



OLow profile : ϕ 10×12.5mm to ϕ 18×25mm

■ Endurance: 1,000 hours at 105°C

Solvent resistant type (see PRECAUTIONS AND GUIDELINES)

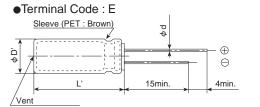
● RoHS2 Compliant

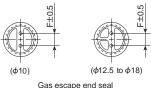


◆SPECIFICATIONS

| Items | Characteristics | | | | | | | | | | |
|--|---|--------|-----------|----------|-----------|----------|------------------------------|--------------------------------------|------------|--|--|
| Category Temperature Range | -55 to +105℃ | | | | | | | | | | |
| Rated Voltage Range | 6.3 to 50V _{dc} | | | | | | | | | | |
| Capacitance Tolerance | ±20% (M) (at 20°C, 120Hz) | | | | | | | | | | |
| Leakage Current | I=0.01CV or 3μA, whichever is greater. Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20°C after 2 minutes) | | | | | | | | | | |
| Dissipation Factor | Rated voltage (Vdc) | 6.3V | 10V | 16V | 25V | 35V | 50V | | | | |
| (tan δ) | tan δ (Max.) | 0.28 | 0.24 | 0.20 | 0.16 | 0.14 | 0.12 | | | | |
| When nominal capacitance exceeds 1,000µF, add 0.03 to the value above for each 1,000µF increase. | | | | | | | | | | | |
| Low Temperature | Rated voltage (Vdc) | 6.3V | 10V | 16V | 25V | 35V | 50V | | | | |
| Characteristics | Z(-25°C)/Z(+20°C) | 5 | 4 | 3 | 2 | 2 | 2 | | | | |
| (Max. Impedance Ratio) | Z(-40°C)/Z(+20°C) | 10 | 8 | 6 | 4 | 3 | 3 | | (at 120Hz) | | |
| Endurance | The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for 1,000 hours at 105°C. | | | | | | | | | | |
| | Rated voltage | 6.3 to | 16Vdc | : | | | 25 to 50V _{dc} | | | | |
| | Capacitance change | ≦± | 25% of | the init | tial valu | Je | | ≦±20% of the initial value | | | |
| | D.F. (tan δ) | ≦20 | 0% of t | he initi | al spec | ified va | alue | ≦200% of the initial specified value | | | |
| | Leakage current | ≦Th | e initial | l specif | ied val | ue | ≦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. | | | | | | | | | | |
| | Rated voltage | 6.3 to | 16Vdc | : | | | 25 to 50V _{dc} | | | | |
| | Capacitance change | ≦± | 25% of | the init | tial valu | re | | ≦±20% of the initial value | | | |
| | D.F. (tan δ) | ≦20 | 0% of t | he initi | al spec | ified va | alue | ≦200% of the initial specified value | | | |
| | Leakage current | ≦Th | e initia | specif | ied val | ue | | ≦The initial specified value | | | |

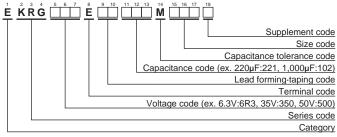
◆DIMENSIONS [mm]





| φD | 10 & 12.5 | 16 & 18 | | | | | |
|-----|------------|---------|--|--|--|--|--|
| φd | 0.6 | 0.8 | | | | | |
| F | 5.0 | 7.5 | | | | | |
| φD' | φD+0.5max. | | | | | | |
| L' | L+1.5max. | | | | | | |

◆PART NUMBERING SYSTEM



Please refer to "Product code guide (radial lead type)"



KRGSeries

STANDARD RATINGS

| WV (V _{dc}) | Cap (µF) | Case size φD×L(mm) | tan δ | Rated ripple current (mArms/ 105°C, 120Hz) | Part No. | WV (V _{dc}) | Cap (µF) | Case size φD×L(mm) | tan δ | Rated ripple current (mArms/ 105°C, 120Hz) | Part No. |
|--------------------------|-------------|-----------------------|-------|---|--------------------|--------------------------|-------------|--------------------|-------|---|--------------------|
| | 4,700 | 16 × 15 | 0.37 | 1,010 | EKRG6R3E□□472ML15S | | 470 | 10 × 12.5 | 0.16 | 370 | EKRG250E□□471MJC5S |
| 6.3 | 6,800 | 18 × 15 | 0.43 | 1,190 | EKRG6R3E□□682MM15S | | 1,000 | 12.5 × 15 | 0.16 | 590 | EKRG250E□□102MK15S |
| | 10,000 | 18 × 20 | 0.55 | 1,440 | EKRG6R3E□□103MM20S | 25 | 2,200 | 18 × 15 | 0.19 | 970 | EKRG250E□□222MM15S |
| | 1,000 | 10 × 12.5 | 0.24 | 445 | EKRG100E□□102MJC5S | | 3,300 | 18 × 20 | 0.22 | 1,220 | EKRG250E□□332MM20S |
| | 2,200 | 12.5 × 15 | 0.27 | 690 | EKRG100E□□222MK15S | | 4,700 | 18 × 25 | 0.25 | 1,470 | EKRG250E□□472MM25S |
| 10 | 3,300 | 16 × 15 | 0.30 | 940 | EKRG100E□□332ML15S | | 330 | 10 × 12.5 | 0.14 | 340 | EKRG350E□□331MJC5S |
| 10 | 4,700 | 18 × 15 | 0.33 | 1,120 | EKRG100E□□472MM15S | 35 | 470 | 12.5×13 | 0.14 | 415 | EKRG350E□□471MK13S |
| | 6,800 | 18 × 20 | 0.39 | 1,330 | EKRG100E□□682MM20S | | 1,000 | 16×15 | 0.14 | 720 | EKRG350E□□102ML15S |
| | 10,000 | 18 × 25 | 0.51 | 1,700 | EKRG100E□□103MM25S | | 2,200 | 18 × 20 | 0.17 | 1,110 | EKRG350E□□222MM20S |
| | 1,000 | 12.5 × 13 | 0.20 | 515 | EKRG160E□□102MK13S | | 220 | 10 × 12.5 | 0.12 | 290 | EKRG500E□□221MJC5S |
| | 2,200 | 16 × 15 | 0.23 | 830 | EKRG160E□□222ML15S | 50 | 330 | 12.5 × 13 | 0.12 | 370 | EKRG500E□□331MK13S |
| 16 | 3,300 | 18 × 15 | 0.26 | 1,050 | EKRG160E□□332MM15S | 50 | 470 | 16×15 | 0.12 | 535 | EKRG500E□□471ML15S |
| | 4,700 | 18 × 20 | 0.29 | 1,260 | EKRG160E□□472MM20S | | 1,000 | 18 × 20 | 0.12 | 830 | EKRG500E□□102MM20S |
| | 6,800 | 18 × 25 | 0.35 | 1,560 | EKRG160E□□682MM25S | | | | | | |

 $[\]square$: Enter the appropriate lead forming or taping code.

◆RATED RIPPLE CURRENT MULTIPLIERS

Frequency Multipliers

| Capacitance(µF) Frequency(Hz) | 50 | 120 | 300 | 1k | 10k | 100k |
|-------------------------------|------|------|------|------|------|------|
| 220 to 1,000 | 0.80 | 1.00 | 1.15 | 1.30 | 1.40 | 1.50 |
| 2,200 to | 0.85 | 1.00 | 1.03 | 1.05 | 1.08 | 1.08 |

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.