

LXK General purpose Series

- Endurance : 85°C 2000 hours
- LXK type capacitors are combined with snap-lock terminals for easy to mount on P.C high ripple
- Ideally suitable for using in Switching Power Supplies and other industrial / commercial applications
- For detail specifications, please refer to Engineering Bulletin No. 2051

LH P77



Specifications

| Item | Characteristics | | | | | | |
|---|--|---|-------|-------|---------|---------|-------------|
| Category Temperature Range | -40~+85°C | -25~+85°C | | | | | |
| Rated Voltage Range | 16 ~ 100V | 160~ 450V | | | | | |
| Rate Capacitance Range | 470 ~ 22000 μF | 100 ~ 2200 μF | | | | | |
| Capacitance Tolerance | ± 20 % at 120Hz , 25°C | | | | | | |
| Leakage Current (MAX) | I=0.01CV or 2(mA) , whichever is smaller. (After 5 minutes application of rated voltage at 25°C) | | | | | | |
| Dissipation Factor (MAX) | Capacitance Exceeds 1000uF The value of D.F(%) is increased by 2% for every addition of 1000uF | | | | | | |
| | Rated voltage(V) | 16 | 25~35 | 50~80 | 100~250 | 400 450 | |
| | D.F(%) | 30 | 25 | 20 | 15 | 20 20 | |
| Low Temperature Stability Impedance Ratio (MAX) | Measurement frequency : 120Hz | | | | | | |
| | Rated voltage(V) | 16 | 25 | 35 | 50~63 | 80~100 | 160~400 450 |
| | Z-25°C / Z+20°C | 3 | 3 | 3 | 2 | 2 | 4 8 |
| | Z-40°C / Z+20°C | 12 | 10 | 8 | 6 | 5 | |
| Endurance | After apply rated voltage with rated ripple current for 2000hrs at 85°C,the capacitors shall meet the following requirements. | | | | | | |
| | Capacitance Change | Within ± 20 % of initial value | | | | | |
| | Dissipation Factor | 200% or less of initial specified value | | | | | |
| | Leakage Current | initial specified value or less | | | | | |
| Shelf Life | The following specifications shall be satisfied when the capacitor are restored to 25°C after exposing then for 500 hours at 85 °C without voltage applied | | | | | | |
| | Capacitance Change | Within ± 20 % of initial value | | | | | |
| | Dissipation Factor | 200% or less of initial specified value | | | | | |
| | Leakage Current | 200% or less of initial specified value | | | | | |
| Marking | Printed with white color letter on black sleeve. | | | | | | |

Multiplier for Ripple Current

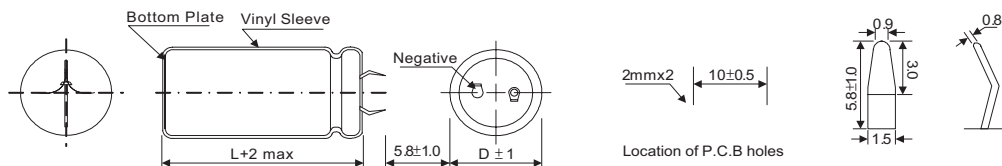
(1) Frequency coefficient

| Frequency (Hz) | 50 | 60 | 120 | 1K | 10K~100K |
|----------------|------|------|------|------|----------|
| 16~100V | 0.88 | 0.90 | 1.00 | 1.15 | 1.16 |
| 160~250V | 0.75 | 0.78 | 1.00 | 1.16 | 1.23 |
| 315~450V | 0.74 | 0.76 | 1.00 | 1.10 | 1.15 |

(2) Temperature coefficient

| Temperature(°c) | 60 | 70 | 85 |
|-----------------|------|------|------|
| Factor | 1.42 | 1.30 | 1.00 |

Diagram of Dimensions



■ Dimensions, Rated Ripple Current

| Capacitance (μ F) | Rated (Surge) Voltage | | | | | | | |
|---------------------------|-----------------------|--------|---------|--------|---------|--------|---------|--------|
| | 16 (20) | | 25 (32) | | 35 (44) | | 50 (63) | |
| | Size | Ripple | Size | Ripple | Size | Ripple | Size | Ripple |
| 1000 | | | | | | | 22x25 | 0.80 |
| 2200 | | | 22x25 | 0.90 | 22x25 | 1.04 | 22x30 | 1.15 |
| | | | | | | | 25x25 | 1.15 |
| 3300 | | | 22x25 | 1.16 | 22x30 | 1.30 | 22x40 | 1.45 |
| | | | | | 25x25 | 1.25 | 25x30 | 1.40 |
| 4700 | 22x25 | 1.10 | 22x30 | 1.30 | 22x40 | 1.70 | 25x45 | 2.08 |
| | | | 25x25 | 1.25 | 25x30 | 1.65 | 30x30 | 2.02 |
| 6800 | 22x30 | 1.50 | 22x40 | 1.70 | 22x50 | 2.05 | 30x40 | 2.53 |
| | 25x25 | 1.45 | 25x30 | 1.65 | 30x30 | 2.00 | 35x30 | 2.48 |
| 10000 | 22x40 | 1.90 | 22x50 | 2.20 | 30x40 | 2.55 | 30x50 | 2.84 |
| | 25x30 | 1.85 | 30x30 | 2.10 | 35x30 | 2.45 | 35x40 | 2.80 |
| 15000 | 22x50 | 2.30 | 30x40 | 2.85 | | | | |
| | 30x30 | 2.30 | 35x30 | 2.80 | | | | |
| 22000 | 30x40 | 2.90 | 35x40 | 3.40 | | | | |
| | 35x30 | 2.90 | | | | | | |

| Capacitance (μ F) | Rated (Surge) Voltage | | | | | | | |
|---------------------------|-----------------------|--------|---------|--------|----------|-------------|----------|--------|
| | 63(79) | | 80(100) | | 100(125) | | 160(200) | |
| | Size | Ripple | Size | Ripple | Size | Ripple | Size | Ripple |
| 330 | | | | | | | 22x25 | 1.30 |
| | | | | | | | 25x30 | 1.40 |
| 470 | | | 22x25 | 0.65 | 22x25 | 0.85 | 22x35 | 1.75 |
| | | | | | | | 25x30 | 1.75 |
| 680 | 22x25 | 0.80 | 22x25 | 0.95 | 22x30 | 1.15 | 22x40 | 2.15 |
| | | | | | 25x25 | 1.10 | 25x35 | 2.20 |
| 820 | | | | | | | 22x50 | 2.45 |
| | | | | | | | 30x30 | 2.45 |
| 1000 | 22x25 | 1.01 | 22x30 | 1.10 | 22x35 | 1.25 | 25x45 | 2.80 |
| | | | 25x25 | 1.00 | 25x30 | 1.20 | 30x35 | 2.80 |
| 2200 | 22x35 | 1.30 | 22x45 | 1.40 | 25x50 | 1.90 | 35x50 | 3.20 |
| | 25x30 | 1.25 | 30x30 | 1.30 | 35x30 | 1.80 | | |
| 3300 | 22x50 | 1.70 | 25x50 | 1.95 | | | | |
| | 30x30 | 1.65 | 35x30 | 1.90 | | | | |
| 4700 | 25x50 | 2.22 | 30x50 | 2.65 | | | | |
| | 35x30 | 2.17 | 35x40 | 2.60 | | | | |
| 6800 | 30x50 | 2.73 | | | | | | |
| | 35x40 | 2.68 | | | | | | |
| 10000 | 35x50 | 3.00 | | | | | | |

■ Dimensions, Rated Ripple Current

| Capacitance (μF) | Rated (Surge) Voltage | | | | | | | |
|----------------------------------|-----------------------|--------|-----------|--------|-----------|--------|-----------|--------|
| | 200 (250) | | 250 (300) | | 400 (450) | | 450 (500) | |
| | Size | Ripple | Size | Ripple | Size | Ripple | Size | Ripple |
| 100 | | | | | 22x30 | 0.65 | 22x40 | 0.44 |
| | | | | | 25x25 | 0.65 | 25x35 | 0.44 |
| 120 | | | | | 22x35 | 0.75 | 22x45 | 0.51 |
| | | | | | 25x30 | 0.75 | 30x30 | 0.51 |
| 150 | | | | | 22x40 | 0.90 | 25x45 | 0.59 |
| | | | | | 25x30 | 0.85 | 35x30 | 0.58 |
| 220 | 22x25 | 1.10 | 22x30 | 1.15 | 22x50 | 1.15 | 30x45 | 0.76 |
| | | | 25x25 | 1.15 | 30x35 | 1.15 | 35x35 | 0.74 |
| 330 | 22x30 | 1.40 | 22x40 | 1.45 | 30x45 | 1.50 | 35x45 | 1.00 |
| | 25x25 | 1.40 | 25x30 | 1.45 | 35x35 | 1.50 | | |
| 470 | 22x40 | 1.80 | 22x50 | 1.90 | 35x35 | 2.00 | | |
| | 25x35 | 1.80 | 25x40 | 1.90 | | | | |
| 680 | 25x40 | 2.25 | 30x40 | 2.40 | | | | |
| | 30x35 | 2.25 | 35x30 | 2.35 | | | | |
| 820 | 25x50 | 2.25 | 30x45 | 2.75 | | | | |
| | 35x30 | 2.50 | 35x35 | 2.75 | | | | |
| 1000 | 30x45 | 2.95 | 35x40 | 2.75 | | | | |
| | 35x35 | 2.90 | | | | | | |

☆ Size: $D\varnothing \times L$ (mm) ☆ Ripple Current : A/rms. 85°C ,120Hz