

• New highly reliable electrolyte is employed to minimize ESR and maximize ripple current.

For motercycle ACG starter.

● Endurance with ripple current : 3,000 to 5,000 hours at 105°C

Rated voltage range : 16 to 50V, Capacitance range : 180 to 12,000µF

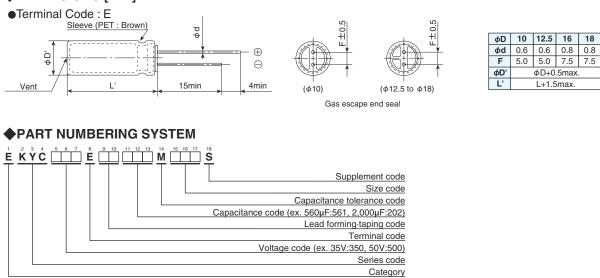
- Non solvent resistant type
- RoHS2 Compliant

●AEC-Q200 compliant : Please contact Chemi-Con for more details, test data, information.

## **\$**SPECIFICATIONS

Items	Characteristics										
Category Temperature Range	-40 to +105℃										
Rated Voltage Range	16 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 ( $\mu$ A), C : Nominal capacitance ( $\mu$ F), V : Rated voltage (V) (at 20°C after 2 minutes)										
Dissipation Factor	Rated voltage (Vdc)	16V	25V	35V	50V						
(tan δ)	tanδ (Max.)	0.16	0.14	0.12	0.10						
	When nominal capacitance exceeds 1,000μF, add 0.02 to the value above for each 1,000μF increase. (at 20°C, 120Hz)										
Low Temperature	Rated voltage(Vdc)	16V	25V	35V	50V						
Characteristics	Z (-25°C) / Z (+20°C)	3	2	2	2						
(Max. Impedance Ratio)	Z (-40°C) / Z (+20°C)	8	5	4	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 5,000 hours (3,000 hours for $\phi$ 10) at 105°C.										
	Capacitance change	$\leq \pm 2$	5% of 1	the initi	al valu	ie					
	D.F. (tan δ )	≦200% of the initial specified value									
	Leakage current	≦The	initial	specifi	ed valu	Je J					
Shelf Life						e capacitors are restored to 20°C after exposing them for 500 hours at 105°C without or 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				ie					
	D.F. (tan δ )	≦200% of the initial specified value			I speci	ified value					
	Leakage current	≦The	initial	specifi	ed valu	Je					

#### **DIMENSIONS** [mm]



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

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# **KYC**<sub>Series</sub>

## **♦STANDARD RATINGS**

WV (Vdc)	Cap (µF)	Case size φD×L(mm)	ESR (Ω max./ 20°C, 100kHz)	Rated ripple current (mArms/ 105°C, 100kHz)	Part No.	WV (Vdc)	Cap (µF)	Case size φD×L(mm)	ESR (Ω max./ 20°C, 100kHz)	Rated ripple current (mArms/ 105°C, 100kHz)	Part No.
	910	10×12.5	0.14	1,120	EKYC160E 911MJC5S		390	10×12.5	0.14	1,120	EKYC350E 391MJC5S
	1,300	10×16	0.10	1,570	EKYC160E 132MJ16S		560	10×16	0.10	1,570	EKYC350E 561MJ16S
	2,000	10×20	0.065	1,940	EKYC160E 202MJ20S		820	10×20	0.065	1,940	EKYC350E B21MJ20S
	3,300	12.5×20	0.050	2,150	EKYC160E 332MK20S		1,300	12.5×20	0.050	2,150	EKYC350E 132MK20S
	4,700	12.5×25	0.037	2,820	EKYC160E 472MK25S		1,800	12.5×25	0.037	2,820	EKYC350E 182MK25S
16	5,600	12.5×30	0.029	3,120	EKYC160E 562MK30S	35	2,200	16×20	0.038	2,530	EKYC350E 222ML20S
10	5,600	16×20	0.038	2,530	EKYC160E 562ML20S	55	2,400	12.5×30	0.029	3,120	EKYC350E 242MK30S
	6,800	18×20	0.037	2,700	EKYC160E G82MM20S		3,000	18×20	0.037	2,700	EKYC350E 302MM20S
	7,500	16×25	0.031	3,240	EKYC160E 752ML25S		3,300	16×25	0.031	3,240	EKYC350E 332ML25S
	9,100	16×30	0.025	3,580	EKYC160E 912ML30S		3,900	16×30	0.025	3,580	EKYC350E 392ML30S
	10,000	18×25	0.030	3,350	EKYC160E 103MM25S		4,300	18×25	0.030	3,350	EKYC350E 432MM25S
	12,000	18×30	0.024	3,710	EKYC160E 123MM30S		5,100	18×30	0.024	3,710	EKYC350E 512MM30S
	560	10×12.5	0.14	1,120	EKYC250E 561MJC5S		180	10×12.5	0.14	1,120	EKYC500E 181MJC5S
	820	10×16	0.10	1,570	EKYC250E B21MJ16S		300	10×16	0.10	1,570	EKYC500E 301MJ16S
	1,300	10×20	0.065	1,940	EKYC250E 132MJ20S		430	10×20	0.065	1,940	EKYC500E 431MJ20S
	2,000	12.5×20	0.050	2,150	EKYC250E 202MK20S		680	12.5×20	0.050	2,150	EKYC500E 681MK20S
	3,000	12.5×25	0.037	2,820	EKYC250E 302MK25S		910	12.5×25	0.037	2,820	EKYC500E 911MK25S
25	3,600	16×20	0.038	2,530	EKYC250E 362ML20S	50	1,200	16×20	0.038	2,530	EKYC500E 122ML20S
20	3,900	12.5×30	0.029	3,120	EKYC250E 392MK30S		1,300	12.5×30	0.029	3,120	EKYC500E 132MK30S
	4,700	18×20	0.037	2,700	EKYC250E 472MM20S		1,500	18×20	0.037	2,700	EKYC500E 152MM20S
	5,100	16×25	0.031	3,240	EKYC250E 512ML25S		1,600	16×25	0.031	3,240	EKYC500E 162ML25S
	6,200	16×30	0.025	3,580	EKYC250E C622ML30S		2,000	16×30	0.025	3,580	EKYC500E 202ML30S
	6,200	18×25	0.030	3,350	EKYC250E C622MM25S		2,200	18×25	0.030	3,350	EKYC500E 222MM25S
	8,200	18×30	0.024	3,710	EKYC250E B22MM30S		2,700	18×30	0.024	3,710	EKYC500E 272MM30S

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

#### **♦**RATED RIPPLE CURRENT MULTIPLIERS

Frequency Multipliers

Capacitance(µF) Frequency(Hz)	120	1k	10k	100k
180	0.40	0.82	0.93	1.00
300 to 560	0.50	0.85	0.94	1.00
680 to 2,000	0.60	0.87	0.95	1.00
2,200 to 4,300	0.75	0.90	0.95	1.00
4,700 to 12,000	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.

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# CHEMI-CON ALUMINUM ELECTROLYTIC CAPACITORS

- 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.

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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