

Aluminum Electrolytic Capacitor

H5 series

- Subminiature product, 105°C.
- Applicable to small electronic devices.
- Height: 5mm.
- RoHS Compliance
- 105°C超小型產品。
- 適用於小型電子設備。
- 高度：5mm系列。

SPECIFICATIONS

| Items 項目 | Characteristics 特性 | | | | | | | |
|---|---|---|------|------|------|------|------|------|
| Capacitance Tolerance 靜電容量誤差 | $\pm 20\%$ (120Hz,20°C) | | | | | | | |
| Operating Temperature Range 適用溫度範圍 | -40 ~ +105°C | | | | | | | |
| Rated Voltage Range 額定電壓範圍 | 4 ~ 50VDC | | | | | | | |
| Leakage Current 洩漏電流 | $I \leq 0.01CV$ or 3 (μA) which is greater.(After 2 minutes application of DC rated voltage, at 20 °C) | | | | | | | |
| Dissipation Factor 散逸因素($\tan \delta$) | Measurement Frequency: 120Hz. Temperature: 20°C | | | | | | | |
| | Rated Voltage(V) | 4 | 6.3 | 10 | 16 | 25 | 35 | 50 |
| | $\tan \delta$ (Max) | 0.35 | 0.24 | 0.20 | 0.16 | 0.15 | 0.14 | 0.13 |
| Low Temperature Stability 低溫特性 | Measurement Frequency: 120Hz. | | | | | | | |
| | Rated Voltage(V) | 4 | 6.3 | 10 | 16 | 25 | 35 | 50 |
| Impedance Ratio(Max) 阻抗比率(最大值) | Z(-25°C)/Z(20°C) | 6 | 3 | 3 | 2 | 2 | 2 | 2 |
| | Z(-40°C)/Z(20°C) | 12 | 8 | 5 | 4 | 3 | 3 | 3 |
| Load Life 負荷壽命 | 1000hours,with application of rated voltage at 105°C | | | | | | | |
| | Capacitance Change | Within $\pm 20\%$ of Initial Value | | | | | | |
| | $\tan \delta$ | 200% or less of Initial Specified Value | | | | | | |
| | Leakage Current | Initial Specified Value or less | | | | | | |
| Shelf Life 放置壽命 | The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours 105°C without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to them 4.1 of JIS C5101-4. | | | | | | | |
| | Capacitance Change | Within $\pm 20\%$ of Initial Value | | | | | | |
| | $\tan \delta$ | 200% or less of Initial Specified Value | | | | | | |
| | Leakage Current | Initial Specified Value or less | | | | | | |
| Standards 參照標準 | JIS C 5101-4 (IEC 60384) | | | | | | | |

Frequency Coefficient of Permissible Ripple Current

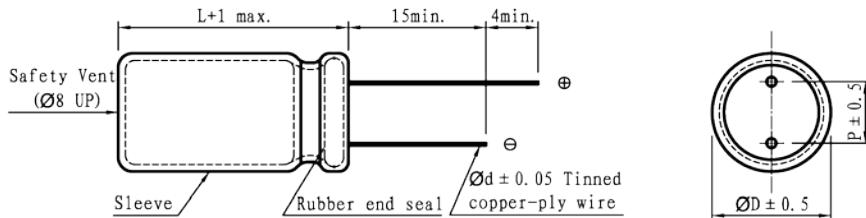
| Capacitance (μF) | Frequency (Hz) | | | |
|-------------------------|----------------|------|------|------------|
| | 50 | 120 | 1K | $\geq 10K$ |
| < 100 | 0.80 | 1.00 | 1.30 | 1.50 |
| ≥ 100 | 0.80 | 1.00 | 1.15 | 1.20 |

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.

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DIMENSIONS(mm)



| ϕD | 4 | 5 | 6.3 | 8 |
|----------|------|------|------|------|
| P | 1.5 | 2.0 | 2.5 | 2.5 |
| ϕd | 0.45 | 0.45 | 0.45 | 0.45 |

STANDARD RATINGS

D×L(mm) ; R.C.(mA rms) at 105°C 120Hz.

| Cap (μ F) | V (Code) | 4 (0G) | | 6.3 (0J) | | 10 (1A) | | 16 (1C) | |
|-------------------|-------------|-----------|-------|-------------|-------|------------|-------|------------|-------|
| | | Item | D × L | R.C. | D × L | R.C. | D × L | R.C. | D × L |
| 10 | | | | | | 4x5 | 16 | 4x5 | 18 |
| 22 | 4x5 | 20 | 4x5 | 21 | 4x5 | 25 | 4x5 | 33 | |
| 33 | 5x5 | 28 | 5x5 | 29 | 5x5 | 34 | 5x5 | 44 | |
| 47 | 5x5 | 33 | 5x5 | 34 | 6.3x5 | 46 | 6.3x5 | 52 | |
| 100 | 6.3x5 | 60 | 6.3x5 | 66 | 6.3x5 | 77 | 8x5 | 93 | |
| 150 | 6.3x5 | 67 | 6.3x5 | 75 | 8x5 | 100 | 8x5 | 115 | |
| 220 | 8x5 | 95 | 8x5 | 115 | 8x5 | 125 | | | |

| Cap (μ F) | V (Code) | 25 (1E) | | 35 (1V) | | 50 (1H) | |
|-------------------|-------------|------------|-------|------------|-------|------------|-------|
| | | Item | D × L | R.C. | D × L | R.C. | D × L |
| 0.1 | | | | | | 4x5 | 1.0 |
| 0.22 | | | | | | 4x5 | 2.0 |
| 0.33 | | | | | | 4x5 | 3.0 |
| 0.47 | | | | | | 4x5 | 3.7 |
| 1 | | | | | | 4x5 | 6.2 |
| 2.2 | | | | | | 4x5 | 10 |
| 3.3 | | | | 4x5 | 11 | 4x5 | 14 |
| 4.7 | 4x5 | 13 | 4x5 | 16 | 5x5 | 18 | |
| 10 | 4x5 | 22 | 5x5 | 25 | 6.3x5 | 28 | |
| 22 | 6.3x5 | 38 | 6.3x5 | 46 | 6.3x5 | 59 | |
| 33 | 6.3x5 | 48 | 6.3x5 | 50 | 8x5 | 65 | |
| 47 | 6.3x5 | 58 | 8x5 | 69 | 8x5 | 78 | |