

SURFACE MOUNT ALUMINUM ELECTROLYTIC CAPACITORS



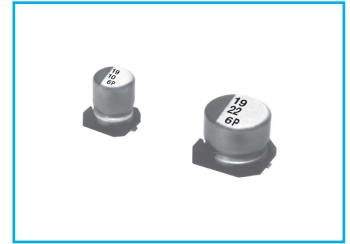
Chip type, Long Life Series



Long Life



Solvent Proof



- Chip type, long life capacitance in large case sizes
- For ECU
- Application to automatic insertion machine using carrier tape
- Complied to the RoHS directive

| Item | Characteristics | | | | | |
|---|--|---------------------------------------|------|------|------|------|
| Operating temperature range | -40 ~ +105°C | | | | | |
| Leakage current | I = 0.03CV or 4μA whichever is greater (after 2 minutes) | | | | | |
| Capacitance tolerance | ±20% (20°C, 120Hz) | | | | | |
| Dissipation factor max. (at 120Hz, 20°C) | Rated Voltage(V) | 10 | 16 | 25 | 35 | 50 |
| | tanδ | 0.32 | 0.24 | 0.21 | 0.18 | 0.18 |
| Low temperature characteristics (Impedance ratio at 120Hz) | WV | 10 | 16 | 25 | 35 | 50 |
| | Z-25°C/Z+20°C | 6 | 4 | 3 | 2 | 2 |
| | Z-40°C/Z+20°C | 12 | 10 | 8 | 6 | 6 |
| Load life (after application of the rated voltage for 10000 hours at 105°C) | Leakage current | Less than specified value | | | | |
| | Capacitance change | Within ±30% of the initial value | | | | |
| | tanδ | Less than 300% of the specified value | | | | |
| Shelf life (at 105°C) | After 1000 hours no load test, leakage current, capacitance and tanδ are same as load life value. The measurement shall be performed at 20°C by the KS C IEC 60384 - 4 | | | | | |
| Resistance to soldering heat | The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them at 250°C for 10 seconds. | | | | | |
| | Leakage current | Less than specified value | | | | |
| | Capacitance change | Within ±30% of the initial value | | | | |
| | tanδ | Less than 300% of the specified value | | | | |

● DRAWING (See page 62)

-Series code of JL is "P"

CHIP TYPES

● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

| μF \ WV | 10 | | 16 | | 25 | | 35 | | 50 | |
|---------|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|
| 33 | | | | | | | | | 8×10 | 75 |
| 47 | | | | | | | 8×10 | 90 | 8×10 | 90 |
| 100 | | | 8×10 | 270 | 8×10 | 163 | 10×10 | 132 | 10×10 | 167 |
| 220 | 8×10 | 270 | 8×10 | 270 | 10×10 | 200 | 10×10 | 249 | | |
| 330 | 8×10 | 270 | 10×10 | 315 | 10×10 | 304 | | | | |
| 470 | 10×10 | 315 | 10×10 | 315 | | | | | | |

↑ ↑
Ripple current (mA rms) at 105°C, 120Hz
Case size ØD×L(mm)

● FREQUENCY COEFFICIENT OF PERMISSIBLE RIPPLE CURRENT

| Frequency | 50Hz | 120Hz | 300Hz | 1kHz | 10kHz ≤ |
|-------------|------|-------|-------|------|---------|
| Coefficient | 0.70 | 1.00 | 1.17 | 1.36 | 1.50 |