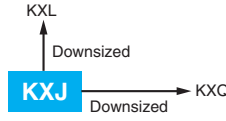


# KXJ Series

- Downsized and Longer life from current KXG series
- Endurance with ripple current : 8,000 to 12,000 hours at 105°C
- Rated voltage range : 160 to 500V, Capacitance range : 6.8 to 680μF
- For electronic ballast circuits and other long life applications
- Non solvent resistant type
- RoHS2 Compliant
- AEC-Q200 compliant : Please contact Chemi-Con for more details, test data, information.

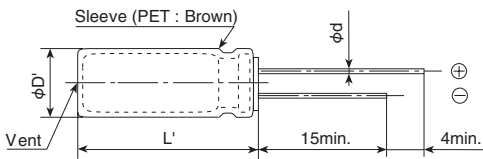


## SPECIFICATIONS

| Items  | Characteristics   |  |                 |  |
|--|---|--|-----------------|--|
| Category   | -40 to +105°C (160 to 450V <sub>dc</sub> )    -25 to +105°C (500V <sub>dc</sub> )   |  |                 |  |
| Temperature Range                                      |   |  |                 |  |
| Rated Voltage Range                                    | 160 to 500V <sub>dc</sub>   |  |                 |  |
| Capacitance Tolerance                                  | ±20% (M) (at 20°C, 120Hz)   |  |                 |  |
| Leakage Current  |   | After 1 minute                                     | After 5 minutes |  |
|  | CV ≤ 1000   | I=0.1CV+40   | I=0.03CV+15     |  |
|  | CV > 1000   | I=0.04CV+100                                       | I=0.02CV+25     |  |
|  | Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20°C)   |  |                 |  |
| Dissipation Factor (tan δ)                             | Rated voltage (V <sub>dc</sub> )  | 160 to 250V  | 350 to 500V     |  |
|  | tan δ (Max.)  | 0.20   | 0.24            | (at 20°C, 120Hz)                             |
| Low Temperature Characteristics (Max. Impedance Ratio) | Rated voltage (V <sub>dc</sub> )  | 160 to 250V  | 350, 400V       | 420 to 500V                                  |
|  | Z(-25°C)/Z(+20°C)   | 3  | 5               | 6  |
|  | Z(-40°C)/Z(+20°C)   | 6  | 6               | —  |
|  | (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 time at 105°C.                                  |  |                 |  |
|  | Rated voltage (V <sub>dc</sub> )  | 160 to 450V  |                 | 500V   |
|  | Time  | 16L to 20L : 10,000hours, 25L to 50L : 12,000hours |                 | φ10 : 8,000hours, φ12.5 to φ18 : 10,000hours |
|  | Capacitance change  | ≤ ±20% 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 1,000 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  | ≤ ±20% of the initial value                        |                 |  |
|  | D.F. (tan δ)  | ≤ 200% of the initial specified value              |                 |  |
|  | Leakage current   | ≤ 500% of the initial specified value              |                 |  |

## DIMENSIONS [mm]

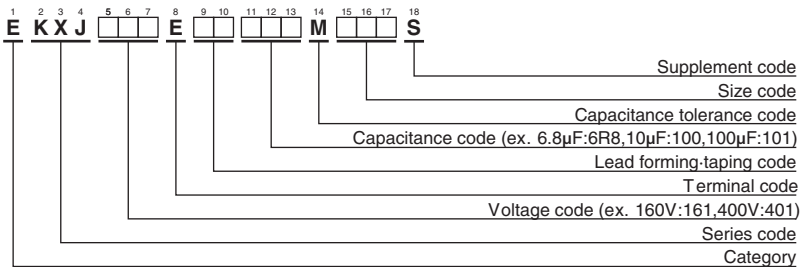
- Terminal Code : E



Gas escaped end seal

| φD  | 10         | 12.5 | 14.5 | 16  | 18  |
|-----|------------|------|------|-----|-----|
| φd  | 0.6        | 0.6  | 0.8  | 0.8 | 0.8 |
| F   | 5.0        | 5.0  | 7.5  | 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 (V <sub>dc</sub> ) | Cap (μF) | Case size φD×L(mm) | tan δ | Rated ripple current (mA <sub>rms</sub> /105°C, 120Hz) | Part No.           | WV (V <sub>dc</sub> ) | Cap (μF) | Case size φD×L(mm) | tan δ              | Rated ripple current (mA <sub>rms</sub> /105°C, 120Hz) | Part No.           |
|-----------------------|----------|--------------------|-------|--|--------------------|-----------------------|----------|--------------------|--------------------|--|--------------------|
|                       |          |                    |       |  |                    |                       |          |                    |                    |  |                    |
| 350                   | 12       | 10×16              | 0.24  | 135  | EKXJ351E□□120MJ16S | 420                   | 6.8      | 10×16              | 0.24               | 105  | EKXJ421E□□6R8MJ16S |
|                       | 22       | 10×20              | 0.24  | 200  | EKXJ351E□□220MJ20S |                       | 12       | 10×20              | 0.24               | 150  | EKXJ421E□□120MJ20S |
|                       | 27       | 10×25              | 0.24  | 240  | EKXJ351E□□270MJ25S |                       | 15       | 10×25              | 0.24               | 185  | EKXJ421E□□150MJ25S |
|                       | 27       | 10×30              | 0.24  | 255  | EKXJ351E□□270MJ30S |                       | 18       | 10×30              | 0.24               | 215  | EKXJ421E□□180MJ30S |
|                       | 33       | 12.5×20            | 0.24  | 330  | EKXJ351E□□330MK20S |                       | 22       | 12.5×20            | 0.24               | 285  | EKXJ421E□□220MK20S |
|                       | 39       | 10×35              | 0.24  | 325  | EKXJ351E□□390MJ35S |                       | 27       | 10×35              | 0.24               | 275  | EKXJ421E□□270MJ35S |
|                       | 47       | 10×40              | 0.24  | 375  | EKXJ351E□□470MJ40S |                       | 27       | 10×40              | 0.24               | 290  | EKXJ421E□□270MJ40S |
|                       | 47       | 12.5×25            | 0.24  | 425  | EKXJ351E□□470MK25S |                       | 27       | 12.5×25            | 0.24               | 340  | EKXJ421E□□270MK25S |
|                       | 47       | 14.5×20            | 0.24  | 420  | EKXJ351E□□470MU20S |                       | 27       | 14.5×20            | 0.24               | 335  | EKXJ421E□□270MU20S |
|                       | 56       | 10×45              | 0.24  | 425  | EKXJ351E□□560MJ45S |                       | 33       | 10×45              | 0.24               | 335  | EKXJ421E□□330MJ45S |
|                       | 56       | 12.5×30            | 0.24  | 495  | EKXJ351E□□560MK30S |                       | 33       | 12.5×30            | 0.24               | 400  | EKXJ421E□□330MK30S |
|                       | 56       | 16×20              | 0.24  | 475  | EKXJ351E□□560ML20S |                       | 33       | 16×20              | 0.24               | 385  | EKXJ421E□□330ML20S |
|                       | 68       | 10×50              | 0.24  | 485  | EKXJ351E□□680MJ50S |                       | 39       | 10×50              | 0.24               | 375  | EKXJ421E□□390MJ50S |
|                       | 68       | 12.5×35            | 0.24  | 580  | EKXJ351E□□680MK35S |                       | 39       | 14.5×25            | 0.24               | 435  | EKXJ421E□□390MU25S |
|                       | 68       | 14.5×25            | 0.24  | 545  | EKXJ351E□□680MU25S |                       | 47       | 12.5×35            | 0.24               | 505  | EKXJ421E□□470MK35S |
|                       | 68       | 18×20              | 0.24  | 550  | EKXJ351E□□680MM20S |                       | 47       | 16×25              | 0.24               | 500  | EKXJ421E□□470ML25S |
|                       | 82       | 12.5×40            | 0.24  | 655  | EKXJ351E□□820MK40S |                       | 47       | 18×20              | 0.24               | 480  | EKXJ421E□□470MM20S |
|                       | 82       | 14.5×31.5          | 0.24  | 645  | EKXJ351E□□820MUN3S |                       | 56       | 12.5×40            | 0.24               | 570  | EKXJ421E□□560MK40S |
|                       | 82       | 16×25              | 0.24  | 625  | EKXJ351E□□820ML25S |                       | 56       | 12.5×45            | 0.24               | 590  | EKXJ421E□□560MK45S |
|                       | 100      | 12.5×45            | 0.24  | 750  | EKXJ351E□□101MK45S |                       | 56       | 14.5×31.5          | 0.24               | 560  | EKXJ421E□□560MUN3S |
|                       | 100      | 12.5×50            | 0.24  | 770  | EKXJ351E□□101MK50S |                       | 68       | 12.5×50            | 0.24               | 670  | EKXJ421E□□680MK50S |
|                       | 100      | 14.5×35.5          | 0.24  | 740  | EKXJ351E□□101MUP1S |                       | 68       | 14.5×35.5          | 0.24               | 640  | EKXJ421E□□680MUP1S |
|                       | 100      | 16×31.5            | 0.24  | 740  | EKXJ351E□□101MLN3S |                       | 68       | 14.5×40            | 0.24               | 660  | EKXJ421E□□680MU40S |
|                       | 100      | 18×25              | 0.24  | 710  | EKXJ351E□□101MM25S |                       | 68       | 16×31.5            | 0.24               | 645  | EKXJ421E□□680MLN3S |
|                       | 120      | 14.5×40            | 0.24  | 835  | EKXJ351E□□121MU40S |                       | 68       | 18×25              | 0.24               | 615  | EKXJ421E□□680MM25S |
|                       | 120      | 14.5×45            | 0.24  | 860  | EKXJ351E□□121MU45S |                       | 82       | 14.5×45            | 0.24               | 750  | EKXJ421E□□820MU45S |
|                       | 120      | 16×35.5            | 0.24  | 830  | EKXJ351E□□121MLP1S |                       | 82       | 16×35.5            | 0.24               | 725  | EKXJ421E□□820MLP1S |
|                       | 150      | 14.5×50            | 0.24  | 980  | EKXJ351E□□151MU50S |                       | 82       | 18×31.5            | 0.24               | 730  | EKXJ421E□□820MMN3S |
|                       | 150      | 16×40              | 0.24  | 960  | EKXJ351E□□151ML40S |                       | 100      | 14.5×50            | 0.24               | 845  | EKXJ421E□□101MU50S |
|                       | 150      | 16×45              | 0.24  | 975  | EKXJ351E□□151ML45S |                       | 100      | 16×40              | 0.24               | 825  | EKXJ421E□□101ML40S |
| 150                   | 18×31.5  | 0.24               | 940   | EKXJ351E□□151MMN3S                                     | 100                | 16×45                 | 0.24     | 840                | EKXJ421E□□101ML45S |  |                    |
| 180                   | 16×50    | 0.24               | 1,090 | EKXJ351E□□181MU50S                                     | 100                | 18×35.5               | 0.24     | 835                | EKXJ421E□□101MMP1S |  |                    |
| 180                   | 18×35.5  | 0.24               | 1,065 | EKXJ351E□□181MMP1S                                     | 120                | 16×50                 | 0.24     | 935                | EKXJ421E□□121ML50S |  |                    |
| 180                   | 18×40    | 0.24               | 1,080 | EKXJ351E□□181MM40S                                     | 120                | 18×40                 | 0.24     | 930                | EKXJ421E□□121MM40S |  |                    |
| 220                   | 18×45    | 0.24               | 1,210 | EKXJ351E□□221MM45S                                     | 120                | 18×45                 | 0.24     | 945                | EKXJ421E□□121MM45S |  |                    |
| 220                   | 18×50    | 0.24               | 1,220 | EKXJ351E□□221MM50S                                     | 150                | 18×50                 | 0.24     | 1,060              | EKXJ421E□□151MM50S |  |                    |
| 400                   | 10       | 10×16              | 0.24  | 125  | EKXJ401E□□100MJ16S | 450                   | 6.8      | 10×16              | 0.24               | 105  | EKXJ451E□□6R8MJ16S |
|                       | 18       | 10×20              | 0.24  | 180  | EKXJ401E□□180MJ20S |                       | 12       | 10×20              | 0.24               | 150  | EKXJ451E□□120MJ20S |
|                       | 22       | 10×25              | 0.24  | 215  | EKXJ401E□□220MJ25S |                       | 15       | 10×25              | 0.24               | 185  | EKXJ451E□□150MJ25S |
|                       | 27       | 10×30              | 0.24  | 255  | EKXJ401E□□270MJ30S |                       | 18       | 10×30              | 0.24               | 215  | EKXJ451E□□180MJ30S |
|                       | 27       | 12.5×20            | 0.24  | 300  | EKXJ401E□□270MK20S |                       | 18       | 12.5×20            | 0.24               | 255  | EKXJ451E□□180MK20S |
|                       | 33       | 10×35              | 0.24  | 300  | EKXJ401E□□330MJ35S |                       | 22       | 10×35              | 0.24               | 250  | EKXJ451E□□220MJ35S |
|                       | 39       | 10×40              | 0.24  | 340  | EKXJ401E□□390MJ40S |                       | 27       | 10×40              | 0.24               | 290  | EKXJ451E□□270MJ40S |
|                       | 39       | 10×45              | 0.24  | 355  | EKXJ401E□□390MJ45S |                       | 27       | 10×45              | 0.24               | 305  | EKXJ451E□□270MJ45S |
|                       | 39       | 12.5×25            | 0.24  | 390  | EKXJ401E□□390MK25S |                       | 27       | 12.5×25            | 0.24               | 340  | EKXJ451E□□270MK25S |
|                       | 39       | 14.5×20            | 0.24  | 385  | EKXJ401E□□390MU20S |                       | 27       | 14.5×20            | 0.24               | 335  | EKXJ451E□□270MU20S |
|                       | 47       | 12.5×30            | 0.24  | 455  | EKXJ401E□□470MK30S |                       | 33       | 12.5×30            | 0.24               | 400  | EKXJ451E□□330MK30S |
|                       | 47       | 16×20              | 0.24  | 435  | EKXJ401E□□470ML20S |                       | 33       | 14.5×25            | 0.24               | 400  | EKXJ451E□□330MU25S |
|                       | 56       | 10×50              | 0.24  | 440  | EKXJ401E□□560MJ50S |                       | 33       | 16×20              | 0.24               | 385  | EKXJ451E□□330ML20S |
|                       | 56       | 12.5×35            | 0.24  | 525  | EKXJ401E□□560MK35S |                       | 39       | 10×50              | 0.24               | 375  | EKXJ451E□□390MJ50S |
|                       | 56       | 14.5×25            | 0.24  | 495  | EKXJ401E□□560MU25S |                       | 39       | 12.5×35            | 0.24               | 460  | EKXJ451E□□390MK35S |
|                       | 56       | 18×20              | 0.24  | 500  | EKXJ401E□□560MM20S |                       | 39       | 18×20              | 0.24               | 440  | EKXJ451E□□390MM20S |
|                       | 68       | 12.5×40            | 0.24  | 600  | EKXJ401E□□680MK40S |                       | 47       | 12.5×40            | 0.24               | 525  | EKXJ451E□□470MK40S |
|                       | 68       | 14.5×31.5          | 0.24  | 585  | EKXJ401E□□680MUN3S |                       | 47       | 14.5×31.5          | 0.24               | 515  | EKXJ451E□□470MUN3S |
|                       | 68       | 16×25              | 0.24  | 570  | EKXJ401E□□680ML25S |                       | 47       | 16×25              | 0.24               | 500  | EKXJ451E□□470ML25S |
|                       | 82       | 12.5×45            | 0.24  | 680  | EKXJ401E□□820MK45S |                       | 56       | 12.5×45            | 0.24               | 590  | EKXJ451E□□560MK45S |
|                       | 82       | 12.5×50            | 0.24  | 700  | EKXJ401E□□820MK50S |                       | 56       | 14.5×35.5          | 0.24               | 580  | EKXJ451E□□560MUP1S |
|                       | 82       | 14.5×35.5          | 0.24  | 670  | EKXJ401E□□820MUP1S |                       | 56       | 16×31.5            | 0.24               | 585  | EKXJ451E□□560MLN3S |
|                       | 82       | 16×31.5            | 0.24  | 670  | EKXJ401E□□820MLN3S |                       | 56       | 18×25              | 0.24               | 560  | EKXJ451E□□560MM25S |
|                       | 82       | 18×25              | 0.24  | 640  | EKXJ401E□□820MM25S |                       | 68       | 12.5×50            | 0.24               | 670  | EKXJ451E□□680MK50S |
|                       | 100      | 14.5×40            | 0.24  | 760  | EKXJ401E□□101MU40S |                       | 68       | 14.5×40            | 0.24               | 660  | EKXJ451E□□680MU40S |
|                       | 100      | 14.5×45            | 0.24  | 785  | EKXJ401E□□101MU45S |                       | 68       | 14.5×45            | 0.24               | 680  | EKXJ451E□□680MU45S |
|                       | 100      | 16×35.5            | 0.24  | 760  | EKXJ401E□□101MLP1S |                       | 68       | 16×35.5            | 0.24               | 660  | EKXJ451E□□680MLP1S |
|                       | 120      | 14.5×50            | 0.24  | 875  | EKXJ401E□□121MU50S |                       | 82       | 14.5×50            | 0.24               | 765  | EKXJ451E□□820MU50S |
|                       | 120      | 16×40              | 0.24  | 860  | EKXJ401E□□121ML40S |                       | 82       | 16×40              | 0.24               | 750  | EKXJ451E□□820ML40S |
|                       | 120      | 16×45              | 0.24  | 875  | EKXJ401E□□121ML45S |                       | 82       | 16×45              | 0.24               | 760  | EKXJ451E□□820ML45S |
| 120                   | 18×31.5  | 0.24               | 840   | EKXJ401E□□121MMN3S                                     | 82                 | 18×31.5               | 0.24     | 730                | EKXJ451E□□820MMN3S |  |                    |
| 120                   | 18×35.5  | 0.24               | 870   | EKXJ401E□□121MMP1S                                     | 100                | 16×50                 | 0.24     | 855                | EKXJ451E□□101ML50S |  |                    |
| 150                   | 16×50    | 0.24               | 995   | EKXJ401E□□151ML50S                                     | 100                | 18×35.5               | 0.24     | 835                | EKXJ451E□□101MMP1S |  |                    |
| 150                   | 18×40    | 0.24               | 985   | EKXJ401E□□151MM40S                                     | 120                | 18×40                 | 0.24     | 930                | EKXJ451E□□121MM40S |  |                    |
| 180                   | 18×45    | 0.24               | 1,095 | EKXJ401E□□181MM45S                                     | 120                | 18×45                 | 0.24     | 945                | EKXJ451E□□121MM45S |  |                    |
| 220                   | 18×50    | 0.24               | 1,220 | EKXJ401E□□221MM50S                                     | 150                | 18×50                 | 0.24     | 1,060              | EKXJ451E□□151MM50S |  |                    |

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

◆STANDARD RATINGS

| WV (V <sub>dc</sub> ) | Cap (μF)  | Case size φD×L(mm) | tan δ | Rated ripple current (mA <sub>rms</sub> /105°C, 120Hz) | Part No.           |
|-----------------------|-----------|--------------------|-------|--|--------------------|
| 500                   | 6.8       | 10 × 20            | 0.24  | 90   | EKXJ501E□□6R8MJ20S |
|                       | 8.2       | 10 × 25            | 0.24  | 110  | EKXJ501E□□8R2MJ25S |
|                       | 10        | 10 × 30            | 0.24  | 130  | EKXJ501E□□100MJ30S |
|                       | 12        | 12.5 × 20          | 0.24  | 135  | EKXJ501E□□120MK20S |
|                       | 15        | 10 × 35            | 0.24  | 170  | EKXJ501E□□150MJ35S |
|                       | 15        | 10 × 40            | 0.24  | 175  | EKXJ501E□□150MJ40S |
|                       | 15        | 12.5 × 25          | 0.24  | 165  | EKXJ501E□□150MK25S |
|                       | 18        | 10 × 45            | 0.24  | 190  | EKXJ501E□□180MJ45S |
|                       | 18        | 12.5 × 30          | 0.24  | 190  | EKXJ501E□□180MK30S |
|                       | 22        | 10 × 50            | 0.24  | 230  | EKXJ501E□□220MJ50S |
|                       | 22        | 12.5 × 35          | 0.24  | 220  | EKXJ501E□□220MK35S |
|                       | 27        | 12.5 × 40          | 0.24  | 260  | EKXJ501E□□270MK40S |
|                       | 33        | 12.5 × 45          | 0.24  | 285  | EKXJ501E□□330MK45S |
| 39                    | 12.5 × 50 | 0.24               | 330   | EKXJ501E□□390MK50S                                     |                    |

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

◆RATED RIPPLE CURRENT MULTIPLIERS

● Frequency Multipliers

(160 to 450V<sub>dc</sub>)

| Capacitance(μF) | Frequency(Hz) | 120  | 1k   | 10k  | 100k |
|-----------------|---------------|------|------|------|------|
| 6.8 to 82       |               | 1.00 | 1.75 | 2.25 | 2.50 |
| 100 to 680      |               | 1.00 | 1.67 | 2.05 | 2.25 |

(500V<sub>dc</sub>)

| Capacitance(μF) | Frequency(Hz) | 120  | 1k   | 10k  | 100k |
|-----------------|---------------|------|------|------|------|
| 6.8 to 22       |               | 1.00 | 1.78 | 2.30 | 2.59 |
| 27 to 39        |               | 1.00 | 1.75 | 2.25 | 2.50 |

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.

单击下面可查看定价，库存，交付和生命周期等信息

[>>NCC\(贵弥功\(黑金刚\)\)](#)