



- 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



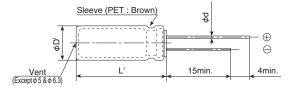


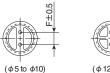
#### **SPECIFICATIONS**

Items	Characteristics											
Category Temperature Range	-40 to +105℃											
Rated Voltage Range	6.3 to 100V <sub>dc</sub>											
Capacitance Tolerance	±20% (M)	±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	Rated volta	ge (V <sub>dc</sub> )	6.3V	10V	16V	25V	35V	50V	63V	100V		
(tan δ)	$tan \delta$ (Max.	.)	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.08		
	When nomi	nal capacitan	ce exce	eds 1,	000μF	add 0	.02 to t	he valu	ie abov	e for e	ach 1,000μF increase.	(at 20°C, 120Hz)
Low Temperature	Rated voltage (Vdc)		6.3V	10V	16V	25V	35V	50V	63V	100V		
Characteristics	Z(-25°C)/Z(+20°C)		4	3	2	2	2	2	2	2		
(Max. Impedance Ratio)	Z(-40°C)/Z(+20°C)		8	6	4	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 vol							DC voltage with the rated				
	nt is applied (	applied (the peak voltage shall not exceed the rated voltage) for the specified period of time at 105℃.										
	Time 6.3 to 10V <sub>dc</sub>			φ 5 & 6.3 : 4,000hours φ 8 & 10 : 6,000hours φ 12.5 to 16 : 8,000hours								
		φ5 & 6.3 : 5,000hours φ8 & 10 : 7,000hours φ12.5 to 16 : 10,000hours										
	Capacitano	≦±25% of the initial value										
	D.F. (tan $\delta$ )	≦200% of the initial specified value										
	Leakage cu	rrent	≦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 voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to It											
	Capacitano		≦±25% of the initial value									
	D.F. (tan $\delta$ )			≦20	0% of 1	the initi	al spec	ified va	alue	1		
	Leakage current				e initia	l specif	ied val	ue		1		

#### **◆DIMENSIONS** [mm]

#### ●Terminal Code : E



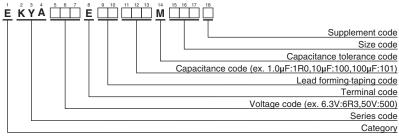


Gas escape end seal



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			
φD'	φD+0.5max.								
L'	L+1.5max.								

## **◆PART NUMBERING SYSTEM**



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





## **STANDARD RATINGS**

wv	Сар	Case size	Impedance (Ω max./100kHz)		Rated ripple current	Part No.		Сар	Case size	Impedance (Ω max./100kHz)		Rated ripple current	Part No.
(V <sub>dc</sub> )	(μF)	φD×L(mm)	20℃	-10℃	(mArms/ 105℃, 100kHz)	T dit No.	(V <sub>dc</sub> )	(μF)	φD×L(mm)	20℃	-10℃	(mArms/ 105℃, 100kHz)	
	100	5×11	0.90	3.6	150	EKYA6R3E□□101ME11D		3,300	16×25	0.021	0.060	2,930	EKYA250E□□332ML25S
	180	5×11	0.40	1.6	250	EKYA6R3E□□181ME11D	25	3,900	16×25	0.021	0.060	2,930	EKYA250E□□392ML25S
	220	5×11	0.40	1.6	250	EKYA6R3E 221ME11D	20	4,700	16×31.5	0.017	0.050	3,450	EKYA250E□□472MLN3S
	330	6.3×11	0.22	0.87	400	EKYA6R3E 331MF11D	$oxed{oxed}$	5,600	16×35.5	0.015	0.044	3,610	EKYA250E□□562MLP1S
	470	6.3×11	0.22	0.87	400	EKYA6R3E 471MF11D		33	5×11	0.40	1.6	250	EKYA350E□□330ME11D
	820	8×11.5	0.13	0.52	640	EKYA6R3E□□821MHB5D		47	5×11	0.40	1.6	250	EKYA350E□□470ME11D
	1,200	10×12.5	0.080	0.32	865	EKYA6R3E□□122MJC5S		100	6.3×11	0.22	0.87	400	EKYA350E□□101MF11D
	1,200	8×15	0.087	0.35	840	EKYA6R3E□□122MH15D		220	8×11.5	0.13	0.52	640	EKYA350E□□221MHB5D
6.3	1,500	8×20	0.069	0.27	1,050	EKYA6R3E□□152MH20D		270	8×15	0.087	0.35	840	EKYA350E□□271MH15D
	1,800	10×16	0.060	0.24	1,300	EKYA6R3E□□182MJ16S		330	10×12.5	0.080	0.32	865	EKYA350E□□331MJC5S
	2,700	10×20	0.046	0.18	1,400	EKYA6R3E□□272MJ20S		390	8×20	0.069	0.27	1,050	EKYA350E□□391MH20D
	3,300	10×25	0.042	0.17	1,650	EKYA6R3E 332MJ25S	35	470	10×16	0.060	0.24	1,300	EKYA350E 471MJ16S
	3,900	12.5×20	0.035	0.12	1,900	EKYA6R3E 392MK20S		680	10×20	0.046	0.18	1,400	EKYA350E G81MJ20S
	4,700	12.5×25	0.027	0.089	2,230	EKYA6R3E 472MK25S		820	10×25	0.042	0.17	1,650	EKYA350E□□821MJ25S
	5,600	12.5×25	0.027	0.089	2,230	EKYA6R3E□□562MK25S		1,000	12.5×20	0.035	0.12	1,900	EKYA350E 102MK20S
	10,000	16×25	0.021	0.060	2,930	EKYA6R3E 103ML25S		1,500	12.5×25	0.027	0.089	2,230	EKYA350E 152MK25S
	12,000	16×31.5	0.017	0.050	3,450	EKYA6R3E 123MLN3S		2,200	16×25	0.021	0.060	2,930	EKYA350E 222ML25S
	15,000	16×35.5	0.015	0.044	3,610	EKYA6R3E 153MLP1S		2,700	16×25	0.021	0.060	2,930	EKYA350E 272ML25S
	100	5×11	0.90	3.6	150	EKYA100E 101ME11D		3,300	16×31.5	0.017	0.050	3,450	EKYA350E 332MLN3S
	120	5×11	0.40	1.6	250	EKYA100E 121ME11D		3,900	16×35.5	0.015	0.044	3,610	EKYA350E 392MLP1S
	330	6.3×11	0.22	0.87	400	EKYA100E 331MF11D		1.0	5×11	4.0	16	30	EKYA500E TROME11D
	560	8×11.5	0.13	0.52	640	EKYA100E 561MHB5D		2.2	5×11	2.5	10	43	EKYA500E 2R2ME11D
	820	8×15	0.087	0.35	840	EKYA100E B21MH15D		3.3	5×11	2.2	8.8	53	EKYA500E 3R3ME11D
	820	10×12.5	0.080	0.32	865	EKYA100E B21MJC5S		4.7	5×11	1.9	7.6	88	EKYA500E 4R7ME11D
	1,000	10×12.5	0.080	0.32	865	EKYA100E 102MJC5S		10	5×11	1.5	6.0	100	EKYA500E 100ME11D
10	1,200	8×20	0.069	0.27	1,050	EKYA100E 122MH20D		22	5×11	0.70	2.8	180	EKYA500E 220ME11D
	1,200	10×16	0.060	0.24	1,300	EKYA100E 122MJ16S		27	5×11	0.70	2.8	250 295	EKYA500E 270ME11D
	1,800	10×20 10×25	0.046	0.18	1,400	EKYA100E 182MJ20S		47	6.3×11	0.30	1.2	295	EKYA500E 470MF11D
	2,200 3,300	10 X 25 12.5 X 20	0.042	0.17	1,650 1,900	EKYA100E □ □ 222MJ25S EKYA100E □ □ 332MK20S		56 100	6.3×11 8×11.5	0.30	1.2 0.68	555	EKYA500E□□560MF11D EKYA500E□□101MHB5D
	3,900	12.5×25	0.033	0.12	2,230	EKYA100E 332MK25S		150	8×15	0.17	0.48	730	EKYA500E 151MH15D
	6,800	16×25	0.027	0.069	2,230	EKYA100E 682ML25S	50	180	10×12.5	0.12	0.48	760	EKYA500E 151MH15D
	10,000	16×31.5	0.021	0.050	3,450	EKYA100E 103MLN3S	30	180	8×20	0.091	0.36	910	EKYA500E□□181MH20D
	12,000	16×35.5	0.017	0.030	3,610	EKYA100E 123MLP1S		220	10×16	0.084	0.34	1,050	EKYA500E 221MJ16S
	47	5×11	0.40	1.6	250	EKYA160E 470ME11D		330	10×10	0.060	0.24	1,220	EKYA500E 331MJ20S
	100	5×11	0.40	1.6	250	EKYA160E 101ME11D		470	10×25	0.055	0.22	1,440	EKYA500E 471MJ25S
	220	6.3×11	0.40	0.87	400	EKYA160E 221MF11D		470	12.5×20	0.035	0.15	1,660	EKYA500E 471MK20S
	270	6.3×11	0.22	0.87	400	EKYA160E 271MF11D		560	12.5×20	0.045	0.15	1,660	EKYA500E 561MK20S
	470	8×11.5	0.13	0.52	640	EKYA160E 471MHB5D		820	12.5×25	0.034	0.11	1,950	EKYA500E B21MK25S
	680	8×15	0.087	0.35	840	EKYA160E 681MH15D		1,000	16×25	0.025	0.075	2,555	EKYA500E 102ML25S
	680	10×12.5	0.080	0.32	865	EKYA160E□□681MJC5S		1,200	16×25	0.025	0.075	2,555	EKYA500E□□122ML25S
İ	820	8×20	0.069	0.27	1,050	EKYA160E□□821MH20D	i	1,800	16×31.5	0.022	0.066	3,010	EKYA500E□□182MLN3S
	1,000	10×16	0.060	0.24	1,300	EKYA160E□□102MJ16S	i	2,200	16×35.5	0.019	0.057	3,150	EKYA500E□□222MLP1S
16	1,500	10×20	0.046	0.18	1,400	EKYA160E□□152MJ20S		10	5×11	0.88	3.5	173	EKYA630E□□100ME11D
	1,800	10×25	0.042	0.17	1,650	EKYA160E□□182MJ25S		15	5×11	0.88	3.5	173	EKYA630E□□150ME11D
İ	2,200	12.5×20	0.035	0.12	1,900	EKYA160E□□222MK20S		33	6.3×11	0.35	1.4	278	EKYA630E□□330MF11D
İ	3,300		0.027	0.089	2,230	EKYA160E□□332MK25S		56	8×11.5	0.22	0.88	500	EKYA630E□□560MHB5D
	4,700	16×25	0.021	0.060	2,930	EKYA160E□□472ML25S		82	8×15	0.16	0.64	665	EKYA630E□□820MH15D
	5,600	16×25	0.021	0.060	2,930	EKYA160E□□562ML25S		100	10×12.5	0.11	0.44	725	EKYA630E□□101MJC5S
	6,800	16×31.5	0.017	0.050	3,450	EKYA160E□□682MLN3S		120	8×20	0.12	0.48	820	EKYA630E□□121MH20D
	8,200	16×31.5	0.017	0.050	3,450	EKYA160E□□822MLN3S		120	10×16	0.076	0.31	950	EKYA630E□□121MJ16S
	10,000	16×35.5	0.015	0.044	3,610	EKYA160E□□103MLP1S	63	220	10×20	0.056	0.23	1,200	EKYA630E□□221MJ20S
	33	5×11	0.40	1.6	250	EKYA250E□□330ME11D		330	10×25	0.046	0.19	1,350	EKYA630E□□331MJ25S
	47	5×11	0.40	1.6	250	EKYA250E□□470ME11D		330	12.5×20	0.041	0.13	1,570	EKYA630E□□331MK20S
	68	5×11	0.40	1.6	250	EKYA250E□□680ME11D		390	12.5×20	0.041	0.13	1,570	EKYA630E□□391MK20S
	150	6.3×11	0.22	0.87	400	EKYA250E□□151MF11D		470	12.5×25	0.031	0.093	1,990	EKYA630E□□471MK25S
	330	8×11.5	0.13	0.52	640	EKYA250E□□331MHB5D		560	12.5×25	0.031	0.093	1,990	EKYA630E□□561MK25S
	390	8×15	0.087	0.35	840	EKYA250E□□391MH15D		1,000	16×25	0.025	0.075	2,730	EKYA630E□□102ML25S
25	470	10×12.5	0.080	0.32	865	EKYA250E□□471MJC5S		1,200	16×31.5	0.021	0.063	2,850	EKYA630E□□122MLN3S
	560	8×20	0.069	0.27	1,050	EKYA250E□□561MH20D		1,500	16×35.5	0.019	0.057	2,900	EKYA630E□□152MLP1S
	680	10×16	0.060	0.24	1,300	EKYA250E□□681MJ16S		1.0	5×11	4.5	15	20	EKYA101E□□1R0ME11D
	1,000	10×20	0.046	0.18	1,400	EKYA250E□□102MJ20S		2.2	5×11	3.0	13	30	EKYA101E□□2R2ME11D
	1,200	10×25	0.042	0.17	1,650	EKYA250E□□122MJ25S	100		5×11	2.7	11	40	EKYA101E□□3R3ME11D
	1,500		0.035	0.12	1,900	EKYA250E□□152MK20S		4.7	5×11	2.5	10	65	EKYA101E□□4R7ME11D
	2,200	12.5×25	0.027	0.089	2,230	EKYA250E□□222MK25S		6.8	5×11	1.4	5.6	125	EKYA101E□□6R8ME11D

 $\square\,\square$  : Enter the appropriate lead forming or taping code.

Production of the products shown in is scheduled to be discontinued.





#### **STANDARD RATINGS**

wv	Cap (µF)	Case size		dance /100kHz)	Rated ripple current	Part No.	
(V <sub>dc</sub> )		φD×L(mm)	20℃	-10℃	(mArms/ 105℃, 100kHz)		
	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	
100	68	10×16	0.11	0.47	600	EKYA101E□□680MJ16S	
100	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. Production of the products shown in □□□□ is schedul

is scheduled to be discontinued.

## **◆RATED RIPPLE 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 deterioration of aluminum electrolytic capacitors accelerates their life due to the internal heating produced by ripple current. For details, refer to Section "5-3 Ripple Current Effect on Lifetime" in the catalog, Technical Note.



- Always read "Notes on Use" before using the product in order to enable you to use the product correctly and prevent any faults and accidents from occurring.
- Request the Product Specification on the product of NIPPON CHEMI-CON CORPORATION to refer to it as well as this brochure prior to the order of the products. Some specific notes on use of the ordered product may be described in the specifications.
- The products listed in this catalog are designed and manufactured for general electronics equipment use and are not intended for use in applications that can adversely affect human life; where the malfunction of equipment may cause damage to life or property. In addition, our products are not intended to be used in specific applications that may cause a major social impact. Please consult with us in advance of usage of our products in the following listed applications. ① Aerospace equipment ② Power generation equipment such as thermal power, nuclear power etc. ③ Medical equipment ④ Transport equipment (automobiles, trains, ships, etc.) ⑤ Transportation control equipment ⑥ Disaster prevention / crime prevention equipment ⑦ Highly publicized information processing equipment ⑧ Submarine equipment ⑨ Other applications that are not considered general-purpose applications.
- The circuits described as examples in this catalog and the "delivery specifications" are featured in order to show the operations and usage of our products, however, this fact does not guarantee that the circuits are available to function in your equipment systems. We are not in any case responsible for any failures or damage caused by the use of information contained herein. You should examine our products, of which the characteristics are described in the "delivery specifications" and other documents, and determine whether or not our products suit your requirements according to the specifications of your equipment systems. Therefore, you bear final responsibility regarding the use of our products.
  - Please make sure that you take appropriate safety measures such as use of redundant design and malfunction prevention measures in order to prevent fatal accidents and/or fires in the event any of our products malfunction.
- We strongly recommend our customers to purchase Nippon Chemi-Con products only through our official sales channels. We assume no responsibility for any defects or damages caused by using products purchased from outside our official sales channel or of counterfeit goods. In addition, we will ask the customer to pay the investigation cost for products purchased outside our official sales channel.
- We reserve the right to discontinue production and delivery of products. We do not guarantee that all the products included in this catalog will be available in the future.
  - The aforementioned does not apply in the case of individual agreements deviating from the foregoing for customer-specific products
- We continually strive to improve the quality and reliability of our products, but in any case that our product does not meet our published specifications, please stop using it promptly and contact us immediately. As for compensation for non-conforming goods delivered by Chemi-Con, we will limit it only to goods found in non-compliance of our published specifications. This may be accomplished by a no cost replacement of non-conforming individual products, a credit of the piece price paid per each individual non-conforming product, or in other ways deemed necessary.
  - In addition, we have an established system with enhanced traceability, therefore we will limit the applicable lot items for any potential compensation.

Part Numbering System
Part Numbering System (Appendix)
Standardization
Available Items by Manufacturing Locations
Environmental Measures
Technical Note
Precautions and Guidelines
Recommended Soldering Conditions
Taping, Lead-preforming and Packaging
Available Terminals for Snap-in and Screw Mount Type

# **Mouser Electronics**

**Authorized Distributor** 

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

# Chemi-Con:

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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
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EKYA100ELL332MK20S EKYA630ELL152MLP1S EKYA101ELL101MJ20S EKYA500ELL470MF11D
EKYA250ELL680ME11D EKYA100ELL123MLP1S
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