

KY Series

- Newly innovative electrolyte is employed to minimize ESR
- 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°C | | | | | | | | | | |
| Temperature Range | -40 to +105°C | | | | | | | | | | |
| 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. | | | | | | | | | | |
| | Time | 6.3 to 10V _{dc} | φ 5 & 6.3 : 4,000hours | | φ 8 & 10 : 6,000hours | | φ 12.5 to 18 : 8,000hours | | | | |
| | | 16 to 100V _{dc} | φ 5 & 6.3 : 5,000hours | | φ 8 & 10 : 7,000hours | | φ 12.5 to 18 : 10,000hours | | | | |
| | Capacitance change | ≤ ±25% 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 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

Table with columns: WV (Vdc), Cap (µF), Case size (φD×L(mm)), Impedance (Ω max./100kHz) at 20°C and -10°C, Rated ripple current (mA rms/105°C, 100kHz), Part No. The table is organized into four main sections based on WV ratings: 35V, 50V, 63V, and 100V. Each section lists various capacitor models with their respective specifications.

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

RATED RIPPLE CURRENT MULTIPLIERS

Frequency Multipliers

Table showing Frequency Multipliers. Columns: Capacitance (µF) ranges (1.0 to 180, 220 to 560, 680 to 1,800, 2,200 to 3,900, 4,700 to), Frequency (Hz) (120, 1k, 10k, 100k). Values range from 0.40 to 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.