

CD IN KT SERIES



2000h at 85°C

- Load life of 2000 hours at 85°C
- High ripple current
- Used for air conditioner, general-purpose inverter

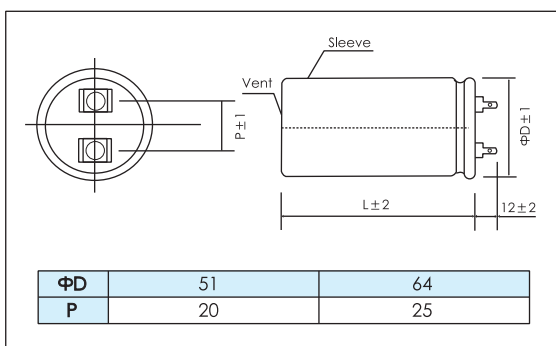


| Items | Characteristics |
|-------------------------------------|---|
| Rated Voltage Range (V) | 400 ~ 450 |
| Operating Temperature Range (°C) | -25 ~ +85 |
| Capacitance Tolerance (20°C, 120Hz) | ± 20% |
| Leakage Current (µA) | After 5 minutes at 20°C application of rated voltage, leakage current is not more than 0.01CV or 5mA. C: Nominal Capacitance (µF) V: Rated Voltage (V) |
| Dissipation Factor (20°C, 120Hz) | Less than 0.20 |

| | Useful Life | | Load Life | Endurance Test | Shelf Life |
|---|---------------------------------------|-----------------------------------|---------------------------------------|---------------------------------------|---|
| Lifetime | 4000h | ≥75000 | 2000h | 2000h | 1000h |
| Leakage Current | Not more than specified value | | Not more than specified value | Not more than specified value | Not more than specified value |
| Capacitance Change | Within ± 30% of initial value | | Within ± 20% of initial value | Within ± 10% of initial value | Within ± 20% of initial value |
| Dissipation Factor | Not more than 300% of specified value | | Not more than 200% of specified value | Not more than 130% of specified value | Not more than 200% of specified value |
| Condition: Applied Voltage Applied Current Applied Temperature | U_R I_R 85°C | U_R $1.4 \times I_R$ 40°C | U_R I_R 85°C | U_R $I_R = 0$ 85°C | $U_R = 0$ $I_R = 0$ 85°C After test: U_R to be applied for 30min >24h before measurement |

Dimensions

mm



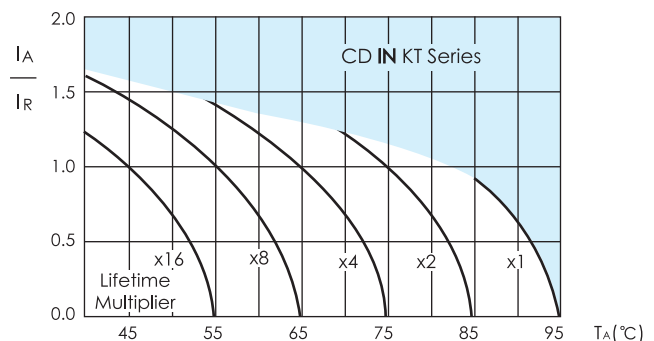
Frequency Coefficient

| Frequency | 50/60Hz | 120Hz | 300Hz | 1kHz | >10kHz |
|-------------|---------|-------|-------|------|--------|
| Coefficient | 0.70 | 1.00 | 1.10 | 1.30 | 1.40 |

Temperature Coefficient

| Temperature(°C) | +40 | +60 | +85 |
|-----------------|------|------|------|
| Coefficient | 1.89 | 1.67 | 1.00 |

Lifetime Diagram



I_A = actual ripple current at 120Hz, I_R = rated ripple current at 120Hz, 85°C
Multiplier of Useful Life as a function of ambient temperature and ripple current load



Ratings for CD IN KT Series

| U_R (Surge Voltage) Code | Rated Capacitance | Dissipation Factor | Leakage Current | Max ESR 20°C, 120Hz | Rated Ripple Current 85°C, 120Hz | Size $\Phi D \times L$ | P/N |
|----------------------------------|-------------------|--------------------|-----------------|---------------------------|--|---------------------------|-------------------|
| (V) | (μF) | - | (mA) | (m Ω) | (Arms) | (mm) | - |
| 400 (450) 2G | 680 | 0.20 | 2.7 | 421 | 2.7 | 51 × 64 | ECL2GKT681M510064 |
| | 820 | 0.20 | 3.2 | 349 | 3.0 | 51 × 64 | ECL2GKT821M520064 |
| | 1000 | 0.20 | 4.0 | 287 | 3.5 | 51 × 75 | ECL2GKT102M510075 |
| | 1200 | 0.20 | 4.8 | 239 | 3.8 | 51 × 75 | ECL2GKT122M510075 |
| | 1500 | 0.20 | 5.0 | 191 | 4.7 | 51 × 96 | ECL2GKT152M510096 |
| | 1800 | 0.20 | 5.0 | 159 | 5.1 | 51 × 96 | ECL2GKT182M510096 |
| | 2200 | 0.20 | 5.0 | 130 | 6.2 | 51 × 121 | ECL2GKT222M510121 |
| | 2700 | 0.20 | 5.0 | 107 | 6.9 | 64 × 96 | ECL2GKT272M640096 |
| | 3300 | 0.20 | 5.0 | 86.8 | 7.9 | 64 × 105 | ECL2GKT332M640105 |
| | 3900 | 0.20 | 5.0 | 73.5 | 9.0 | 64 × 121 | ECL2GKT392M640121 |
| 450 (500) 2W | 680 | 0.20 | 2.7 | 421 | 2.6 | 51 × 64 | ECL2WKT681M510064 |
| | 820 | 0.20 | 3.2 | 349 | 3.1 | 51 × 75 | ECL2WKT821M510075 |
| | 1000 | 0.20 | 4.0 | 287 | 3.5 | 51 × 75 | ECL2WKT102M510075 |
| | 1200 | 0.20 | 4.8 | 239 | 4.3 | 51 × 96 | ECL2WKT122M510096 |
| | 1500 | 0.20 | 5.0 | 191 | 4.8 | 51 × 109 | ECL2WKT152M510109 |
| | 1800 | 0.20 | 5.0 | 159 | 5.5 | 51 × 121 | ECL2WKT182M510121 |
| | 2200 | 0.20 | 5.0 | 130 | 6.3 | 64 × 96 | ECL2WKT222M640096 |
| | 2700 | 0.20 | 5.0 | 106.2 | 7.1 | 64 × 105 | ECL2WKT272M640105 |
| | 3300 | 0.20 | 5.0 | 86.8 | 8.3 | 64 × 121 | ECL2WKT332M640121 |
| | 3900 | 0.20 | 5.0 | 73.5 | 9.8 | 64 × 144 | ECL2WKT392M640144 |

Customer products are available on request.

