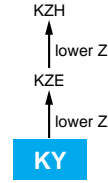


# KY Series

- Newly innovative electrolyte is employed to minimize ESR
- Endurance with ripple current : 4000 to 10000 hours at 105°C
- Non solvent-proof type
- Pb-free design

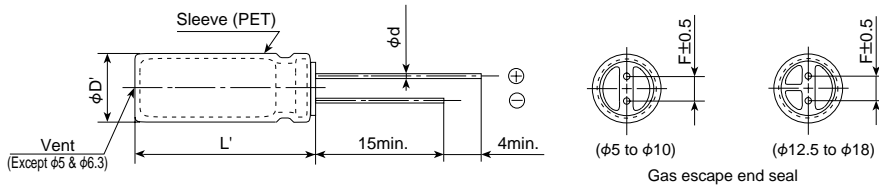


## ◆ SPECIFICATIONS

Items	Characteristics						
Category	-40 to +105°C						
Temperature Range	-40 to +105°C						
Rated Voltage Range	6.3 to 50V <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 (tanδ)	Rated voltage (V <sub>dc</sub> )	6.3V	10V	16V	25V	35V	50V
	tanδ (Max.)	0.22	0.19	0.16	0.14	0.12	0.10
	When nominal capacitance exceeds 1000µF, add 0.02 to the value above for each 1000µF increase. (at 20°C, 120Hz)						
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (V <sub>dc</sub> )	6.3V	10V	16V	25V	35V	50V
	Z(-25°C)/Z(+20°C)	4	3	2	2	2	2
	Z(-40°C)/Z(+20°C)	8	6	4	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 for the specified period of time at 105°C.						
	Time	6.3 to 10V <sub>dc</sub>	φ5 & 6.3 : 4000hours	φ8 & 10 : 6000hours	φ12.5 to 18 : 8000hours		
		16 to 50V <sub>dc</sub>	φ5 & 6.3 : 5000hours	φ8 & 10 : 7000hours	φ12.5 to 18 : 10000hours		
	Capacitance change	≤±25% of the initial value					
	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°C after exposing them for 500 hours at 105°C without voltage applied.						
	Capacitance change	≤±25% of the initial value					
	D.F. (tanδ)	≤200% of the initial specified value					
	Leakage current	≤The initial specified value					

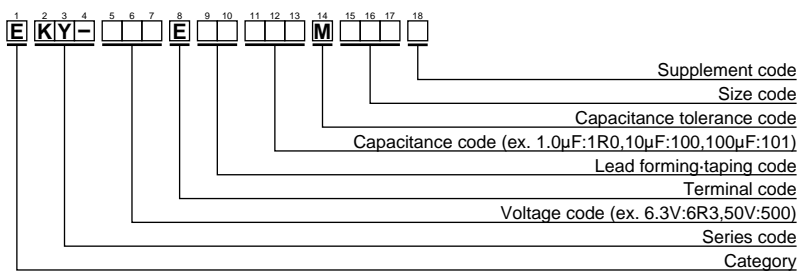
## ◆ DIMENSIONS [mm]

- Terminal Code : E



φD	5	6.3	8	10	12.5	16	18
φd	0.5	0.5	0.6	0.6	0.6	0.8	0.8
F	2.0	2.5	3.5	5.0	5.0	7.5	7.5
φD'	φD+0.5max.						
L'	L+1.5max.						

## ◆ PART NUMBERING SYSTEM



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

◆STANDARD RATINGS

WV (Vdc)	Cap (μF)	Case size φD×L(mm)	Impedance (Ωmax/100kHz)		Rated ripple current (mArms/ 105°C, 100kHz)	Part No.	WV (Vdc)	Cap (μF)	Case size φD×L(mm)	Impedance (Ωmax/100kHz)		Rated ripple current (mArms/ 105°C, 100kHz)	Part No.		
			20°C	-10°C						20°C	-10°C				
6.3	150	5 × 11	0.58	2.3	210	EKY-6R3E□□151ME11D	16	1500	12.5 × 20	0.035	0.12	1900	EKY-160E□□152MK20S		
	330	6.3 × 11	0.22	0.87	340	EKY-6R3E□□331MF11D		1500	16 × 15	0.042	0.12	1940	EKY-160E□□152ML15S		
	680	8 × 11.5	0.13	0.52	640	EKY-6R3E□□681MHB5D		2200	12.5 × 25	0.027	0.089	2230	EKY-160E□□222MK25S		
	820	10 × 12.5	0.080	0.32	865	EKY-6R3E□□821MJC5S		2200	18 × 15	0.043	0.11	2210	EKY-160E□□222MM15S		
	1000	8 × 15	0.087	0.35	840	EKY-6R3E□□102MH15D		2700	12.5 × 30	0.024	0.078	2650	EKY-160E□□272MK30S		
	1200	8 × 20	0.069	0.27	1050	EKY-6R3E□□122MH20D		2700	16 × 20	0.027	0.078	2530	EKY-160E□□272ML20S		
	1200	10 × 16	0.060	0.24	1210	EKY-6R3E□□122MJ16S		3300	12.5 × 35	0.020	0.065	2880	EKY-160E□□332MK35S		
	1500	10 × 20	0.046	0.18	1400	EKY-6R3E□□152MJ20S		3900	12.5 × 40	0.017	0.056	3350	EKY-160E□□392MK40S		
	1800	12.5 × 15	0.049	0.16	1450	EKY-6R3E□□182MK15S		3900	16 × 25	0.021	0.060	2930	EKY-160E□□392ML25S		
	2200	10 × 25	0.042	0.17	1650	EKY-6R3E□□222MJ25S		3900	18 × 20	0.026	0.067	2860	EKY-160E□□392MM20S		
	2700	10 × 30	0.031	0.12	1910	EKY-6R3E□□272MJ30S		4700	16 × 31.5	0.017	0.050	3450	EKY-160E□□472MLN3S		
	2700	16 × 15	0.042	0.12	1940	EKY-6R3E□□272ML15S		4700	18 × 25	0.019	0.049	3140	EKY-160E□□472MM25S		
	3300	12.5 × 20	0.035	0.12	1900	EKY-6R3E□□332MK20S		5600	16 × 35.5	0.015	0.044	3610	EKY-160E□□562MLP1S		
	3900	12.5 × 25	0.027	0.089	2230	EKY-6R3E□□392MK25S		5600	18 × 31.5	0.015	0.040	4170	EKY-160E□□562MMN3S		
	3900	18 × 15	0.043	0.11	2210	EKY-6R3E□□392MM15S		6800	16 × 40	0.013	0.038	4080	EKY-160E□□682ML40S		
	4700	12.5 × 30	0.024	0.078	2650	EKY-6R3E□□472MK30S		8200	18 × 35.5	0.014	0.038	4220	EKY-160E□□822MMP1S		
	5600	12.5 × 35	0.020	0.065	2880	EKY-6R3E□□562MK35S		10000	18 × 40	0.012	0.032	4280	EKY-160E□□103MM40S		
	5600	16 × 20	0.027	0.078	2530	EKY-6R3E□□562ML20S									
	6800	12.5 × 40	0.017	0.056	3350	EKY-6R3E□□682MK40S		47	5 × 11	0.58	2.3	210	EKY-250E□□470ME11D		
	6800	16 × 25	0.021	0.060	2930	EKY-6R3E□□682ML25S		100	6.3 × 11	0.22	0.87	340	EKY-250E□□101MF11D		
6800	18 × 20	0.026	0.067	2860	EKY-6R3E□□682MM20S	220	8 × 11.5	0.13	0.52	640	EKY-250E□□221MHB5D				
8200	16 × 31.5	0.017	0.050	3450	EKY-6R3E□□822MLN3S	330	8 × 15	0.087	0.35	840	EKY-250E□□331MH15D				
10000	16 × 35.5	0.015	0.044	3610	EKY-6R3E□□103MLP1S	330	10 × 12.5	0.080	0.32	865	EKY-250E□□331MJC5S				
10000	18 × 25	0.019	0.049	3140	EKY-6R3E□□103MM25S	470	8 × 20	0.069	0.27	1050	EKY-250E□□471MH20D				
12000	16 × 40	0.013	0.038	4080	EKY-6R3E□□123ML40S	470	10 × 16	0.060	0.24	1210	EKY-250E□□471MJ16S				
12000	18 × 31.5	0.015	0.040	4170	EKY-6R3E□□123MMN3S	680	10 × 20	0.046	0.18	1400	EKY-250E□□681MJ20S				
15000	18 × 35.5	0.014	0.038	4220	EKY-6R3E□□153MMP1S	680	12.5 × 15	0.049	0.16	1450	EKY-250E□□681MK15S				
18000	18 × 40	0.012	0.032	4280	EKY-6R3E□□183MM40S	820	10 × 25	0.042	0.17	1650	EKY-250E□□821MJ25S				
						1000	10 × 30	0.031	0.12	1910	EKY-250E□□102MJ30S				
						1000	12.5 × 20	0.035	0.12	1900	EKY-250E□□102MK20S				
						1000	16 × 15	0.042	0.12	1940	EKY-250E□□102ML15S				
						1200	18 × 15	0.043	0.11	2210	EKY-250E□□122MM15S				
						1500	12.5 × 25	0.027	0.089	2230	EKY-250E□□152MK25S				
						1800	12.5 × 30	0.024	0.078	2650	EKY-250E□□182MK30S				
						1800	16 × 20	0.027	0.078	2530	EKY-250E□□182ML20S				
						2200	12.5 × 35	0.020	0.065	2880	EKY-250E□□222MK35S				
						2200	18 × 20	0.026	0.067	2860	EKY-250E□□222MM20S				
						2700	12.5 × 40	0.017	0.056	3350	EKY-250E□□272MK40S				
						2700	16 × 25	0.021	0.060	2930	EKY-250E□□272ML25S				
						3300	16 × 31.5	0.017	0.050	3450	EKY-250E□□332MLN3S				
						3300	18 × 25	0.019	0.049	3140	EKY-250E□□332MM25S				
						3900	16 × 35.5	0.015	0.044	3610	EKY-250E□□392MLP1S				
						3900	18 × 31.5	0.015	0.040	4170	EKY-250E□□392MMN3S				
						4700	16 × 40	0.013	0.038	4080	EKY-250E□□472ML40S				
						4700	18 × 35.5	0.014	0.038	4220	EKY-250E□□472MMP1S				
						5600	18 × 40	0.012	0.032	4280	EKY-250E□□562MM40S				
						33	5 × 11	0.58	2.3	210	EKY-350E□□330ME11D				
						56	6.3 × 11	0.22	0.87	340	EKY-350E□□560MF11D				
						150	8 × 11.5	0.13	0.52	640	EKY-350E□□151MHB5D				
						220	8 × 15	0.087	0.35	840	EKY-350E□□221MH15D				
						220	10 × 12.5	0.080	0.32	865	EKY-350E□□221MJC5S				
						270	8 × 20	0.069	0.27	1050	EKY-350E□□271MH20D				
						330	10 × 16	0.060	0.24	1210	EKY-350E□□331MJ16S				
						470	10 × 20	0.046	0.18	1400	EKY-350E□□471MJ20S				
						470	12.5 × 15	0.049	0.16	1450	EKY-350E□□471MK15S				
						560	10 × 25	0.042	0.17	1650	EKY-350E□□561MJ25S				
						680	10 × 30	0.031	0.12	1910	EKY-350E□□681MJ30S				
						680	12.5 × 20	0.035	0.12	1900	EKY-350E□□681MK20S				
						680	16 × 15	0.042	0.12	1940	EKY-350E□□681ML15S				
						1000	12.5 × 25	0.027	0.089	2230	EKY-350E□□102MK25S				
						1000	18 × 15	0.043	0.11	2210	EKY-350E□□102MM15S				
						1200	12.5 × 30	0.024	0.078	2650	EKY-350E□□122MK30S				
						1200	16 × 20	0.027	0.078	2530	EKY-350E□□122ML20S				
						1500	12.5 × 35	0.020	0.065	2880	EKY-350E□□152MK35S				
						1800	12.5 × 40	0.017	0.056	3350	EKY-350E□□182MK40S				
						1800	16 × 25	0.021	0.060	2930	EKY-350E□□182ML25S				
						1800	18 × 20	0.026	0.067	2860	EKY-350E□□182MM20S				
						2200	16 × 31.5	0.017	0.050	3450	EKY-350E□□222MLN3S				
16	56	5 × 11	0.58	2.3	210	EKY-160E□□560ME11D									
	120	6.3 × 11	0.22	0.87	340	EKY-160E□□121MF11D									
	330	8 × 11.5	0.13	0.52	640	EKY-160E□□331MHB5D									
	470	8 × 15	0.087	0.35	840	EKY-160E□□471MH15D									
	470	10 × 12.5	0.080	0.32	865	EKY-160E□□471MJC5S									
	680	8 × 20	0.069	0.27	1050	EKY-160E□□681MH20D									
	680	10 × 16	0.060	0.24	1210	EKY-160E□□681MJ16S									
	1000	10 × 20	0.046	0.18	1400	EKY-160E□□102MJ20S									
	1000	12.5 × 15	0.049	0.16	1450	EKY-160E□□102MK15S									
	1200	10 × 25	0.042	0.17	1650	EKY-160E□□122MJ25S									
	1500	10 × 30	0.031	0.12	1910	EKY-160E□□152MJ30S									

□ : Lead forming / Taping code

◆STANDARD RATINGS

WV (Vdc)	Cap (μF)	Case size φD×L(mm)	Impedance (Ωmax/100kHz)		Rated ripple current (mA <sub>RMS</sub> / 105°C, 100kHz)	Part No.	WV (Vdc)	Cap (μF)	Case size φD×L(mm)	Impedance (Ωmax/100kHz)		Rated ripple current (mA <sub>RMS</sub> / 105°C, 100kHz)	Part No.
			20°C	-10°C						20°C	-10°C		
35	2200	18 × 25	0.019	0.049	3140	EKY-350E□□222MM25S	50	270	12.5 × 15	0.061	0.20	1260	EKY-500E□□271MK15S
	2700	16 × 35.5	0.015	0.044	3610	EKY-350E□□272MLP1S		330	10 × 25	0.055	0.22	1440	EKY-500E□□331MJ25S
	2700	18 × 31.5	0.015	0.040	4170	EKY-350E□□272MMN3S		470	10 × 30	0.043	0.17	1690	EKY-500E□□471MJ30S
	3300	16 × 40	0.013	0.038	4080	EKY-350E□□332ML40S		470	12.5 × 20	0.045	0.15	1660	EKY-500E□□471MK20S
	3300	18 × 35.5	0.014	0.038	4220	EKY-350E□□332MMP1S		470	16 × 15	0.055	0.17	1690	EKY-500E□□471ML15S
	3900	18 × 40	0.012	0.032	4280	EKY-350E□□392MM40S		560	12.5 × 25	0.034	0.11	1950	EKY-500E□□561MK25S
50	0.47	5 × 11	5.5	22.0	17	EKY-500E□□R47ME11D		560	18 × 15	0.054	0.15	1930	EKY-500E□□561MM15S
	1.0	5 × 11	4.0	16.0	30	EKY-500E□□1R0ME11D		680	12.5 × 30	0.030	0.10	2310	EKY-500E□□681MK30S
	2.2	5 × 11	2.5	10.0	43	EKY-500E□□2R2ME11D		820	12.5 × 35	0.025	0.083	2510	EKY-500E□□821MK35S
	3.3	5 × 11	2.2	8.8	53	EKY-500E□□3R3ME11D		820	16 × 20	0.034	0.10	2210	EKY-500E□□821ML20S
	4.7	5 × 11	1.9	7.6	88	EKY-500E□□4R7ME11D		1000	12.5 × 40	0.021	0.069	2920	EKY-500E□□102MK40S
	10	5 × 11	1.5	6.0	100	EKY-500E□□100ME11D		1000	16 × 25	0.025	0.075	2555	EKY-500E□□102ML25S
	22	5 × 11	0.70	2.8	180	EKY-500E□□220ME11D		1000	18 × 20	0.036	0.097	2490	EKY-500E□□102MM20S
	56	6.3 × 11	0.30	1.2	295	EKY-500E□□560MF11D		1200	16 × 31.5	0.022	0.066	3010	EKY-500E□□122MLN3S
	100	8 × 11.5	0.17	0.68	555	EKY-500E□□101MHB5D		1200	18 × 25	0.026	0.070	2740	EKY-500E□□122MM25S
	120	8 × 15	0.12	0.48	730	EKY-500E□□121MH15D		1500	16 × 35.5	0.019	0.057	3150	EKY-500E□□152MLP1S
	150	10 × 12.5	0.12	0.48	760	EKY-500E□□151MJC5S		1800	16 × 40	0.016	0.048	3710	EKY-500E□□182ML40S
	180	8 × 20	0.091	0.36	910	EKY-500E□□181MH20D		1800	18 × 31.5	0.021	0.057	3635	EKY-500E□□182MMN3S
220	10 × 16	0.084	0.34	1050	EKY-500E□□221MJ16S	2200	18 × 35.5	0.017	0.046	3680	EKY-500E□□222MMP1S		
270	10 × 20	0.060	0.24	1220	EKY-500E□□271MJ20S	2700	18 × 40	0.014	0.038	3800	EKY-500E□□272MM40S		

□□ : Lead forming / Taping code

◆RATED RIPPLE CURRENT MULTIPLIERS

●Frequency Multipliers

Capacitance (μF)	Frequency (Hz)			
	120	1k	10k	100k
0.47 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