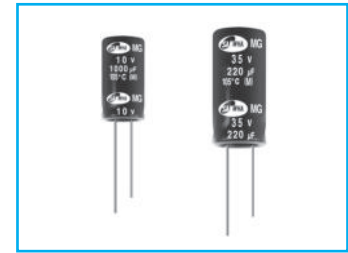


MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

MG Long Life Series

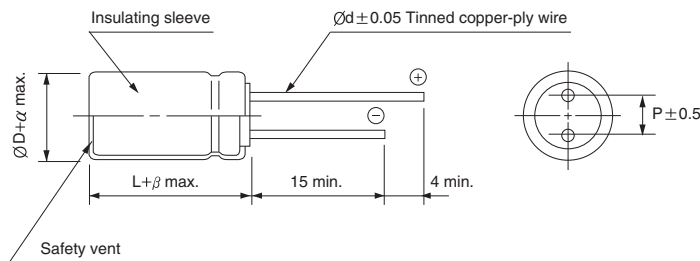
- Long Life
- For LED Lighting
- High reliability withstanding 20000 hours load life at 105°C
- Complied to the RoHS directive



| Item | Characteristics | | | | |
|---|--|-----------------------------------|------|------|------|
| Operating temperature range | -55 ~ +105°C | | | | |
| Leakage current max. | I = 0.03CV or 4µA whichever is greater (after 1 minutes) | | | | |
| Capacitance tolerance | ±20% at 120Hz, 20°C | | | | |
| Dissipation factor max. (at 120Hz, 20°C) | WV | 10 | 16 | 25 | 35 |
| | tanδ | 0.20 | 0.16 | 0.14 | 0.12 |
| Low temperature characteristics (Impedance ratio at 120Hz) | WV | 10 | 16 | 25 | 35 |
| | Z-25°C/Z+20°C | 3 | 2 | 2 | 2 |
| | Z-55°C/Z+20°C | 4 | 4 | 4 | 4 |
| Load life (after application of the rated voltage for 20000 hours at 105°C) | Leakage current | Less than specified value | | | |
| | Capacitance change | Within ±30% of initial value | | | |
| | tanδ | Less than 300% of 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 | | | | |

DRAWING

Unit : mm



| ØD | 10 | 12.5 | 16 | 18 |
|----|-----|------|-----|-----|
| P | 5.0 | 5.0 | 7.5 | 7.5 |
| Ød | 0.6 | 0.6 | 0.8 | 0.8 |
| α | 0.5 | | | |
| β | 2.0 | | | |

DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

| µF \ WV | 10 | 16 | 25 | 35 |
|---------|-----------|-----------|-----------|-----------|
| 100 | | | 10 × 12.5 | 10 × 20 |
| 220 | | 10 × 16 | 12.5 × 20 | 12.5 × 25 |
| 330 | 10 × 16 | 10 × 20 | 12.5 × 25 | 16 × 25 |
| 470 | 10 × 20 | 12.5 × 20 | 16 × 25 | 16 × 31.5 |
| 1000 | 12.5 × 25 | 16 × 25 | 16 × 31.5 | 18 × 40 |
| 2200 | 16 × 31.5 | 18 × 35.5 | | |
| 3300 | 18 × 35.5 | 18 × 40 | | |
| 4700 | 18 × 40 | | | |

↑ ↑ Ripple current (mA rms) at 105°C, 100kHz
Case size ØD × L (mm)

FREQUENCY COEFFICIENT OF PERMISSIBLE RIPPLE CURRENT

| Frequency | 120Hz | 1kHz | 10kHz | 50kHz | 100kHz ≤ |
|-------------|-------|------|-------|-------|----------|
| Coefficient | 0.75 | 0.8 | 0.9 | 0.95 | 1.00 |