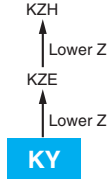


KY Series

- Newly innovative electrolyte is employed to minimize ESR
- Endurance with ripple current : 4,000 to 10,000 hours at 105°C
- Non solvent resistant type
- RoHS2 Compliant

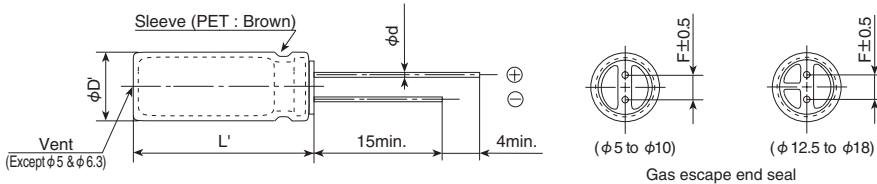


◆ SPECIFICATIONS

Items	Characteristics										
Category	-40 to +105°C										
Temperature Range	-40 to +105°C										
Rated Voltage Range	6.3 to 100V _{dc}										
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 _{dc})	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 _{dc})	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 _{dc}	φ 5 & 6.3 : 4,000hours		φ 8 & 10 : 6,000hours		φ 12.5 to 18 : 8,000hours				
		16 to 100V _{dc}	φ 5 & 6.3 : 5,000hours		φ 8 & 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									

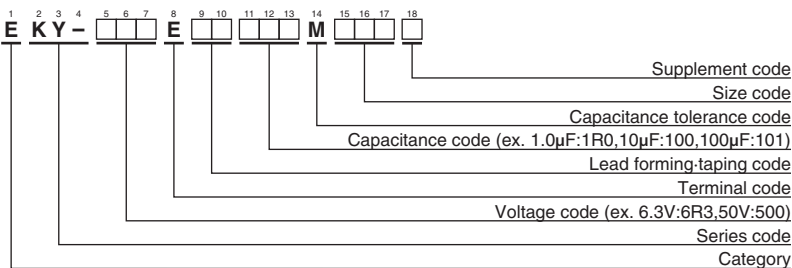
◆ DIMENSIONS [mm]

● Terminal Code : E



φD	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 "Product code guide (radial lead type)"

◆STANDARD RATINGS

WV (Vdc)	Cap (μF)	Case size φD×L(mm)	Impedance (Ω max./100kHz)		Rated ripple current (mA rms/105°C, 100kHz)	Part No.	WV (Vdc)	Cap (μF)	Case size φD×L(mm)	Impedance (Ω max./100kHz)		Rated ripple current (mA rms/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	1,500	12.5×20	0.035	0.12	1,900	EKY-160E□□152MK20S		
	330	6.3×11	0.22	0.87	340	EKY-6R3E□□331MF11D		1,500	16×15	0.042	0.12	1,940	EKY-160E□□152ML15S		
	680	8×11.5	0.13	0.52	640	EKY-6R3E□□681MHB5D		2,200	12.5×25	0.027	0.089	2,230	EKY-160E□□222MK25S		
	820	10×12.5	0.080	0.32	865	EKY-6R3E□□821MJC5S		2,200	18×15	0.043	0.11	2,210	EKY-160E□□222MM15S		
	1,000	8×15	0.087	0.35	840	EKY-6R3E□□102MH15D		2,700	12.5×30	0.024	0.078	2,650	EKY-160E□□272MK30S		
	1,200	8×20	0.069	0.27	1,050	EKY-6R3E□□122MH20D		2,700	16×20	0.027	0.078	2,530	EKY-160E□□272ML20S		
	1,200	10×16	0.060	0.24	1,210	EKY-6R3E□□122MJ16S		3,300	12.5×35	0.020	0.065	2,880	EKY-160E□□332MK35S		
	1,500	10×20	0.046	0.18	1,400	EKY-6R3E□□152MJ20S		3,900	12.5×40	0.017	0.056	3,350	EKY-160E□□392MK40S		
	1,800	12.5×15	0.049	0.16	1,450	EKY-6R3E□□182MK15S		3,900	16×25	0.021	0.060	2,930	EKY-160E□□392ML25S		
	2,200	10×25	0.042	0.17	1,650	EKY-6R3E□□222MJ25S		3,900	18×20	0.026	0.067	2,860	EKY-160E□□392MM20S		
	2,700	10×30	0.031	0.12	1,910	EKY-6R3E□□272MJ30S		4,700	16×31.5	0.017	0.050	3,450	EKY-160E□□472MLN3S		
	2,700	16×15	0.042	0.12	1,940	EKY-6R3E□□272ML15S		4,700	18×25	0.019	0.049	3,140	EKY-160E□□472MM25S		
	3,300	12.5×20	0.035	0.12	1,900	EKY-6R3E□□332MK20S		5,600	16×35.5	0.015	0.044	3,610	EKY-160E□□562MLP1S		
	3,900	12.5×25	0.027	0.089	2,230	EKY-6R3E□□392MK25S		5,600	18×31.5	0.015	0.040	4,170	EKY-160E□□562MMN3S		
	3,900	18×15	0.043	0.11	2,210	EKY-6R3E□□392MM15S		6,800	16×40	0.013	0.038	4,080	EKY-160E□□682ML40S		
	4,700	12.5×30	0.024	0.078	2,650	EKY-6R3E□□472MK30S		8,200	18×35.5	0.014	0.038	4,220	EKY-160E□□822MMP1S		
	5,600	12.5×35	0.020	0.065	2,880	EKY-6R3E□□562MK35S		10,000	18×40	0.012	0.032	4,280	EKY-160E□□103MM40S		
	5,600	16×20	0.027	0.078	2,530	EKY-6R3E□□562ML20S									
	6,800	12.5×40	0.017	0.056	3,350	EKY-6R3E□□682MK40S									
	6,800	16×25	0.021	0.060	2,930	EKY-6R3E□□682ML25S									
	6,800	18×20	0.026	0.067	2,860	EKY-6R3E□□682MM20S									
8,200	16×31.5	0.017	0.050	3,450	EKY-6R3E□□822MLN3S										
10,000	16×35.5	0.015	0.044	3,610	EKY-6R3E□□103MLP1S										
10,000	18×25	0.019	0.049	3,140	EKY-6R3E□□103MM25S										
12,000	16×40	0.013	0.038	4,080	EKY-6R3E□□123ML40S										
12,000	18×31.5	0.015	0.040	4,170	EKY-6R3E□□123MMN3S										
15,000	18×35.5	0.014	0.038	4,220	EKY-6R3E□□153MMP1S										
18,000	18×40	0.012	0.032	4,280	EKY-6R3E□□183MM40S										
10	100	5×11	0.58	2.3	210	EKY-100E□□101ME11D	25	47	5×11	0.58	2.3	210	EKY-250E□□470ME11D		
	220	6.3×11	0.22	0.87	340	EKY-100E□□221MF11D		100	6.3×11	0.22	0.87	340	EKY-250E□□101MF11D		
	470	8×11.5	0.13	0.52	640	EKY-100E□□471MHB5D		220	8×11.5	0.13	0.52	640	EKY-250E□□221MHB5D		
	680	8×15	0.087	0.35	840	EKY-100E□□681MH15D		330	8×15	0.087	0.35	840	EKY-250E□□331MH15D		
	680	10×12.5	0.080	0.32	865	EKY-100E□□681MJC5S		330	10×12.5	0.080	0.32	865	EKY-250E□□331MJC5S		
	1,000	8×20	0.069	0.27	1,050	EKY-100E□□102MH20D		470	8×20	0.069	0.27	1,050	EKY-250E□□471MH20D		
	1,000	10×16	0.060	0.24	1,210	EKY-100E□□102MJ16S		470	10×16	0.060	0.24	1,210	EKY-250E□□471MJ16S		
	1,200	8×20	0.069	0.27	1,050	EKY-100E□□122MJ20S		680	10×20	0.046	0.18	1,400	EKY-250E□□681MJ20S		
	1,200	10×20	0.046	0.18	1,400	EKY-100E□□122MJ20S		680	12.5×15	0.049	0.16	1,450	EKY-250E□□681MJ15S		
	1,500	10×25	0.042	0.17	1,650	EKY-100E□□152MJ25S		820	10×25	0.042	0.17	1,650	EKY-250E□□821MJ25S		
	1,500	12.5×15	0.049	0.16	1,450	EKY-100E□□152MK15S		1,000	10×30	0.031	0.12	1,910	EKY-250E□□102MJ30S		
	2,200	10×30	0.031	0.12	1,910	EKY-100E□□222MJ30S		1,000	12.5×20	0.035	0.12	1,900	EKY-250E□□102MK20S		
	2,200	12.5×20	0.035	0.12	1,900	EKY-100E□□222MK20S		1,000	16×15	0.042	0.12	1,940	EKY-250E□□102ML15S		
	2,200	16×15	0.042	0.12	1,940	EKY-100E□□222ML15S		1,200	18×15	0.043	0.11	2,210	EKY-250E□□122MM15S		
	2,700	18×15	0.043	0.11	2,210	EKY-100E□□272MM15S		1,500	12.5×25	0.027	0.089	2,230	EKY-250E□□152MK25S		
	3,300	12.5×25	0.027	0.089	2,230	EKY-100E□□332MK25S		1,800	12.5×30	0.024	0.078	2,650	EKY-250E□□182MK30S		
	3,900	12.5×30	0.024	0.078	2,650	EKY-100E□□392MK30S		1,800	16×20	0.027	0.078	2,530	EKY-250E□□182ML20S		
	3,900	16×20	0.027	0.078	2,530	EKY-100E□□392ML20S		2,200	12.5×35	0.020	0.065	2,880	EKY-250E□□222MK35S		
	4,700	12.5×35	0.020	0.065	2,880	EKY-100E□□472MK35S		2,200	18×20	0.026	0.067	2,860	EKY-250E□□222MM20S		
	5,600	12.5×40	0.017	0.056	3,350	EKY-100E□□562MK40S		2,700	12.5×40	0.017	0.056	3,350	EKY-250E□□272MK40S		
	5,600	16×25	0.021	0.060	2,930	EKY-100E□□562ML25S		3,300	16×31.5	0.017	0.050	3,450	EKY-250E□□332MLN3S		
5,600	18×20	0.026	0.067	2,860	EKY-100E□□562MM20S	3,300	18×25	0.019	0.049	3,140	EKY-250E□□332MM25S				
6,800	16×31.5	0.017	0.050	3,450	EKY-100E□□682MLN3S	3,900	16×35.5	0.015	0.044	3,610	EKY-250E□□392MLP1S				
6,800	18×25	0.019	0.049	3,140	EKY-100E□□682MM25S	3,900	18×31.5	0.015	0.040	4,170	EKY-250E□□392MMN3S				
8,200	16×35.5	0.015	0.044	3,610	EKY-100E□□822MLP1S	4,700	16×40	0.013	0.038	4,080	EKY-250E□□472ML40S				
8,200	18×31.5	0.015	0.040	4,170	EKY-100E□□822MMN3S	4,700	18×35.5	0.014	0.038	4,220	EKY-250E□□472MMP1S				
10,000	16×40	0.013	0.038	4,080	EKY-100E□□103ML40S	5,600	18×40	0.012	0.032	4,280	EKY-250E□□562MM40S				
10,000	18×35.5	0.014	0.038	4,220	EKY-100E□□103MMP1S										
12,000	18×40	0.012	0.032	4,280	EKY-100E□□123MM40S										
16	56	5×11	0.58	2.3	210	EKY-160E□□560ME11D	35	33	5×11	0.58	2.3	210	EKY-350E□□330ME11D		
	120	6.3×11	0.22	0.87	340	EKY-160E□□121MF11D		56	6.3×11	0.22	0.87	340	EKY-350E□□560MF11D		
	330	8×11.5	0.13	0.52	640	EKY-160E□□331MHB5D		150	8×11.5	0.13	0.52	640	EKY-350E□□151MHB5D		
	470	8×15	0.087	0.35	840	EKY-160E□□471MH15D		220	8×15	0.087	0.35	840	EKY-350E□□221MH15D		
	470	10×12.5	0.080	0.32	865	EKY-160E□□471MJC5S		220	10×12.5	0.080	0.32	865	EKY-350E□□221MJC5S		
	680	8×20	0.069	0.27	1,050	EKY-160E□□681MH20D		270	8×20	0.069	0.27	1,050	EKY-350E□□271MH20D		
	680	10×16	0.060	0.24	1,210	EKY-160E□□681MJ16S		330	10×16	0.060	0.24	1,210	EKY-350E□□331MJ16S		
	1,000	10×20	0.046	0.18	1,400	EKY-160E□□102MJ20S		470	10×20	0.046	0.18	1,400	EKY-350E□□471MJ20S		
	1,000	12.5×15	0.049	0.16	1,450	EKY-160E□□102MK15S		470	12.5×15	0.049	0.16	1,450	EKY-350E□□471MK15S		
	1,200	10×25	0.042	0.17	1,650	EKY-160E□□122MJ25S		560	10×25	0.042	0.17	1,650	EKY-350E□□561MJ25S		
	1,500	10×30	0.031	0.12	1,910	EKY-160E□□152MJ30S		680	10×30	0.031	0.12	1,910	EKY-350E□□681MJ30S		
								680	12.5×20	0.035	0.12	1,900	EKY-350E□□681MK20S		
								680	16×15	0.042	0.12	1,940	EKY-350E□□681ML15S		
								1,000	12.5×25	0.027	0.089	2,230	EKY-350E□□102MK25S		
						1,000	18×15	0.043	0.11	2,210	EKY-350E□□102MM15S				
						1,200	12.5×30	0.024	0.078	2,650	EKY-350E□□122MK30S				
						1,200	16×20	0.027	0.078	2,530	EKY-350E□□122ML20S				
						1,500	12.5×35	0.020	0.065	2,880	EKY-350E□□152MK35S				
						1,800	12.5×40	0.017	0.056	3,350	EKY-350E□□182MK40S				
						1,800	16×25	0.021	0.060	2,930	EKY-350E□□182ML25S				
						1,800	18×20	0.026	0.067	2,860	EKY-350E□□182MM20S				
						2,200	16×31.5	0.017	0.050	3,450	EKY-350E□□222MLN3S				

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

KY Series

STANDARD RATINGS

Table with columns: WV (Vdc), Cap (μF), Case size φD×L(mm), Impedance (Ω max./100kHz) at 20°C and -10°C, Rated ripple current (mArms/105°C, 100kHz), and Part No. The table is organized into rows for different capacitance values (35, 50, 63, 63, 63, 100) and case sizes.

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

RATED RIPPLE CURRENT MULTIPLIERS

Frequency Multipliers

Table with columns: Capacitance(μF), Frequency(Hz), and multipliers for 120, 1k, 10k, and 100k. Rows include capacitance ranges: 1.0 to 180, 220 to 560, 680 to 1,800, 2,200 to 3,900, and 4,700 to.

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.