

# KYC Series

- New highly reliable electrolyte is employed to minimize ESR and maximize ripple current.
- For motorcycle 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 12,000 $\mu$ F
- Non solvent resistant type
- RoHS2 Compliant
- AEC-Q200 compliant : Please contact Chemi-Con for more details, test data, information.

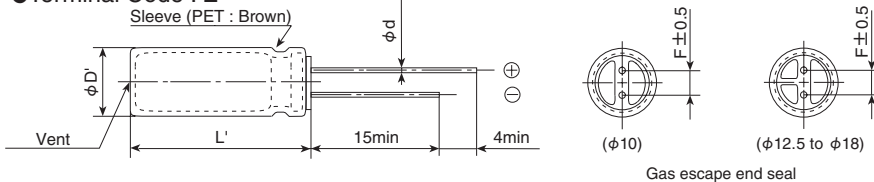


## SPECIFICATIONS

Items	Characteristics			
Category	-40 to +105°C			
Temperature Range	-40 to +105°C			
Rated Voltage Range	16 to 50V <sub>dc</sub>			
Capacitance Tolerance	$\pm 20\%$ (M) (at 20°C, 120Hz)			
Leakage Current	I=0.01CV or 3 $\mu$ A, 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 (tan $\delta$ )	Rated voltage (V <sub>dc</sub> )	16V	25V	35V 50V
	tan $\delta$ (Max.)	0.16	0.14	0.12 0.10
When nominal capacitance exceeds 1,000 $\mu$ F, add 0.02 to the value above for each 1,000 $\mu$ F increase. (at 20°C, 120Hz)				
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (V <sub>dc</sub> )	16V	25V	35V 50V
	Z (-25°C) / Z (+20°C)	3	2	2 2
	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	$\leq \pm 25\%$ of the initial value		
	D.F. (tan $\delta$ )	$\leq 200\%$ 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 $\delta$ )	$\leq 200\%$ of the initial specified value		
	Leakage current	$\leq$ The initial specified value		

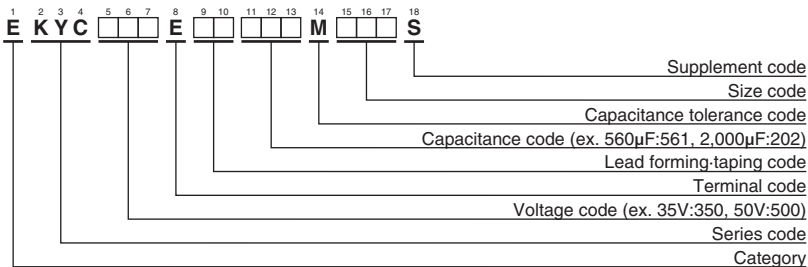
## DIMENSIONS [mm]

### Terminal Code : E



$\phi$ D	10	12.5	16	18
$\phi$ d	0.6	0.6	0.8	0.8
F	5.0	5.0	7.5	7.5
$\phi$ D'	$\phi$ D+0.5max.			
L'	L+1.5max.			

## PART NUMBERING SYSTEM



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

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KYC Series

◆STANDARD RATINGS

WV (V <sub>dc</sub> )	Cap (μF)	Case size φD×L(mm)	ESR (Ω max./20°C, 100kHz)	Rated ripple current (mA <sub>rms</sub> /105°C, 100kHz)	Part No.	WV (V <sub>dc</sub> )	Cap (μF)	Case size φD×L(mm)	ESR (Ω max./20°C, 100kHz)	Rated ripple current (mA <sub>rms</sub> /105°C, 100kHz)	Part No.
16	910	10×12.5	0.14	1,120	EKYC160E□□911MJCS5	35	390	10×12.5	0.14	1,120	EKYC350E□□391MJCS5
	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□□821MJ20S
	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
	5,600	12.5×30	0.029	3,120	EKYC160E□□562MK30S		2,200	16×20	0.038	2,530	EKYC350E□□222ML20S
	5,600	16×20	0.038	2,530	EKYC160E□□562ML20S		2,400	12.5×30	0.029	3,120	EKYC350E□□242MK30S
	6,800	18×20	0.037	2,700	EKYC160E□□682MM20S		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		
25	560	10×12.5	0.14	1,120	EKYC250E□□561MJCS5	50	180	10×12.5	0.14	1,120	EKYC500E□□181MJCS5
	820	10×16	0.10	1,570	EKYC250E□□821MJ16S		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
	3,600	16×20	0.038	2,530	EKYC250E□□362ML20S		1,200	16×20	0.038	2,530	EKYC500E□□122ML20S
	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□□622ML30S		2,000	16×30	0.025	3,580	EKYC500E□□202ML30S
	6,200	18×25	0.030	3,350	EKYC250E□□622MM25S		2,200	18×25	0.030	3,350	EKYC500E□□222MM25S
8,200	18×30	0.024	3,710	EKYC250E□□822MM30S	2,700	18×30	0.024	3,710	EKYC500E□□272MM30S		

□□ : 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 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.

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