

KYA Series

- Downsized from KY series
- Newly innovative electrolyte is employed to minimize impedance
- Endurance with ripple current : 4,000 to 10,000 hours at 105°C
- Non solvent resistant type
- RoHS Compliant

KYA

Downsized
KY P166

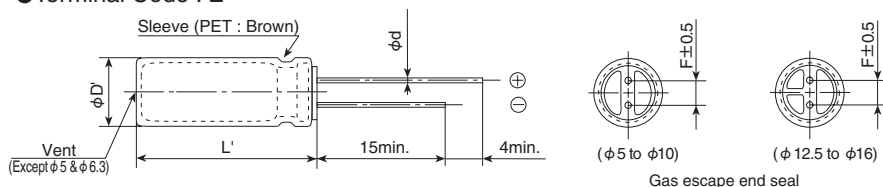


◆ SPECIFICATIONS

Items	Characteristics								
Category Temperature Range	-40 to +105°C								
Rated Voltage Range	6.3 to 100V _{dc}								
Capacitance Tolerance	$\pm 20\%$ (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	100V
	tan δ (Max.)	0.22	0.19	0.16	0.14	0.12	0.10	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	100V
	Z(-25°C)/Z(+20°C)	4	3	2	2	2	2	2	2
	Z(-40°C)/Z(+20°C)	8	6	4	3	3	3	3	3
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 16 : 8,000hours						
		16 to 100V _{dc}	φ 5 & 6.3 : 5,000hours φ 8 & 10 : 7,000hours φ 12.5 to 16 : 10,000hours						
	Capacitance change	$\leq \pm 25\%$ of the initial 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°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	$\leq \pm 25\%$ of the initial value							
	D.F. (tan δ)	$\leq 200\%$ of the initial specified value							
	Leakage current	$\leq$ The initial specified value							

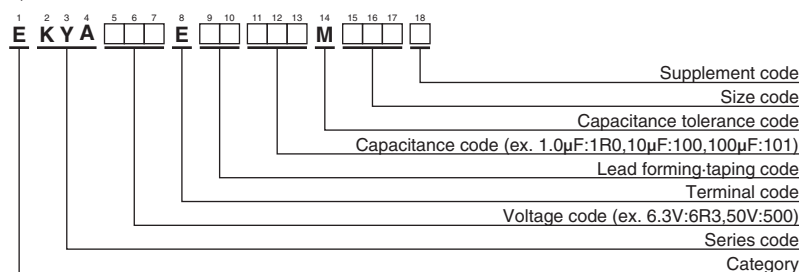
◆ DIMENSIONS [mm]

- Terminal Code : E



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

◆PART NUMBERING SYSTEM



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

◆ STANDARD RATINGS

WV (V _{dc})	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		
6.3	100	5×11	0.90	3.6	150	EKYA6R3E□□101ME11D
	180	5×11	0.40	1.6	250	EKYA6R3E□□181ME11D
	220	5×11	0.40	1.6	250	EKYA6R3E□□221ME11D
	330	6.3×11	0.22	0.87	400	EKYA6R3E□□331MF11D
	470	6.3×11	0.22	0.87	400	EKYA6R3E□□471MF11D
	820	8×11.5	0.13	0.52	640	EKYA6R3E□□821MHB5D
	1,200	10×12.5	0.080	0.32	865	EKYA6R3E□□122MJC5S
	1,200	8×15	0.087	0.35	840	EKYA6R3E□□122MH15D
	1,500	8×20	0.069	0.27	1,050	EKYA6R3E□□152MH20D
	1,800	10×16	0.060	0.24	1,300	EKYA6R3E□□182MJ16S
	2,700	10×20	0.046	0.18	1,400	EKYA6R3E□□272MJ20S
	3,300	10×25	0.042	0.17	1,650	EKYA6R3E□□332MJ25S
	3,900	12.5×20	0.035	0.12	1,900	EKYA6R3E□□392MK20S
	4,700	12.5×25	0.027	0.089	2,230	EKYA6R3E□□472MK25S
	5,600	12.5×25	0.027	0.089	2,230	EKYA6R3E□□562MK25S
10	10,000	16×25	0.021	0.060	2,930	EKYA6R3E□□103MLN3S
	12,000	16×31.5	0.017	0.050	3,450	EKYA6R3E□□123MLN3S
	15,000	16×35.5	0.015	0.044	3,610	EKYA6R3E□□153MLP1S
	100	5×11	0.90	3.6	150	EKYA100E□□101ME11D
	120	5×11	0.40	1.6	250	EKYA100E□□121ME11D
	330	6.3×11	0.22	0.87	400	EKYA100E□□331MF11D
	560	8×11.5	0.13	0.52	640	EKYA100E□□561MHB5D
	820	8×15	0.087	0.35	840	EKYA100E□□821MH15D
	820	10×12.5	0.080	0.32	865	EKYA100E□□821MJC5S
	1,000	10×12.5	0.080	0.32	865	EKYA100E□□102MJC5S
	1,200	8×20	0.069	0.27	1,050	EKYA100E□□122MH20D
	1,200	10×16	0.060	0.24	1,300	EKYA100E□□122MJ16S
16	1,800	10×20	0.046	0.18	1,400	EKYA100E□□182MJ20S
	2,200	10×25	0.042	0.17	1,650	EKYA100E□□222MJ25S
	3,300	12.5×20	0.035	0.12	1,900	EKYA100E□□332MK20S
	3,900	12.5×25	0.027	0.089	2,230	EKYA100E□□392MK25S
	6,800	16×25	0.021	0.060	2,930	EKYA100E□□682MLN3S
	10,000	16×31.5	0.017	0.050	3,450	EKYA100E□□103MLN3S
	12,000	16×35.5	0.015	0.044	3,610	EKYA100E□□123MLP1S
	47	5×11	0.40	1.6	250	EKYA160E□□470ME11D
	100	5×11	0.40	1.6	250	EKYA160E□□101ME11D
	220	6.3×11	0.22	0.87	400	EKYA160E□□221MF11D
	270	6.3×11	0.22	0.87	400	EKYA160E□□271MF11D
	470	8×11.5	0.13	0.52	640	EKYA160E□□471MHB5D
25	680	8×15	0.087	0.35	840	EKYA160E□□681MH15D
	680	10×12.5	0.080	0.32	865	EKYA160E□□681MJC5S
	820	8×20	0.069	0.27	1,050	EKYA160E□□821MH20D
	1,000	10×16	0.060	0.24	1,300	EKYA160E□□102MJ16S
	1,500	10×20	0.046	0.18	1,400	EKYA160E□□152MJ20S
	1,800	10×25	0.042	0.17	1,650	EKYA160E□□182MJ25S
	2,200	12.5×20	0.035	0.12	1,900	EKYA160E□□222MK20S
	3,300	12.5×25	0.027	0.089	2,230	EKYA160E□□332MK25S
	4,700	16×25	0.021	0.060	2,930	EKYA160E□□472MLN3S
	5,600	16×25	0.021	0.060	2,930	EKYA160E□□562MLN3S
	6,800	16×31.5	0.017	0.050	3,450	EKYA160E□□682MLN3S
	8,200	16×31.5	0.017	0.050	3,450	EKYA160E□□822MLN3S
35	10,000	16×35.5	0.015	0.044	3,610	EKYA160E□□103MLP1S
	33	5×11	0.40	1.6	250	EKYA250E□□330ME11D
	47	5×11	0.40	1.6	250	EKYA250E□□470ME11D
	68	5×11	0.40	1.6	250	EKYA250E□□680ME11D
	150	6.3×11	0.22	0.87	400	EKYA250E□□151MF11D
	330	8×11.5	0.13	0.52	640	EKYA250E□□331MHB5D
	390	8×15	0.087	0.35	840	EKYA250E□□391MH15D
	470	10×12.5	0.080	0.32	865	EKYA250E□□471MJC5S
	560	8×20	0.069	0.27	1,050	EKYA250E□□561MH20D
	680	10×16	0.060	0.24	1,300	EKYA250E□□681MJ16S
	1,000	10×20	0.046	0.18	1,400	EKYA250E□□102MJ20S
	1,200	10×25	0.042	0.17	1,650	EKYA250E□□122MJ25S
50	1,500	12.5×20	0.035	0.12	1,900	EKYA250E□□152MK20S
	2,200	12.5×25	0.027	0.089	2,230	EKYA250E□□222MK25S
	3,300	16×25	0.021	0.060	2,930	EKYA250E□□332MLN3S
	4,700	16×25	0.021	0.060	2,930	EKYA250E□□472MLN3S
	5,600	16×31.5	0.017	0.050	3,450	EKYA250E□□562MLN3S
	6,800	16×31.5	0.017	0.050	3,450	EKYA250E□□682MLN3S
	8,200	16×31.5	0.017	0.050	3,450	EKYA250E□□822MLN3S
	10,000	16×35.5	0.015	0.044	3,610	EKYA250E□□103MLP1S
	1.0	5×11	4.0	16	30	EKYA500E□□1R0ME11D
	2.2	5×11	2.5	10	43	EKYA500E□□2R2ME11D
	3.3	5×11	2.2	8.8	53	EKYA500E□□3R3ME11D
	4.7	5×11	1.9	7.6	88	EKYA500E□□4R7ME11D
63	10	5×11	1.5	6.0	100	EKYA500E□□100ME11D
	22	5×11	0.70	2.8	180	EKYA500E□□220ME11D
	27	5×11	0.70	2.8	250	EKYA500E□□270ME11D
	47	6.3×11	0.30	1.2	295	EKYA500E□□470MF11D
	56	6.3×11	0.30	1.2	295	EKYA500E□□560MF11D
	100	8×11.5	0.17	0.68	555	EKYA500E□□101MHB5D
	150	8×15	0.12	0.48	730	EKYA500E□□151MH15D
	180	10×12.5	0.12	0.48	760	EKYA500E□□181MJC5S
	180	8×20	0.091	0.36	910	EKYA500E□□181MH20D
	220	10×16	0.084	0.34	1,050	EKYA500E□□221MJ16S
	330	10×20	0.060	0.24	1,220	EKYA500E□□331MJ20S
	470	10×25	0.055	0.22	1,440	EKYA500E□□471MJ25S
100	470	12.5×20	0.045	0.15	1,660	EKYA500E□□471MK20S
	560	12.5×20	0.045	0.15	1,660	EKYA500E□□561MK20S
	820	12.5×25	0.034	0.11	1,950	EKYA500E□□821MK25S
	1,000	16×25	0.025	0.075	2,555	EKYA500E□□102MLN3S
	1,200	16×25	0.025	0.075	2,555	EKYA500E□□122MLN3S
	1,800	16×31.5	0.022	0.066	3,010	EKYA500E□□182MLN3S
	2,200	16×35.5	0.019	0.057	3,150	EKYA500E□□222MLP1S
	10	5×11	0.88	3.5	173	EKYA630E□□100ME11D
	15	5×11	0.88	3.5	173	EKYA630E□□150ME11D
	33	6.3×11	0.35	1.4	278	EKYA630E□□330MF11D
	56	8×11.5	0.22	0.88	500	EKYA630E□□560MHB5D
	82	8×15	0.16	0.64	665	EKYA630E□□820MH15D
100	100	10×12.5	0.11	0.44	725	EKYA630E□□101MJC5S
	120	8×20	0.12	0.48	820	EKYA630E□□121MH20D
	120	10×16	0.076	0.31	950	EKYA630E□□121MJ16S
	220	10×20	0.056	0.23	1,200	EKYA630E□□221MJ20S
	330	10×25	0.046	0.19	1,350	EKYA630E□□331MJ25S
	330	12.5×20	0.041	0.13	1,570	EKYA630E□□331MK20S
	390	12.5×20	0.041	0.13	1,570	EKYA630E□□391MK20S
	470	12.5×25	0.031	0.093	1,990	EKYA630E□□471MK25S
	560	12.5×25	0.031	0.093	1,990	EKYA630E□□561MK25S
	1,000	16×25	0.025	0.075	2,730	EKYA630E□□102MLN3S
	1,200	16×31.5	0.021	0.063	2,850	EKYA630E□□122MLN3S
	1,500	16×35.5	0.019	0.057	2,900	EKYA630E□□152MLP1S
100	1.0	5×11	4.5	15	20	EKYA101E□□1R0ME11D
	2.2	5×11	3.0	13	30	EKYA101E□□2R2ME11D
	3.3	5×11	2.7	11	40	EKYA101E□□3R3ME11D
	4.7	5×11	2.5	10	65	EKYA101E□□4R7ME11D
	6.8	5×11	1.4	5.6	125	EKYA101E□□6R8ME11D

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

KYA Series

◆STANDARD RATINGS

WV (V _{dc})	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		
100	10	6.3×11	0.57	2.3	205	EKYA101E□□100MF11D
	15	6.3×11	0.57	2.3	205	EKYA101E□□150MF11D
	27	8×11.5	0.36	1.4	355	EKYA101E□□270MHB5D
	39	8×15	0.25	1.0	450	EKYA101E□□390MH15D
	47	10×12.5	0.17	0.66	480	EKYA101E□□470MJC5S
	56	8×20	0.19	0.76	565	EKYA101E□□560MH20D
	68	10×16	0.11	0.47	600	EKYA101E□□680MJ16S
	100	10×20	0.084	0.34	800	EKYA101E□□101MJ20S
	150	10×25	0.069	0.28	900	EKYA101E□□151MJ25S
	180	12.5×20	0.062	0.18	1,100	EKYA101E□□181MK20S
	220	12.5×25	0.047	0.14	1,250	EKYA101E□□221MK25S
	330	16×25	0.038	0.12	1,700	EKYA101E□□331ML25S
	470	16×31.5	0.032	0.095	1,850	EKYA101E□□471MLN3S
	560	16×35.5	0.029	0.086	2,000	EKYA101E□□561MLP1S

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

◆RATED RIPLE CURRENT MULTIPLIERS

●Frequency Multipliers

Capacitance(μF) \ Frequency(Hz)	120	1k	10k	100k
1.0 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.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

United Chemi-Con (UCC):

EKYA500ELL222MLP1S	EKYA101ELL3R3ME11D	EKYA250ELL122MJ25S	EKYA350ELL392MLP1S
EKYA100ELL122MJ16S	EKYA100ELL103MLN3S	EKYA6R3ELL153MLP1S	EKYA500ELL221MJ16S
EKYA6R3ELL103ML25S	EKYA101ELL470MJC5S	EKYA6R3ELL562MK25S	EKYA500ELL102ML25S
EKYA500ELL122ML25S	EKYA500ELL182MLN3S	EKYA500ELL181MJC5S	EKYA160ELL822MLN3S
EKYA630ELL122MLN3S	EKYA100ELL102MJC5S	EKYA6R3ELL332MJ25S	EKYA250ELL471MJC5S
EKYA250ELL472MLN3S	EKYA160ELL152MJ20S	EKYA350ELL152MK25S	EKYA630ELL101MJC5S
EKYA500ELL331MJ20S	EKYA101ELL471MLN3S	EKYA6R3ELL182MJ16S	EKYA101ELL100MF11D
EKYA160ELL102MJ16S	EKYA350ELL471MJ16S	EKYA100ELL392MK25S	EKYA160ELL682MLN3S
EKYA350ELL681MJ20S	EKYA350ELL821MJ25S	EKYA6R3ELL472MK25S	EKYA100ELL682ML25S
EKYA101ELL150MF11D	EKYA160ELL472ML25S	EKYA101ELL331ML25S	EKYA100ELL821MJC5S
EKYA101ELL4R7ME11D	EKYA630ELL102ML25S	EKYA160ELL681MJC5S	EKYA630ELL121MJ16S
EKYA250ELL152MK20S	EKYA500ELL471MJ25S	EKYA101ELL6R8ME11D	EKYA500ELL561MK20S
EKYA6R3ELL392MK20S	EKYA6R3ELL122MJC5S	EKYA250ELL102MJ20S	EKYA160ELL222MK20S
EKYA630ELL221MJ20S	EKYA500ELL471MK20S	EKYA160ELL562ML25S	EKYA350ELL272ML25S
EKYA100ELL222MJ25S	EKYA101ELL680MJ16S	EKYA350ELL102MK20S	EKYA101ELL2R2ME11D
EKYA6R3ELL123MLN3S	EKYA101ELL390MH15D	EKYA630ELL391MK20S	EKYA250ELL562MLP1S
EKYA101ELL221MK25S	EKYA630ELL471MK25S	EKYA350ELL222ML25S	EKYA101ELL151MJ25S
EKYA250ELL392ML25S	EKYA100ELL182MJ20S	EKYA160ELL123MLP1S	EKYA160ELL103MLP1S
EKYA6R3ELL272MJ20S	EKYA101ELL1R0ME11D	EKYA101ELL270MHB5D	EKYA250ELL681MJ16S
EKYA101ELL181MK20S	EKYA500ELL821MK25S	EKYA630ELL561MK25S	EKYA350ELL332MLN3S
EKYA350ELL331MJC5S	EKYA630ELL331MJ25S	EKYA630ELL331MK20S	EKYA250ELL222MK25S
EKYA160ELL332MK25S	EKYA250ELL332ML25S	EKYA101ELL561MLP1S	EKYA160ELL182MJ25S
EKYA100ELL332MK20S	EKYA630ELL152MLP1S	EKYA101ELL101MJ20S	