

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 12,000μF
- Non solvent resistant type
- RoHS2 Compliant
- AEC-Q200 compliant : Please contact Chemi-Con for more details, test data, information.

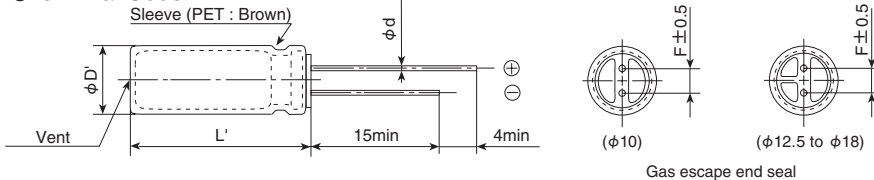


SPECIFICATIONS

| Items | Characteristics | | | |
|---|---|--------------------------------------|------|-----------|
| Category | -40 to +105°C | | | |
| Temperature Range | -40 to +105°C | | | |
| Rated Voltage Range | 16 to 50V _{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}) | 16V | 25V | 35V 50V |
| | tan δ (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 Characteristics (Max. Impedance Ratio) | Rated voltage (V _{dc}) | 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 φ 10) at 105°C. | | | |
| | 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 | | |

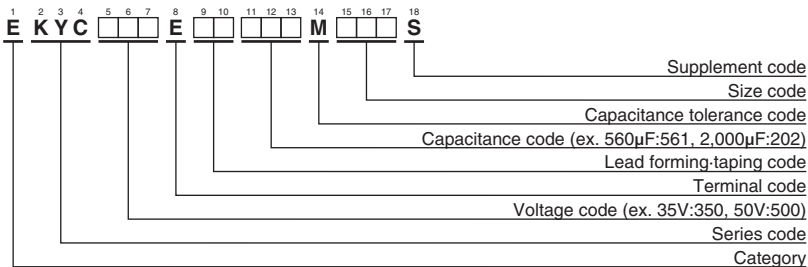
DIMENSIONS [mm]

Terminal Code : E



| φD | 10 | 12.5 | 16 | 18 |
|-----|------------|------|-----|-----|
| φd | 0.6 | 0.6 | 0.8 | 0.8 |
| F | 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)"

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KYC Series
◆STANDARD RATINGS

| WV (V _{dc}) | Cap (μF) | Case size φD×L(mm) | ESR (Ω max./20°C, 100kHz) | Rated ripple current (mA _{rms} /105°C, 100kHz) | Part No. | WV (V _{dc}) | Cap (μF) | Case size φD×L(mm) | ESR (Ω max./20°C, 100kHz) | Rated ripple current (mA _{rms} /105°C, 100kHz) | Part No. |
|-----------------------|----------|--------------------|---------------------------|---|--------------------|-----------------------|----------|--------------------|---------------------------|---|--------------------|
| 16 | 910 | 10×12.5 | 0.14 | 1,120 | EKYC160E□□911MJC5S | 35 | 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□□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□□561MJC5S | 50 | 180 | 10×12.5 | 0.14 | 1,120 | EKYC500E□□181MJC5S |
| | 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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