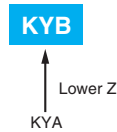


# KYB Series

- 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
- RoHS2 Compliant

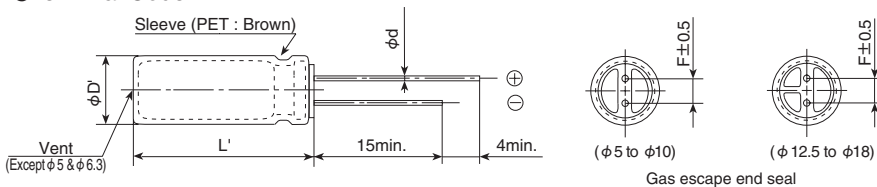


## SPECIFICATIONS

| Items                                                        | Characteristics                                                                                                                                                                                                                                                                     |                                                           |      |      |      |      |      |      |                                                            |      |  |
|--------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|------|------|------|------|------|------|------------------------------------------------------------|------|--|
| Category                                                     | -40 to +105℃                                                                                                                                                                                                                                                                        |                                                           |      |      |      |      |      |      |                                                            |      |  |
| Temperature Range                                            |                                                                                                                                                                                                                                                                                     |                                                           |      |      |      |      |      |      |                                                            |      |  |
| Rated Voltage Range                                          | 6.3 to 100V <sub>dc</sub>                                                                                                                                                                                                                                                           |                                                           |      |      |      |      |      |      |                                                            |      |  |
| Capacitance Tolerance                                        | ±20% (M) (at 20℃, 120Hz)                                                                                                                                                                                                                                                            |                                                           |      |      |      |      |      |      |                                                            |      |  |
| Leakage Current                                              | I=0.01CV or 3μA, whichever is greater.<br>Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20℃ after 2 minutes)                                                                                                                        |                                                           |      |      |      |      |      |      |                                                            |      |  |
| Dissipation Factor<br>(tan δ)                                | Rated voltage (V <sub>dc</sub> )                                                                                                                                                                                                                                                    | 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℃, 120Hz)                                                                                                                                                                    |                                                           |      |      |      |      |      |      |                                                            |      |  |
| Low Temperature<br>Characteristics<br>(Max. Impedance Ratio) | Rated voltage (V <sub>dc</sub> )                                                                                                                                                                                                                                                    | 6.3V                                                      | 10V  | 16V  | 25V  | 35V  | 50V  | 63V  | 80V                                                        | 100V |  |
|                                                              | Z(-25℃)/Z(+20℃)                                                                                                                                                                                                                                                                     | 4                                                         | 3    | 2    | 2    | 2    | 2    | 2    | 2                                                          | 2    |  |
|                                                              | Z(-40℃)/Z(+20℃)                                                                                                                                                                                                                                                                     | 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℃ 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℃.                      |                                                           |      |      |      |      |      |      |                                                            |      |  |
|                                                              | Rated Voltage(V <sub>dc</sub> )                                                                                                                                                                                                                                                     | 6.3 to 10V <sub>dc</sub>                                  |      |      |      |      |      |      | 16 to 100V <sub>dc</sub>                                   |      |  |
|                                                              | Time                                                                                                                                                                                                                                                                                | φ5: 4,000hours φ6.3 & 8: 6,000hours φ10 to 18: 8,000hours |      |      |      |      |      |      | φ5: 5,000hours φ6.3 & 8: 7,000hours φ10 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℃ after exposing them for 500 hours at 105℃ 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                              |      |      |      |      |      |      |                                                            |      |  |

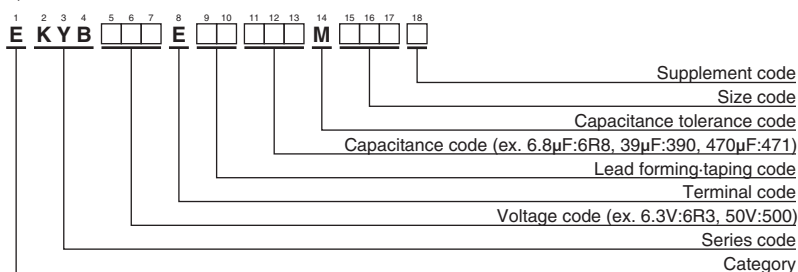
## DIMENSIONS [mm]

### 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

| WV<br>(V <sub>dc</sub> ) | Cap<br>(μF) | Case size<br>φD×L(mm) | Impedance<br>(Ω max./100kHz) |       | Rated<br>ripple<br>current<br>(mA rms/<br>105°C,<br>100kHz) | Part No.           |
|--------------------------|-------------|-----------------------|------------------------------|-------|-------------------------------------------------------------|--------------------|
|                          |             |                       | 20°C                         | -10°C |                                                             |                    |
| 6.3                      | 180         | 5×11                  | 0.29                         | 1.2   | 340                                                         | EKYB6R3E□□181ME11D |
|                          | 390         | 6.3×11                | 0.15                         | 0.60  | 540                                                         | EKYB6R3E□□391MF11D |
|                          | 820         | 8×11.5                | 0.087                        | 0.35  | 840                                                         | EKYB6R3E□□821MHB5D |
|                          | 1,200       | 8×15                  | 0.069                        | 0.28  | 1,050                                                       | EKYB6R3E□□122MH15D |
|                          | 1,200       | 10×12.5               | 0.064                        | 0.26  | 1,050                                                       | EKYB6R3E□□122MJC5S |
|                          | 1,500       | 8×20                  | 0.060                        | 0.24  | 1,210                                                       | EKYB6R3E□□152MH20D |
|                          | 1,800       | 10×16                 | 0.049                        | 0.20  | 1,400                                                       | EKYB6R3E□□182MJ16S |
|                          | 2,200       | 10×20                 | 0.037                        | 0.15  | 1,650                                                       | EKYB6R3E□□222MJ20S |
|                          | 2,700       | 10×25                 | 0.031                        | 0.13  | 1,910                                                       | EKYB6R3E□□272MJ25S |
|                          | 3,300       | 10×30                 | 0.027                        | 0.11  | 2,230                                                       | EKYB6R3E□□332MJ30S |
|                          | 3,900       | 12.5×20               | 0.027                        | 0.11  | 2,230                                                       | EKYB6R3E□□392MK20S |
|                          | 4,700       | 12.5×25               | 0.024                        | 0.096 | 2,530                                                       | EKYB6R3E□□472MK25S |
|                          | 6,800       | 12.5×30               | 0.021                        | 0.084 | 2,860                                                       | EKYB6R3E□□682MK30S |
|                          | 6,800       | 16×20                 | 0.025                        | 0.10  | 2,610                                                       | EKYB6R3E□□682ML20S |
|                          | 8,200       | 12.5×35               | 0.018                        | 0.072 | 3,140                                                       | EKYB6R3E□□822MK35S |
|                          | 8,200       | 18×20                 | 0.021                        | 0.084 | 3,000                                                       | EKYB6R3E□□822MM20S |
|                          | 10,000      | 12.5×40               | 0.017                        | 0.068 | 3,640                                                       | EKYB6R3E□□103MK40S |
|                          | 10,000      | 16×25                 | 0.020                        | 0.080 | 3,140                                                       | EKYB6R3E□□103ML25S |
|                          | 12,000      | 16×31.5               | 0.016                        | 0.064 | 3,610                                                       | EKYB6R3E□□123MLN3S |
|                          | 12,000      | 18×25                 | 0.017                        | 0.068 | 3,530                                                       | EKYB6R3E□□123MM25S |
|                          | 15,000      | 16×35.5               | 0.014                        | 0.056 | 4,080                                                       | EKYB6R3E□□153MLP1S |
|                          | 15,000      | 18×31.5               | 0.014                        | 0.056 | 4,220                                                       | EKYB6R3E□□153MMN3S |
| 10                       | 120         | 5×11                  | 0.29                         | 1.2   | 340                                                         | EKYB100E□□121ME11D |
|                          | 330         | 6.3×11                | 0.15                         | 0.60  | 540                                                         | EKYB100E□□331MF11D |
|                          | 560         | 8×11.5                | 0.087                        | 0.35  | 840                                                         | EKYB100E□□561MHB5D |
|                          | 820         | 8×15                  | 0.069                        | 0.28  | 1,050                                                       | EKYB100E□□821MH15D |
|                          | 1,000       | 8×20                  | 0.060                        | 0.24  | 1,210                                                       | EKYB100E□□102MH20D |
|                          | 1,000       | 10×12.5               | 0.064                        | 0.26  | 1,050                                                       | EKYB100E□□102MJC5S |
|                          | 1,200       | 10×16                 | 0.049                        | 0.20  | 1,400                                                       | EKYB100E□□122MJ16S |
|                          | 1,800       | 10×20                 | 0.037                        | 0.15  | 1,650                                                       | EKYB100E□□182MJ20S |
|                          | 2,200       | 10×25                 | 0.031                        | 0.13  | 1,910                                                       | EKYB100E□□222MJ25S |
|                          | 2,700       | 10×30                 | 0.027                        | 0.11  | 2,230                                                       | EKYB100E□□272MJ30S |
|                          | 2,700       | 12.5×20               | 0.027                        | 0.11  | 2,230                                                       | EKYB100E□□272MK20S |
|                          | 3,900       | 12.5×25               | 0.024                        | 0.096 | 2,530                                                       | EKYB100E□□392MK25S |
|                          | 4,700       | 12.5×30               | 0.021                        | 0.084 | 2,860                                                       | EKYB100E□□472MK30S |
|                          | 4,700       | 16×20                 | 0.025                        | 0.10  | 2,610                                                       | EKYB100E□□472ML20S |
|                          | 5,600       | 12.5×35               | 0.018                        | 0.072 | 3,140                                                       | EKYB100E□□562MK35S |
|                          | 6,800       | 12.5×40               | 0.017                        | 0.068 | 3,640                                                       | EKYB100E□□682MK40S |
|                          | 6,800       | 16×25                 | 0.020                        | 0.080 | 3,140                                                       | EKYB100E□□682ML25S |
|                          | 6,800       | 18×20                 | 0.021                        | 0.084 | 3,000                                                       | EKYB100E□□682MM20S |
|                          | 8,200       | 16×31.5               | 0.016                        | 0.064 | 3,610                                                       | EKYB100E□□822MLN3S |
|                          | 8,200       | 18×25                 | 0.017                        | 0.068 | 3,530                                                       | EKYB100E□□822MM25S |
|                          | 10,000      | 16×35.5               | 0.014                        | 0.056 | 4,080                                                       | EKYB100E□□103MLP1S |
|                          | 10,000      | 18×31.5               | 0.014                        | 0.056 | 4,220                                                       | EKYB100E□□103MMN3S |
| 16                       | 120         | 5×11                  | 0.29                         | 1.2   | 340                                                         | EKYB160E□□121ME11D |
|                          | 270         | 6.3×11                | 0.15                         | 0.60  | 540                                                         | EKYB160E□□271MF11D |
|                          | 470         | 8×11.5                | 0.087                        | 0.35  | 840                                                         | EKYB160E□□471MHB5D |
|                          | 680         | 8×15                  | 0.069                        | 0.28  | 1,050                                                       | EKYB160E□□681MH15D |
|                          | 680         | 10×12.5               | 0.064                        | 0.26  | 1,050                                                       | EKYB160E□□681MJC5S |
|                          | 820         | 8×20                  | 0.060                        | 0.24  | 1,210                                                       | EKYB160E□□821MH20D |
|                          | 1,000       | 10×16                 | 0.049                        | 0.20  | 1,400                                                       | EKYB160E□□102MJ16S |
|                          | 1,500       | 10×20                 | 0.037                        | 0.15  | 1,650                                                       | EKYB160E□□152MJ20S |
|                          | 1,800       | 10×25                 | 0.031                        | 0.13  | 1,910                                                       | EKYB160E□□182MJ25S |
|                          | 2,200       | 10×30                 | 0.027                        | 0.11  | 2,230                                                       | EKYB160E□□222MJ30S |
|                          | 2,200       | 12.5×20               | 0.027                        | 0.11  | 2,230                                                       | EKYB160E□□222MK20S |
|                          | 3,300       | 12.5×25               | 0.024                        | 0.096 | 2,530                                                       | EKYB160E□□332MK25S |
|                          | 3,900       | 12.5×30               | 0.021                        | 0.084 | 2,860                                                       | EKYB160E□□392MK30S |
|                          | 3,900       | 16×20                 | 0.025                        | 0.10  | 2,610                                                       | EKYB160E□□392ML20S |
|                          | 4,700       | 12.5×35               | 0.018                        | 0.072 | 3,140                                                       | EKYB160E□□472MK35S |
|                          | 4,700       | 18×20                 | 0.021                        | 0.084 | 3,000                                                       | EKYB160E□□472MM20S |
|                          | 5,600       | 16×31.5               | 0.016                        | 0.064 | 3,610                                                       | EKYB160E□□562MLN3S |
|                          | 5,600       | 18×25                 | 0.017                        | 0.068 | 3,530                                                       | EKYB160E□□562MM25S |
|                          | 6,800       | 16×35.5               | 0.014                        | 0.056 | 4,080                                                       | EKYB160E□□682MLP1S |
|                          | 6,800       | 18×31.5               | 0.014                        | 0.056 | 4,220                                                       | EKYB160E□□682MMN3S |
|                          | 8,200       | 16×40                 | 0.013                        | 0.052 | 4,220                                                       | EKYB160E□□822ML40S |
|                          | 8,200       | 18×35.5               | 0.012                        | 0.048 | 4,280                                                       | EKYB160E□□822MMP1S |
|                          | 15,000      | 18×40                 | 0.011                        | 0.044 | 4,700                                                       | EKYB160E□□153MM40S |
| 25                       | 4,700       | 12.5×35               | 0.018                        | 0.072 | 3,140                                                       | EKYB250E□□472MK35S |
|                          | 4,700       | 18×20                 | 0.021                        | 0.084 | 3,000                                                       | EKYB250E□□472MM20S |
|                          | 5,600       | 12.5×40               | 0.017                        | 0.068 | 3,640                                                       | EKYB250E□□562MK40S |
|                          | 5,600       | 16×25                 | 0.020                        | 0.080 | 3,140                                                       | EKYB250E□□562ML25S |
|                          | 6,800       | 16×31.5               | 0.016                        | 0.064 | 3,610                                                       | EKYB250E□□682MLN3S |
|                          | 6,800       | 18×25                 | 0.017                        | 0.068 | 3,530                                                       | EKYB250E□□682MM25S |
|                          | 8,200       | 16×35.5               | 0.014                        | 0.056 | 4,080                                                       | EKYB250E□□822MLP1S |
|                          | 8,200       | 18×31.5               | 0.014                        | 0.056 | 4,220                                                       | EKYB250E□□822MMN3S |
|                          | 10,000      | 16×40                 | 0.013                        | 0.052 | 4,220                                                       | EKYB250E□□103ML40S |
|                          | 10,000      | 18×35.5               | 0.012                        | 0.048 | 4,280                                                       | EKYB250E□□103MMP1S |
|                          | 12,000      | 16×40                 | 0.013                        | 0.052 | 4,220                                                       | EKYB250E□□123ML40S |
|                          | 12,000      | 18×35.5               | 0.012                        | 0.048 | 4,280                                                       | EKYB250E□□123MMP1S |
|                          | 15,000      | 18×40                 | 0.011                        | 0.044 | 4,700                                                       | EKYB250E□□153MM40S |
|                          | 15,000      | 18×40                 | 0.011                        | 0.044 | 4,700                                                       | EKYB250E□□223MM40S |
|                          | 15,000      | 18×40                 | 0.011                        | 0.044 | 4,700                                                       | EKYB250E□□223MM40S |
|                          | 15,000      | 18×40                 | 0.011                        | 0.044 | 4,700                                                       | EKYB250E□□223MM40S |
|                          | 15,000      | 18×40                 | 0.011                        | 0.044 | 4,700                                                       | EKYB250E□□223MM40S |
|                          | 15,000      | 18×40                 | 0.011                        | 0.044 | 4,700                                                       | EKYB250E□□223MM40S |
|                          | 15,000      | 18×40                 | 0.011                        | 0.044 | 4,700                                                       | EKYB250E□□223MM40S |
|                          | 15,000      | 18×40                 | 0.011                        | 0.044 | 4,700                                                       | EKYB250E□□223MM40S |
|                          | 15,000      | 18×40                 | 0.011                        | 0.044 | 4,700                                                       | EKYB250E□□223MM40S |
|                          | 15,000      | 18×40                 | 0.011                        | 0.044 | 4,700                                                       | EKYB250E□□223MM40S |
|                          | 15,000      | 18×40                 | 0.011                        | 0.044 | 4,700                                                       | EKYB250E□□223MM40S |
|                          | 15,000      | 18×40                 | 0.011                        | 0.044 | 4,700                                                       | EKYB250E□□223MM40S |
| 35                       | 47          | 5×11                  | 0.29                         | 1.2   | 340                                                         | EKYB350E□□470ME11D |
|                          | 100         | 6.3×11                | 0.15                         | 0.60  | 540                                                         | EKYB350E□□101MF11D |
|                          | 180         | 8×11.5                | 0.087                        | 0.35  | 840                                                         | EKYB350E□□181MHB5D |
|                          | 270         | 8×15                  | 0.069                        | 0.28  | 1,050                                                       | EKYB350E□□271MH15D |
|                          | 330         | 8×20                  | 0.060                        | 0.24  | 1,210                                                       | EKYB350E□□331MH20D |
|                          | 330         | 10×12.5               | 0.064                        | 0.26  | 1,050                                                       | EKYB350E□□331MJC5S |
|                          | 470         | 10×16                 | 0.049                        | 0.20  | 1,400                                                       | EKYB350E□□471MJ16S |
|                          | 680         | 10×20                 | 0.037                        | 0.15  | 1,650                                                       | EKYB350E□□681MJ20S |
|                          | 820         | 10×25                 | 0.031                        | 0.13  | 1,910                                                       | EKYB350E□□821MJ25S |
|                          | 1,000       | 10×30                 | 0.027                        | 0.11  | 2,230                                                       | EKYB350E□□102MJ30S |
|                          | 1,000       | 12.5×20               | 0.027                        | 0.11  | 2,230                                                       | EKYB350E□□102MK20S |
|                          | 1,500       | 12.5×25               | 0.024                        | 0.096 | 2,530                                                       | EKYB350E□□152MK25S |
|                          | 1,800       | 12.5×30               | 0.021                        | 0.084 | 2,860                                                       | EKYB350E□□182MK30S |
|                          | 1,800       | 16×20                 | 0.025                        | 0.10  | 2,610                                                       | EKYB350E□□182ML20S |
|                          | 2,200       | 12.5×35               | 0.018                        | 0.072 | 3,140                                                       | EKYB350E□□222MK35S |
|                          | 2,200       | 18×20                 | 0.021                        | 0.084 | 3,000                                                       | EKYB350E□□222MM20S |
|                          | 2,700       | 12.5×40               | 0.017                        | 0.068 | 3,640                                                       | EKYB350E□□272MK40S |
|                          | 2,700       | 16×25                 | 0.020                        | 0.080 | 3,140                                                       | EKYB350E□□272ML25S |
|                          | 3,300       | 16×31.5               | 0.016                        | 0.064 | 3,610                                                       | EKYB350E□□332MLN3S |
|                          | 3,300       | 18×25                 | 0.017                        | 0.068 | 3,530                                                       | EKYB350E□□332MM25S |
|                          | 3,900       | 16×35.5               | 0.014                        | 0.056 | 4,080                                                       | EKYB350E□□392MLP1S |
|                          | 4,700       | 16×40                 | 0.013                        | 0.052 | 4,220                                                       | EKYB350E□□472ML40S |
|                          | 4,700       | 18×31.5               | 0.014                        | 0.056 | 4,220                                                       | EKYB350E□□472MMN3S |
| 50                       | 27          | 5×11                  | 0.48                         | 2.0   | 238                                                         | EKYB500E□□270ME11D |
|                          | 56          | 6.3×11                | 0.20                         | 0.80  | 385                                                         | EKYB500E□□560MF11D |
|                          | 100         | 8×11.5                | 0.12                         | 0.48  | 620                                                         | EKYB500E□□101MHB5D |
|                          | 150         | 8×15                  | 0.093                        | 0.38  | 810                                                         | EKYB500E□□151MH15D |
|                          | 150         | 10×12.5               | 0.10                         | 0.40  | 810                                                         | EKYB500E□□151MJC5S |

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

## ◆STANDARD RATINGS

| WV<br>(V <sub>dc</sub> ) | Cap<br>(μF) | Case size<br>φD×L(mm) | Impedance<br>(Ω max./100kHz) |       | Rated ripple<br>current<br>(mA rms/<br>105°C,<br>100kHz) | Part No.           |
|--------------------------|-------------|-----------------------|------------------------------|-------|----------------------------------------------------------|--------------------|
|                          |             |                       | 20°C                         | -10°C |                                                          |                    |
| 50                       | 180         | 8×20                  | 0.075                        | 0.30  | 980                                                      | EKYB500E□□181MH20D |
|                          | 220         | 10×16                 | 0.069                        | 0.28  | 1,100                                                    | EKYB500E□□221MJ16S |
|                          | 270         | 10×20                 | 0.055                        | 0.22  | 1,300                                                    | EKYB500E□□271MJ20S |
|                          | 390         | 10×25                 | 0.043                        | 0.18  | 1,600                                                    | EKYB500E□□391MJ25S |
|                          | 470         | 10×30                 | 0.038                        | 0.16  | 1,820                                                    | EKYB500E□□471MJ30S |
|                          | 470         | 12.5×20               | 0.034                        | 0.14  | 1,820                                                    | EKYB500E□□471MK20S |
|                          | 680         | 12.5×25               | 0.030                        | 0.12  | 2,100                                                    | EKYB500E□□681MK25S |
|                          | 820         | 12.5×30               | 0.025                        | 0.10  | 2,450                                                    | EKYB500E□□821MK30S |
|                          | 820         | 16×20                 | 0.028                        | 0.12  | 2,350                                                    | EKYB500E□□821ML20S |
|                          | 1,000       | 12.5×35               | 0.021                        | 0.084 | 2,800                                                    | EKYB500E□□102MK35S |
|                          | 1,000       | 18×20                 | 0.025                        | 0.10  | 2,600                                                    | EKYB500E□□102MM20S |
|                          | 1,200       | 16×40                 | 0.019                        | 0.076 | 3,100                                                    | EKYB500E□□122MK40S |
|                          | 1,200       | 16×25                 | 0.024                        | 0.096 | 2,750                                                    | EKYB500E□□122ML25S |
|                          | 1,500       | 16×31.5               | 0.019                        | 0.076 | 3,150                                                    | EKYB500E□□152MLN3S |
|                          | 1,500       | 18×25                 | 0.021                        | 0.084 | 2,890                                                    | EKYB500E□□152MM25S |
|                          | 1,800       | 16×35.5               | 0.016                        | 0.064 | 3,550                                                    | EKYB500E□□182MLP1S |
|                          | 2,200       | 16×40                 | 0.014                        | 0.056 | 3,900                                                    | EKYB500E□□222ML40S |
|                          | 2,200       | 18×31.5               | 0.014                        | 0.056 | 3,800                                                    | EKYB500E□□222MMN3S |
|                          | 2,700       | 18×35.5               | 0.013                        | 0.052 | 4,100                                                    | EKYB500E□□272MMP1S |
|                          | 18          | 5×11                  | 0.50                         | 2.0   | 220                                                      | EKYB630E□□180ME11D |
| 63                       | 33          | 6.3×11                | 0.25                         | 1.0   | 350                                                      | EKYB630E□□330MF11D |
|                          | 56          | 8×11.5                | 0.16                         | 0.64  | 530                                                      | EKYB630E□□560MHB5D |
|                          | 82          | 8×15                  | 0.12                         | 0.48  | 700                                                      | EKYB630E□□820MH15D |
|                          | 120         | 8×20                  | 0.085                        | 0.34  | 880                                                      | EKYB630E□□121MH20D |
|                          | 120         | 10×12.5               | 0.11                         | 0.44  | 725                                                      | EKYB630E□□121MJC5S |
|                          | 180         | 10×16                 | 0.073                        | 0.30  | 1,050                                                    | EKYB630E□□181MJ16S |
|                          | 220         | 10×20                 | 0.055                        | 0.22  | 1,300                                                    | EKYB630E□□221MJ20S |
|                          | 330         | 10×25                 | 0.045                        | 0.18  | 1,550                                                    | EKYB630E□□331MJ25S |
|                          | 390         | 10×30                 | 0.040                        | 0.16  | 1,780                                                    | EKYB630E□□391MJ30S |
|                          | 390         | 12.5×20               | 0.036                        | 0.15  | 1,780                                                    | EKYB630E□□391MK20S |
|                          | 560         | 12.5×25               | 0.030                        | 0.12  | 2,100                                                    | EKYB630E□□561MK25S |
|                          | 680         | 12.5×30               | 0.026                        | 0.11  | 2,415                                                    | EKYB630E□□681MK30S |
|                          | 680         | 16×20                 | 0.028                        | 0.12  | 2,250                                                    | EKYB630E□□681ML20S |
|                          | 820         | 12.5×35               | 0.022                        | 0.088 | 2,700                                                    | EKYB630E□□821MK35S |
|                          | 820         | 18×20                 | 0.028                        | 0.12  | 2,500                                                    | EKYB630E□□821MM20S |
|                          | 1,000       | 12.5×40               | 0.020                        | 0.080 | 3,000                                                    | EKYB630E□□102MK40S |
|                          | 1,000       | 16×25                 | 0.025                        | 0.10  | 2,730                                                    | EKYB630E□□102ML25S |
|                          | 1,200       | 16×31.5               | 0.020                        | 0.080 | 3,000                                                    | EKYB630E□□122MLN3S |
|                          | 1,200       | 18×25                 | 0.022                        | 0.088 | 2,800                                                    | EKYB630E□□122MM25S |
|                          | 1,500       | 16×35.5               | 0.018                        | 0.072 | 3,200                                                    | EKYB630E□□152MLP1S |
| 80                       | 1,500       | 18×31.5               | 0.018                        | 0.072 | 3,300                                                    | EKYB630E□□152MMN3S |
|                          | 1,800       | 16×40                 | 0.016                        | 0.064 | 3,590                                                    | EKYB630E□□182ML40S |
|                          | 1,800       | 18×35.5               | 0.017                        | 0.068 | 3,570                                                    | EKYB630E□□182MMP1S |
|                          | 2,200       | 18×40                 | 0.016                        | 0.064 | 3,670                                                    | EKYB630E□□222MM40S |
|                          | 12          | 5×11                  | 0.80                         | 3.2   | 163                                                      | EKYB800E□□120ME11D |
|                          | 22          | 6.3×11                | 0.43                         | 1.8   | 267                                                      | EKYB800E□□220MF11D |
|                          | 39          | 8×11.5                | 0.18                         | 0.72  | 462                                                      | EKYB800E□□390MHB5D |
|                          | 56          | 8×15                  | 0.14                         | 0.56  | 585                                                      | EKYB800E□□560MH15D |
|                          | 82          | 8×20                  | 0.11                         | 0.44  | 735                                                      | EKYB800E□□820MH20D |
|                          | 82          | 10×12.5               | 0.14                         | 0.56  | 624                                                      | EKYB800E□□820MJC5S |
|                          | 120         | 10×16                 | 0.10                         | 0.40  | 780                                                      | EKYB800E□□121MJ16S |
|                          | 180         | 10×20                 | 0.075                        | 0.30  | 1,040                                                    | EKYB800E□□181MJ20S |
|                          | 220         | 10×25                 | 0.060                        | 0.24  | 1,170                                                    | EKYB800E□□221MJ25S |
|                          | 270         | 10×30                 | 0.053                        | 0.22  | 1,350                                                    | EKYB800E□□271MJ30S |
|                          | 270         | 12.5×20               | 0.048                        | 0.20  | 1,430                                                    | EKYB800E□□271MK20S |
|                          | 390         | 12.5×25               | 0.039                        | 0.16  | 1,620                                                    | EKYB800E□□391MK25S |
|                          | 470         | 12.5×30               | 0.033                        | 0.14  | 1,950                                                    | EKYB800E□□471MK30S |
|                          | 470         | 16×20                 | 0.036                        | 0.15  | 1,750                                                    | EKYB800E□□471ML20S |
|                          | 560         | 12.5×35               | 0.026                        | 0.11  | 2,250                                                    | EKYB800E□□561MM20S |
|                          | 560         | 18×20                 | 0.032                        | 0.13  | 2,100                                                    | EKYB800E□□561MM25S |
| 100                      | 680         | 12.5×40               | 0.024                        | 0.096 | 2,450                                                    | EKYB800E□□681MK40S |
|                          | 680         | 16×25                 | 0.028                        | 0.12  | 2,250                                                    | EKYB800E□□681ML25S |
|                          | 820         | 16×31.5               | 0.022                        | 0.088 | 2,400                                                    | EKYB800E□□821MLN3S |
|                          | 820         | 18×25                 | 0.027                        | 0.11  | 2,270                                                    | EKYB800E□□821MM25S |
|                          | 1,000       | 16×35.5               | 0.020                        | 0.080 | 2,600                                                    | EKYB800E□□102MLP1S |
|                          | 1,200       | 16×40                 | 0.018                        | 0.072 | 2,900                                                    | EKYB800E□□122ML40S |
|                          | 1,200       | 18×31.5               | 0.020                        | 0.080 | 2,550                                                    | EKYB800E□□122MMN3S |
|                          | 1,500       | 18×35.5               | 0.018                        | 0.072 | 3,050                                                    | EKYB800E□□152MMP1S |
|                          | 6.8         | 5×11                  | 0.80                         | 3.2   | 163                                                      | EKYB101E□□6R8ME11D |
|                          | 15          | 6.3×11                | 0.43                         | 1.8   | 267                                                      | EKYB101E□□150MF11D |
|                          | 27          | 8×11.5                | 0.18                         | 0.72  | 462                                                      | EKYB101E□□270MHB5D |
|                          | 39          | 8×15                  | 0.14                         | 0.56  | 585                                                      | EKYB101E□□390MH15D |
|                          | 56          | 8×20                  | 0.11                         | 0.44  | 735                                                      | EKYB101E□□560MH20D |
|                          | 56          | 10×12.5               | 0.14                         | 0.56  | 624                                                      | EKYB101E□□560MJC5S |
|                          | 82          | 10×16                 | 0.10                         | 0.40  | 780                                                      | EKYB101E□□820MJ16S |
|                          | 100         | 10×20                 | 0.075                        | 0.30  | 1,040                                                    | EKYB101E□□101MJ20S |
|                          | 120         | 10×25                 | 0.060                        | 0.24  | 1,170                                                    | EKYB101E□□121MJ25S |
|                          | 150         | 10×30                 | 0.053                        | 0.22  | 1,350                                                    | EKYB101E□□151MJ30S |
|                          | 180         | 12.5×20               | 0.048                        | 0.20  | 1,430                                                    | EKYB101E□□181MK20S |
|                          | 220         | 12.5×25               | 0.039                        | 0.16  | 1,620                                                    | EKYB101E□□221MK25S |
|                          | 270         | 12.5×30               | 0.033                        | 0.14  | 1,950                                                    | EKYB101E□□271MK30S |
| 100                      | 270         | 16×20                 | 0.036                        | 0.15  | 1,750                                                    | EKYB101E□□271ML20S |
|                          | 330         | 16×25                 | 0.028                        | 0.12  | 2,250                                                    | EKYB101E□□331ML25S |
|                          | 390         | 12.5×35               | 0.026                        | 0.11  | 2,250                                                    | EKYB101E□□391MK35S |
|                          | 390         | 18×20                 | 0.032                        | 0.13  | 2,100                                                    | EKYB101E□□391MM20S |
|                          | 470         | 12.5×40               | 0.024                        | 0.096 | 2,450                                                    | EKYB101E□□471MK40S |
|                          | 470         | 16×31.5               | 0.022                        | 0.088 | 2,400                                                    | EKYB101E□□471MLN3S |
|                          | 560         | 16×35.5               | 0.020                        | 0.080 | 2,600                                                    | EKYB101E□□561MLP1S |
|                          | 560         | 18×25                 | 0.027                        | 0.11  | 2,270                                                    | EKYB101E□□561MM25S |
|                          | 680         | 16×40                 | 0.018                        | 0.072 | 2,900                                                    | EKYB101E□□681ML40S |
|                          | 680         | 18×31.5               | 0.020                        | 0.080 | 2,550                                                    | EKYB101E□□681MMN3S |
|                          | 820         | 18×35.5               | 0.018                        | 0.072 | 3,050                                                    | EKYB101E□□821MMP1S |
|                          | 1,000       | 18×40                 | 0.017                        | 0.068 | 3,510                                                    | EKYB101E□□102MM40S |

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

## ◆RATED RIPPLE 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.