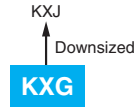


KXG Series

- For electronic ballast circuits and other long life applications
- Endurance with ripple current : 8,000 to 10,000 hours at 105°C
- Non solvent resistant type
- RoHS2 Compliant

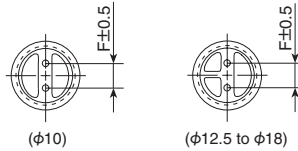


SPECIFICATIONS

| Items | Characteristics | | | |
|--|---|---------------------------------------|-----------------|------------------|
| Category | -40 to +105°C (160 to 400V _{dc}) -25 to +105°C (450V _{dc}) | | | |
| Temperature Range | | | | |
| Rated Voltage Range | 160 to 450V _{dc} | | | |
| Capacitance Tolerance | ±20% (M) (at 20°C, 120Hz) | | | |
| Leakage Current | | After 1 minute | After 5 minutes | |
| | CV ≤ 1,000 | I = 0.1CV + 40 | I = 0.03CV + 15 | |
| | CV > 1,000 | 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 _{dc}) | 160 to 250V | 350 to 450V | |
| | tan δ (Max.) | 0.20 | 0.24 | (at 20°C, 120Hz) |
| Low Temperature Characteristics (Max. Impedance Ratio) | Rated voltage (V _{dc}) | 160 to 250V | 350 & 400V | 450V |
| | 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 10,000 hours (8,000 hours for φ10) at 105°C. | | | |
| | 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 | | |

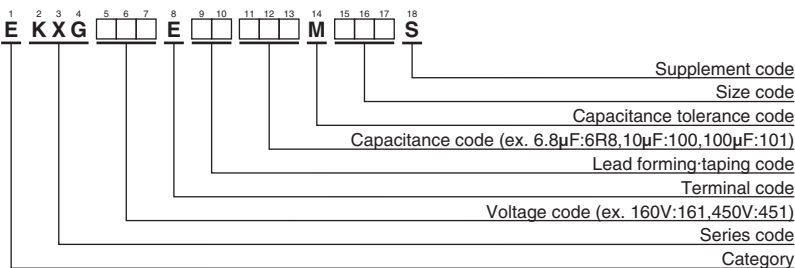
DIMENSIONS [mm]

- Terminal Code : E



| 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)"

RATED RIPPLE CURRENT MULTIPLIERS

- Frequency Multipliers

| Capacitance(μF) | Frequency(Hz) | | | |
|-----------------|---------------|------|------|------|
| | 120 | 1k | 10k | 100k |
| 6.8 to 82 | 1.00 | 1.75 | 2.25 | 2.50 |
| 100 to 330 | 1.00 | 1.67 | 2.05 | 2.25 |

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.

◆STANDARD RATINGS

| VV (V _{dc}) | Cap (μF) | Case size φD×L(mm) | tan δ | Rated ripple current(mArms/105°C) | | Part No. |
|--------------------------|-------------|-----------------------|-------|-----------------------------------|--------------------|--------------------|
| | | | | 120Hz | 100kHz | |
| 160 | 10 | 10 × 16 | 0.20 | 125 | 315 | EKXG161E□□100MJ16S |
| | 22 | 10 × 20 | 0.20 | 200 | 500 | EKXG161E□□220MJ20S |
| | 33 | 10 × 20 | 0.20 | 250 | 625 | EKXG161E□□330MJ20S |
| | 47 | 10 × 20 | 0.20 | 300 | 750 | EKXG161E□□470MJ20S |
| | 68 | 12.5 × 20 | 0.20 | 470 | 1,175 | EKXG161E□□680MK20S |
| | 82 | 12.5 × 20 | 0.20 | 510 | 1,275 | EKXG161E□□820MK20S |
| | 100 | 12.5 × 25 | 0.20 | 620 | 1,395 | EKXG161E□□101MK25S |
| | 100 | 16 × 20 | 0.20 | 630 | 1,420 | EKXG161E□□101ML20S |
| | 150 | 16 × 20 | 0.20 | 770 | 1,735 | EKXG161E□□151ML20S |
| 200 | 10 | 10 × 16 | 0.20 | 125 | 315 | EKXG201E□□100MJ16S |
| | 22 | 10 × 20 | 0.20 | 200 | 500 | EKXG201E□□220MJ20S |
| | 33 | 10 × 20 | 0.20 | 260 | 650 | EKXG201E□□330MJ20S |
| | 47 | 12.5 × 20 | 0.20 | 390 | 975 | EKXG201E□□470MK20S |
| | 68 | 12.5 × 20 | 0.20 | 470 | 1,175 | EKXG201E□□680MK20S |
| | 82 | 16 × 20 | 0.20 | 550 | 1,375 | EKXG201E□□820ML20S |
| | 100 | 16 × 20 | 0.20 | 630 | 1,420 | EKXG201E□□101ML20S |
| | 150 | 16 × 25 | 0.20 | 840 | 1,890 | EKXG201E□□151ML25S |
| | 220 | 18 × 25 | 0.20 | 1,050 | 2,365 | EKXG201E□□221MM25S |
| 250 | 10 | 10 × 20 | 0.20 | 140 | 350 | EKXG251E□□100MJ20S |
| | 22 | 10 × 20 | 0.20 | 200 | 500 | EKXG251E□□220MJ20S |
| | 33 | 12.5 × 20 | 0.20 | 320 | 800 | EKXG251E□□330MK20S |
| | 47 | 12.5 × 20 | 0.20 | 390 | 975 | EKXG251E□□470MK20S |
| | 68 | 16 × 20 | 0.20 | 520 | 1,300 | EKXG251E□□680ML20S |
| | 82 | 16 × 20 | 0.20 | 550 | 1,375 | EKXG251E□□820ML20S |
| | 100 | 16 × 25 | 0.20 | 680 | 1,530 | EKXG251E□□101ML25S |
| | 150 | 18 × 25 | 0.20 | 860 | 1,935 | EKXG251E□□151MM25S |
| | 220 | 18 × 31.5 | 0.20 | 1,130 | 2,545 | EKXG251E□□221MMN3S |
| 350 | 6.8 | 10 × 16 | 0.24 | 110 | 275 | EKXG351E□□6R8MJ16S |
| | 10 | 10 × 20 | 0.24 | 140 | 350 | EKXG351E□□100MJ20S |
| | 22 | 12.5 × 20 | 0.24 | 260 | 650 | EKXG351E□□220MK20S |
| | 33 | 16 × 20 | 0.24 | 360 | 900 | EKXG351E□□330ML20S |
| | 47 | 16 × 20 | 0.24 | 430 | 1,075 | EKXG351E□□470ML20S |
| | 68 | 16 × 25 | 0.24 | 560 | 1,400 | EKXG351E□□680ML25S |
| | 68 | 18 × 20 | 0.24 | 550 | 1,375 | EKXG351E□□680MM20S |
| | 82 | 18 × 25 | 0.24 | 610 | 1,525 | EKXG351E□□820MM25S |
| | 100 | 18 × 25 | 0.24 | 700 | 1,575 | EKXG351E□□101MM25S |
| 400 | 6.8 | 10 × 16 | 0.24 | 110 | 275 | EKXG401E□□6R8MJ16S |
| | 10 | 10 × 20 | 0.24 | 140 | 350 | EKXG401E□□100MJ20S |
| | 15 | 12.5 × 20 | 0.24 | 220 | 550 | EKXG401E□□150MK20S |
| | 22 | 12.5 × 20 | 0.24 | 260 | 650 | EKXG401E□□220MK20S |
| | 33 | 16 × 20 | 0.24 | 360 | 900 | EKXG401E□□330ML20S |
| | 47 | 16 × 25 | 0.24 | 470 | 1,175 | EKXG401E□□470ML25S |
| | 47 | 18 × 20 | 0.24 | 450 | 1,125 | EKXG401E□□470MM20S |
| | 68 | 18 × 25 | 0.24 | 585 | 1,465 | EKXG401E□□680MM25S |
| | 82 | 18 × 25 | 0.24 | 610 | 1,525 | EKXG401E□□820MM25S |
| 450 | 6.8 | 10 × 20 | 0.24 | 110 | 275 | EKXG451E□□6R8MJ20S |
| | 10 | 12.5 × 20 | 0.24 | 180 | 450 | EKXG451E□□100MK20S |
| | 15 | 12.5 × 25 | 0.24 | 240 | 600 | EKXG451E□□150MK25S |
| | 22 | 16 × 20 | 0.24 | 290 | 725 | EKXG451E□□220ML20S |
| | 33 | 16 × 25 | 0.24 | 390 | 975 | EKXG451E□□330ML25S |
| | 33 | 18 × 20 | 0.24 | 380 | 950 | EKXG451E□□330MM20S |
| | 47 | 18 × 25 | 0.24 | 480 | 1,200 | EKXG451E□□470MM25S |
| | 68 | 18 × 31.5 | 0.24 | 630 | 1,575 | EKXG451E□□680MMN3S |
| | 82 | 18 × 35.5 | 0.24 | 715 | 1,785 | EKXG451E□□820MMP1S |
| 100 | 18 × 40 | 0.24 | 800 | 1,800 | EKXG451E□□101MM40S | |

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