

KYB Series

- Low impedance, high ripple and long life from KYA 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

KYB
↑ Lower Z
KYA P163



◆ SPECIFICATIONS

| Items | Characteristics | | | | | | | | | | |
|--|---|--|------|------|------|------|---|------|------|------|--|
| Category | -40 to +105°C | | | | | | | | | | |
| Temperature Range | | | | | | | | | | | |
| Rated Voltage Range | 6.3 to 100V _{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}) | 6.3V | 10V | 16V | 25V | 35V | 50V | 63V | 80V | 100V | |
| | tan δ (Max.) | 0.22 | 0.19 | 0.16 | 0.14 | 0.12 | 0.10 | 0.09 | 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 | 80V | 100V | |
| | Z(-25°C)/Z(+20°C) | 4 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | Z(-40°C)/Z(+20°C) | 8 | 6 | 4 | 3 | 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 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. | | | | | | | | | | |
| | Rated Voltage(V _{dc}) | 6.3 to 10V _{dc} | | | | | 16 to 100V _{dc} | | | | |
| | Time | φ 5: 4,000hours φ 6.3 & 8: 6,000hours φ 10 to 18: 8,000hours | | | | | φ 5: 5,000hours φ 6.3 & 8: 7,000hours φ 10 to 18: 10,000hours | | | | |
| | Capacitance change | ≤ ±30% of the initial value | | | | | ≤ ±25% of the initial value | | | | |
| | D.F. (tan δ) | ≤ 200% of the initial specified value | | | | | ≤ 200% of the initial specified value | | | | |
| | Leakage current | ≤ The initial specified value | | | | | ≤ 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 | 5 | 6.3 | 8 | 10 | 12.5 | 16 | 18 |
|-----|------------|-----|-----|-----|------|-----|-----|
| φd | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 | 0.8 | 0.8 |
| F | 2.0 | 2.5 | 3.5 | 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)"



◆STANDARD RATINGS

Main table containing capacitor specifications with columns for WV (Vdc), Cap (uF), Case size (phi D x L (mm)), Impedance (ohm max./100kHz) at 20°C and -10°C, Rated ripple current (mA rms/105°C, 100kHz), and Part No. The table is organized into sections for WV values 6.3, 10, and 16, and further into voltage sub-sections (16V, 25V, 35V, 50V).

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

◆ 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. | 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 | | | | | | 20°C | -10°C | | |
| 50 | 180 | 8×20 | 0.075 | 0.30 | 980 | EKYB500E□□181MH20D | 80 | 56 | 8×15 | 0.14 | 0.56 | 585 | EKYB800E□□560MH15D |
| | 220 | 10×16 | 0.069 | 0.28 | 1,100 | EKYB500E□□221MJ16S | | 82 | 8×20 | 0.11 | 0.44 | 735 | EKYB800E□□820MH20D |
| | 270 | 10×20 | 0.055 | 0.22 | 1,300 | EKYB500E□□271MJ20S | | 82 | 10×12.5 | 0.14 | 0.56 | 624 | EKYB800E□□820MJC5S |
| | 390 | 10×25 | 0.043 | 0.18 | 1,600 | EKYB500E□□391MJ25S | | 120 | 10×16 | 0.10 | 0.40 | 780 | EKYB800E□□121MJ16S |
| | 470 | 10×30 | 0.038 | 0.16 | 1,820 | EKYB500E□□471MJ30S | | 180 | 10×20 | 0.075 | 0.30 | 1,040 | EKYB800E□□181MJ20S |
| | 470 | 12.5×20 | 0.034 | 0.14 | 1,820 | EKYB500E□□471MK20S | | 220 | 10×25 | 0.060 | 0.24 | 1,170 | EKYB800E□□221MJ25S |
| | 680 | 12.5×25 | 0.030 | 0.12 | 2,100 | EKYB500E□□681MK25S | | 270 | 10×30 | 0.053 | 0.22 | 1,350 | EKYB800E□□271MJ30S |
| | 820 | 12.5×30 | 0.025 | 0.10 | 2,450 | EKYB500E□□821MK30S | | 270 | 12.5×20 | 0.048 | 0.20 | 1,430 | EKYB800E□□271MK20S |
| | 820 | 16×20 | 0.028 | 0.12 | 2,350 | EKYB500E□□821ML20S | | 390 | 12.5×25 | 0.039 | 0.16 | 1,620 | EKYB800E□□391MK25S |
| | 1,000 | 12.5×35 | 0.021 | 0.084 | 2,800 | EKYB500E□□102MK35S | | 470 | 12.5×30 | 0.033 | 0.14 | 1,950 | EKYB800E□□471MK30S |
| | 1,000 | 18×20 | 0.025 | 0.10 | 2,600 | EKYB500E□□102MM20S | | 470 | 16×20 | 0.036 | 0.15 | 1,750 | EKYB800E□□471ML20S |
| | 1,200 | 12.5×40 | 0.019 | 0.076 | 3,100 | EKYB500E□□122MK40S | | 560 | 16×35 | 0.026 | 0.11 | 2,250 | EKYB800E□□561MM35S |
| | 1,200 | 16×25 | 0.024 | 0.096 | 2,750 | EKYB500E□□122ML25S | | 560 | 18×20 | 0.032 | 0.13 | 2,100 | EKYB800E□□561MM20S |
| | 1,500 | 16×31.5 | 0.019 | 0.076 | 3,150 | EKYB500E□□152MLN3S | | 680 | 12.5×40 | 0.024 | 0.096 | 2,450 | EKYB800E□□681MK40S |
| | 1,500 | 18×25 | 0.021 | 0.084 | 2,890 | EKYB500E□□152MM25S | | 680 | 16×25 | 0.028 | 0.12 | 2,250 | EKYB800E□□681ML25S |
| | 1,800 | 16×35.5 | 0.016 | 0.064 | 3,550 | EKYB500E□□182MLP1S | | 820 | 16×31.5 | 0.022 | 0.088 | 2,400 | EKYB800E□□821MLN3S |
| | 2,200 | 16×40 | 0.014 | 0.056 | 3,900 | EKYB500E□□222ML40S | | 820 | 18×25 | 0.027 | 0.11 | 2,270 | EKYB800E□□821MM25S |
| | 2,200 | 18×31.5 | 0.014 | 0.056 | 3,800 | EKYB500E□□222MMN3S | | 1,000 | 16×35.5 | 0.020 | 0.080 | 2,600 | EKYB800E□□102MLP1S |
| | 2,700 | 18×35.5 | 0.013 | 0.052 | 4,100 | EKYB500E□□272MMP1S | | 1,200 | 16×40 | 0.018 | 0.072 | 2,900 | EKYB800E□□122ML40S |
| | 63 | 18 | 5×11 | 0.50 | 2.0 | 220 | | EKYB630E□□180ME11D | 100 | 6.8 | 5×11 | 0.80 | 3.2 |
| 33 | | 6.3×11 | 0.25 | 1.0 | 350 | EKYB630E□□330MF11D | 15 | 6.3×11 | | 0.43 | 1.8 | 267 | EKYB101E□□150MF11D |
| 56 | | 8×11.5 | 0.16 | 0.64 | 530 | EKYB630E□□560MHB5D | 27 | 8×11.5 | | 0.18 | 0.72 | 462 | EKYB101E□□270MHB5D |
| 82 | | 8×15 | 0.12 | 0.48 | 700 | EKYB630E□□820MH15D | 39 | 8×15 | | 0.14 | 0.56 | 585 | EKYB101E□□390MH15D |
| 120 | | 8×20 | 0.085 | 0.34 | 880 | EKYB630E□□121MH20S | 56 | 8×20 | | 0.11 | 0.44 | 735 | EKYB101E□□560MH20D |
| 120 | | 10×12.5 | 0.11 | 0.44 | 725 | EKYB630E□□121MJC5S | 56 | 10×12.5 | | 0.14 | 0.56 | 624 | EKYB101E□□560MJC5S |
| 180 | | 10×16 | 0.073 | 0.30 | 1,050 | EKYB630E□□181MJ16S | 82 | 10×16 | | 0.10 | 0.40 | 780 | EKYB101E□□820MJ16S |
| 220 | | 10×20 | 0.055 | 0.22 | 1,300 | EKYB630E□□221MJ20S | 100 | 10×20 | | 0.075 | 0.30 | 1,040 | EKYB101E□□101MJ20S |
| 330 | | 10×25 | 0.045 | 0.18 | 1,550 | EKYB630E□□331MJ25S | 120 | 10×25 | | 0.060 | 0.24 | 1,170 | EKYB101E□□121MJ25S |
| 390 | | 10×30 | 0.040 | 0.16 | 1,780 | EKYB630E□□391MJ30S | 150 | 10×30 | | 0.053 | 0.22 | 1,350 | EKYB101E□□151MJ30S |
| 390 | | 12.5×20 | 0.036 | 0.15 | 1,780 | EKYB630E□□391MK20S | 180 | 12.5×20 | | 0.048 | 0.20 | 1,430 | EKYB101E□□181MK20S |
| 560 | | 12.5×25 | 0.030 | 0.12 | 2,100 | EKYB630E□□561MK25S | 220 | 12.5×25 | | 0.039 | 0.16 | 1,620 | EKYB101E□□221MK25S |
| 680 | | 12.5×30 | 0.026 | 0.11 | 2,415 | EKYB630E□□681MK30S | 270 | 12.5×30 | | 0.033 | 0.14 | 1,950 | EKYB101E□□271MK30S |
| 680 | | 16×20 | 0.028 | 0.12 | 2,250 | EKYB630E□□681ML20S | 270 | 16×20 | | 0.036 | 0.15 | 1,750 | EKYB101E□□271ML20S |
| 820 | | 12.5×35 | 0.022 | 0.088 | 2,700 | EKYB630E□□821MK35S | 330 | 16×25 | | 0.028 | 0.12 | 2,250 | EKYB101E□□331ML25S |
| 820 | | 18×20 | 0.028 | 0.12 | 2,500 | EKYB630E□□821MM20S | 390 | 12.5×35 | | 0.026 | 0.11 | 2,250 | EKYB101E□□391MK35S |
| 1,000 | | 12.5×40 | 0.020 | 0.080 | 3,000 | EKYB630E□□102MK40S | 390 | 18×20 | | 0.032 | 0.13 | 2,100 | EKYB101E□□391MM20S |
| 1,000 | | 16×25 | 0.025 | 0.10 | 2,730 | EKYB630E□□102ML25S | 470 | 12.5×40 | | 0.024 | 0.096 | 2,450 | EKYB101E□□471MK40S |
| 1,200 | | 16×31.5 | 0.020 | 0.080 | 3,000 | EKYB630E□□122MLN3S | 470 | 16×31.5 | | 0.022 | 0.088 | 2,400 | EKYB101E□□471MLN3S |
| 1,500 | | 16×35.5 | 0.018 | 0.072 | 3,200 | EKYB630E□□152MLP1S | 560 | 16×35.5 | | 0.020 | 0.080 | 2,600 | EKYB101E□□561MLP1S |
| 1,500 | 18×31.5 | 0.018 | 0.072 | 3,300 | EKYB630E□□152MMN3S | 560 | 18×25 | 0.027 | 0.11 | 2,270 | EKYB101E□□561MM25S | | |
| 1,800 | 16×40 | 0.016 | 0.064 | 3,590 | EKYB630E□□182ML40S | 680 | 16×40 | 0.018 | 0.072 | 2,900 | EKYB101E□□681ML40S | | |
| 1,800 | 18×35.5 | 0.017 | 0.068 | 3,570 | EKYB630E□□182MMP1S | 680 | 18×31.5 | 0.020 | 0.080 | 2,550 | EKYB101E□□681MMN3S | | |
| 2,200 | 18×40 | 0.016 | 0.064 | 3,670 | EKYB630E□□222MM40S | 820 | 18×35.5 | 0.018 | 0.072 | 3,050 | EKYB101E□□821MMP1S | | |
| 80 | 12 | 5×11 | 0.80 | 3.2 | 163 | EKYB800E□□120ME11D | 1,000 | 1,000 | 18×40 | 0.017 | 0.068 | 3,510 | EKYB101E□□102MM40S |
| | 22 | 6.3×11 | 0.43 | 1.8 | 267 | EKYB800E□□220MF11D | | | | | | | |
| | 39 | 8×11.5 | 0.18 | 0.72 | 462 | EKYB800E□□390MHB5D | | | | | | | |

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

◆ RATED RIPLE CURRENT MULTIPLIERS

● Frequency Multipliers

| Capacitance(μF) | Frequency(Hz) | | | |
|-----------------|---------------|------|------|------|
| | 120 | 1k | 10k | 100k |
| 6.8 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.



Стандарт Электрон Связь

Мы молодая и активно развивающаяся компания в области поставок электронных компонентов. Мы поставляем электронные компоненты отечественного и импортного производства напрямую от производителей и с крупнейших складов мира.

Благодаря сотрудничеству с мировыми поставщиками мы осуществляем комплексные и плановые поставки широчайшего спектра электронных компонентов.

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С нами вы становитесь еще успешнее!

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