJ100E□□102MJC5S
	1,500	8×20	0.012	2,350	EKZJ100E□□152MH20D
	1,500	8×25	0.011	2,710	EKZJ100E□□152MH25D
	1,500	10×16	0.0125	2,460	EKZJ100E□□152MJ16S
	1,800	10×20	0.011	2,920	EKZJ100E□□182MJ20S
	2,200	10×25	0.009	3,230	EKZJ100E□□222MJ25S
16	470	8×11.5	0.021	1,310	EKZJ160E□□471MHB5D
	680	8×15	0.018	1,850	EKZJ160E□□681MH15D
	680	10×12.5	0.018	1,960	EKZJ160E□□681MJC5S
	1,000	8×20	0.012	2,350	EKZJ160E□□102MH20D
	1,000	8×25	0.011	2,710	EKZJ160E□□102MH25D
	1,000	10×16	0.0125	2,460	EKZJ160E□□102MJ16S
	1,500	10×20	0.011	2,920	EKZJ160E□□152MJ20S
	1,800	10×25	0.009	3,230	EKZJ160E□□182MJ25S
	2,200	12.5×20	0.009	3,220	EKZJ160E□□222MK20S
	2,700	12.5×25	0.008	3,370	EKZJ160E□□272MK25S

□□ : 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

Specifications in this bulletin are subject to change without notice.