

# KZQ Series

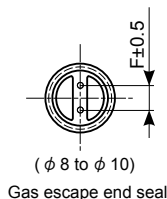
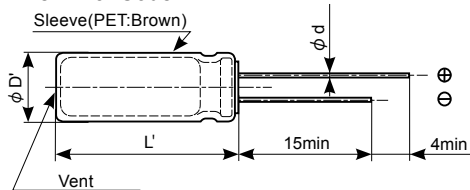
- Ideal use to compact power supply
- Lower impedance, higher capacitance than KZH series
- Rated voltage range : 16 to 25V<sub>dc</sub>, Nominal capacitance range : 330 to 2,200μF
- Endurance with ripple current : 4,000 to 5,000 hours at 105°C
- Non solvent resistant type
- RoHS Compliant

## SPECIFICATIONS

Items	Characteristics		
Category			
Temperature Range	-40 to +105°C		
Rated Voltage Range	16 to 25V <sub>dc</sub>		
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)		
Leakage Current	I=0.03CV or 3μA, which is greater. Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20°C after 2 minutes)		
Dissipation Factor (tan δ)	Rated voltage (V <sub>dc</sub> )	16V	25V
	tan δ (Max.)	0.16	0.14
	When nominal capacitance exceeds 1,000μF, add 0.02 to the value above for each 1,000μF increase. (at 20°C, 120Hz)		
Low Temperature Characteristics	Z(-25°C) / Z(+20°C)	2 max.	
	Z(-40°C) / Z(+20°C)	3 max. (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 is applied (the peak voltage shall not exceed the rated voltage) for 5,000 hours (4,000 hours for φ 8) at 105°C.		
	Capacitance change	≤ ±25% of the initial value	
	D.F. (tan δ)	≤ 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 500 hours at 105°C without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to Item 4.1 of JIS C 5101-4.		
	Capacitance change	≤ ±25% of the initial value	
	D.F. (tan δ)	≤ 200% of the initial specified value	
	Leakage current	≤ The initial specified value	

## DIMENSIONS [mm]

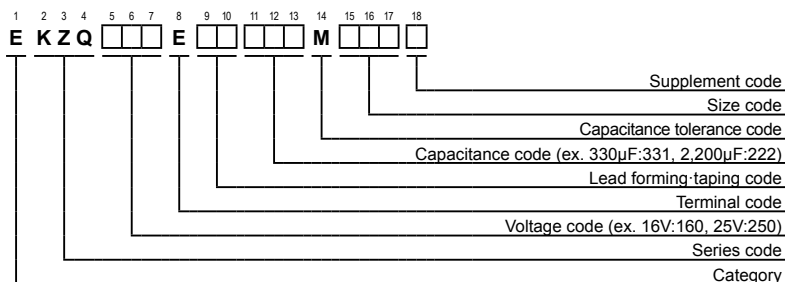
- Terminal Code : E



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

Gas escape end seal

## PART NUMBERING SYSTEM



Product specifications in this bulletin are subject to change without notice. Request our product specifications before purchase and/or use. Please use our products based on the information contained in this bulletin and product specifications. Please contact us for mass production schedule.

# KZQ Series

## ◆ STANDARD RATINGS

VV (Vdc)	Cap ( $\mu$ F)	Case size $\phi$ D×L(mm)	Impedance ( $\Omega$ max./100kHz)		Rated ripple current (mA <sub>rms</sub> /105°C, 100kHz)	Part No.
			20°C	-10°C		
16	560	8×11.5	0.049	0.15	1,060	EKZQ160E□□561MHB5D
	1,200	8×20	0.027	0.081	1,660	EKZQ160E□□122MH20D
	1,200	10×16	0.025	0.075	1,930	EKZQ160E□□122MJ16S
	1,800	10×20	0.018	0.054	2,130	EKZQ160E□□182MJ20S
	2,200	10×25	0.015	0.045	2,500	EKZQ160E□□222MJ25S
25	330	8×11.5	0.049	0.15	1,060	EKZQ250E□□331MHB5D
	680	8×20	0.027	0.081	1,660	EKZQ250E□□681MH20D
	820	10×16	0.025	0.075	1,930	EKZQ250E□□821MJ16S
	1,200	10×20	0.018	0.054	2,130	EKZQ250E□□122MJ20S

□□ :Enter the appropriate lead forming or taping code.

## ◆ RATED RIPPLE CURRENT MULTIPLIERS

### ● Frequency Multipliers

Capacitance ( $\mu$ F)	Frequency (Hz)			
	120	1k	10k	100k
330 to 680	0.55	0.77	0.94	1.00
820 to 1,800	0.60	0.80	0.96	1.00
2,200	0.70	0.85	0.98	1.00

The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5°C rise. When long life performance is required in actual use, the rms ripple current has to be reduced.