

**KY Series**

- Newly innovative electrolyte is employed to minimize ESR
- Endurance with ripple current : 6,000 to 10,000 hours at 105°C
- Non solvent resistant type
- RoHS2 Compliant

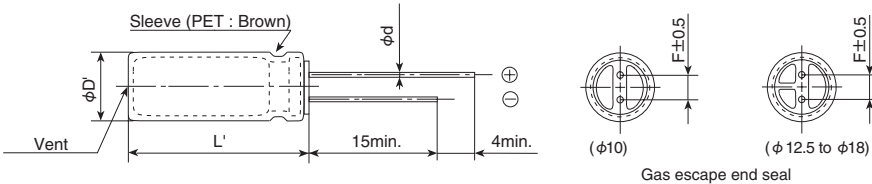


◆ SPECIFICATIONS

Items	Characteristics										
Category	-40 to +105°C										
Temperature Range	-40 to +105°C										
Rated Voltage Range	6.3 to 100V <sub>dc</sub>										
Capacitance Tolerance	±20% (M) (at 20°C, 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°C after 2 minutes)										
Dissipation Factor (tan δ)	Rated voltage (V <sub>dc</sub> )	6.3V	10V	16V	25V	35V	50V	63V	80V	100V	
	tan δ (Max.)	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.09	0.08	
	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 (Max. Impedance Ratio)	Rated voltage (V <sub>dc</sub> )	6.3V	10V	16V	25V	35V	50V	63V	80V	100V	
	Z(-25°C)/Z(+20°C)	4	3	2	2	2	2	2	2	2	
	Z(-40°C)/Z(+20°C)	8	6	4	3	3	3	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 is applied (the peak voltage shall not exceed the rated voltage) for the specified period of time at 105°C.										
	Time	6.3 to 10V <sub>dc</sub>	φ 10 : 6,000hours			φ 12.5 to 18 : 8,000hours					
		16 to 100V <sub>dc</sub>	φ 10 : 7,000hours			φ 12.5 to 18 : 10,000hours					
	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									

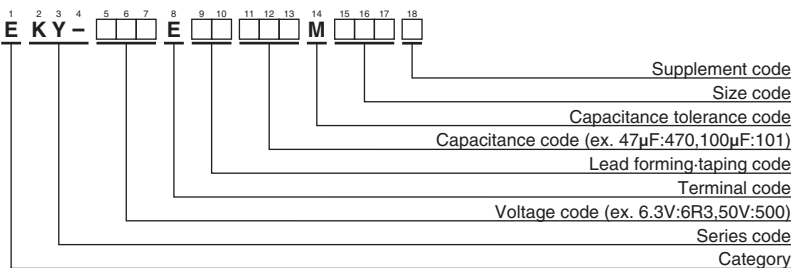
◆ DIMENSIONS [mm]

● Terminal Code : E



φD	10	12.5	16	18
φd	0.6	0.6	0.8	0.8
F	5.0	5.0	7.5	7.5
φD'	φD+0.5max.			
L'	L+1.5max.			

◆ PART NUMBERING SYSTEM



Please refer to "Product code guide (radial lead type)"



◆STANDARD RATINGS

WV (V <sub>dc</sub> )	Cap (μF)	Case size φD×L(mm)	Impedance (Ω max./100kHz)		Rated ripple current (mA <sub>rms</sub> / 105°C, 100kHz)	Part No.	WV (V <sub>dc</sub> )	Cap (μF)	Case size φD×L(mm)	Impedance (Ω max./100kHz)		Rated ripple current (mA <sub>rms</sub> / 105°C, 100kHz)	Part No.
			20°C	-10°C						20°C	-10°C		
50	1,800	16×40	0.016	0.048	3,710	EKY-500E□□182ML40S	80	390	12.5×30	0.042	0.13	1,500	EKY-800E□□391MK30S
	1,800	18×31.5	0.021	0.057	3,635	EKY-500E□□182MMN3S		470	12.5×35	0.036	0.11	1,650	EKY-800E□□471MK35S
	2,200	18×35.5	0.017	0.046	3,680	EKY-500E□□222MMP1S		470	16×25	0.038	0.12	1,700	EKY-800E□□471ML25S
	2,700	18×40	0.014	0.038	3,800	EKY-500E□□272MM40S		470	18×20	0.045	0.14	1,500	EKY-800E□□471MM20S
	82	10×12.5	0.11	0.44	690	EKY-630E□□820MJC5S		560	12.5×40	0.032	0.095	1,800	EKY-800E□□561MK40S
120	10×16	0.076	0.31	950	EKY-630E□□121MJ16S	680		16×31.5	0.032	0.095	1,850	EKY-800E□□681MLN3S	
180	10×20	0.056	0.23	1,150	EKY-630E□□181MJ20S	680		18×25	0.036	0.11	1,750	EKY-800E□□681MM25S	
180	12.5×16	0.072	0.29	1,150	EKY-630E□□181MK16S	820		16×35.5	0.029	0.086	2,000	EKY-800E□□821MLP1S	
220	10×25	0.046	0.19	1,350	EKY-630E□□221MJ25S	820		18×31.5	0.030	0.090	1,900	EKY-800E□□821MMN3S	
270	12.5×20	0.041	0.13	1,500	EKY-630E□□271MK20S	1,000		16×40	0.027	0.081	2,200	EKY-800E□□102ML40S	
390	12.5×25	0.031	0.093	1,900	EKY-630E□□391MK25S	1,000		18×35.5	0.027	0.081	2,200	EKY-800E□□102MMP1S	
470	12.5×30	0.028	0.084	2,300	EKY-630E□□471MK30S	1,200		18×40	0.026	0.077	2,700	EKY-800E□□122MM40S	
470	16×20	0.032	0.096	2,000	EKY-630E□□471ML20S	100		47	10×12.5	0.17	0.66	480	EKY-101E□□470MJC5S
560	12.5×35	0.024	0.072	2,500	EKY-630E□□561MK35S			68	10×16	0.11	0.47	600	EKY-101E□□680MJ16S
680	12.5×40	0.021	0.063	2,800	EKY-630E□□681MK40S			82	10×20	0.084	0.34	800	EKY-101E□□820MJ20S
680	16×25	0.025	0.075	2,600	EKY-630E□□681ML25S		100	12.5×16	0.11	0.34	750	EKY-101E□□101MK16S	
680	18×20	0.030	0.090	2,500	EKY-630E□□681MM20S		120	10×25	0.069	0.28	900	EKY-101E□□121MJ25S	
820	16×31.5	0.021	0.063	2,850	EKY-630E□□821MLN3S		150	12.5×20	0.062	0.18	1,100	EKY-101E□□151MK20S	
820	18×25	0.024	0.072	2,800	EKY-630E□□821MM25S		220	12.5×25	0.047	0.14	1,250	EKY-101E□□221MK25S	
1,000	16×35.5	0.019	0.057	2,900	EKY-630E□□102MLP1S		220	16×20	0.048	0.15	1,350	EKY-101E□□221ML20S	
1,200	16×40	0.018	0.054	3,400	EKY-630E□□122ML40S		270	12.5×30	0.042	0.13	1,500	EKY-101E□□271MK30S	
1,200	18×31.5	0.020	0.060	3,300	EKY-630E□□122MMN3S		330	12.5×35	0.036	0.11	1,650	EKY-101E□□331MK35S	
1,500	18×35.5	0.018	0.054	3,400	EKY-630E□□152MMP1S		330	16×25	0.038	0.12	1,700	EKY-101E□□331ML25S	
1,800	18×40	0.017	0.051	3,500	EKY-630E□□182MM40S		330	18×20	0.045	0.14	1,500	EKY-101E□□331MM20S	
80	68	10×12.5	0.17	0.66	480		EKY-800E□□680MJC5S	390	12.5×40	0.032	0.095	1,800	EKY-101E□□391MK40S
	100	10×16	0.11	0.47	600		EKY-800E□□101MJ16S	470	16×31.5	0.032	0.095	1,850	EKY-101E□□471MLN3S
	120	10×20	0.084	0.34	800		EKY-800E□□121MJ20S	470	18×25	0.036	0.11	1,750	EKY-101E□□471MM25S
	150	10×25	0.069	0.28	900	EKY-800E□□151MJ25S	560	16×35.5	0.029	0.086	2,000	EKY-101E□□561MLP1S	
	150	12.5×16	0.11	0.34	750	EKY-800E□□151MK16S	560	18×31.5	0.030	0.090	1,900	EKY-101E□□561MMN3S	
	220	12.5×20	0.062	0.18	1,100	EKY-800E□□221MK20S	680	16×40	0.027	0.081	2,200	EKY-101E□□681ML40S	
	330	12.5×25	0.047	0.14	1,250	EKY-800E□□331MK25S	680	18×35.5	0.027	0.081	2,200	EKY-101E□□681MMP1S	
	330	16×20	0.048	0.15	1,350	EKY-800E□□331ML20S	820	18×40	0.026	0.077	2,700	EKY-101E□□821MM40S	

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

◆RATED RIPPLE CURRENT MULTIPLIERS

●Frequency Multipliers

Capacitance(μF)	Frequency(Hz)			
	120	1k	10k	100k
47 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

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.