

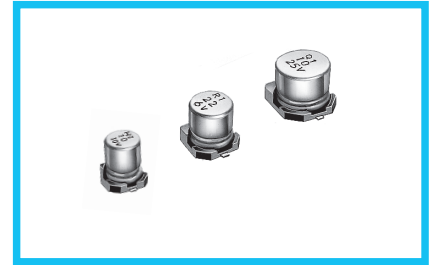
ALUMINUM ELECTROLYTIC CAPACITORS

UWP

5.5mmL Chip Type, Bi-Polarized



- Designed for surface mounting on high density PC board.
- Applicable to automatic mounting machine fed with carrier tape.
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).
- AEC-Q200 compliant. Please contact us for details.

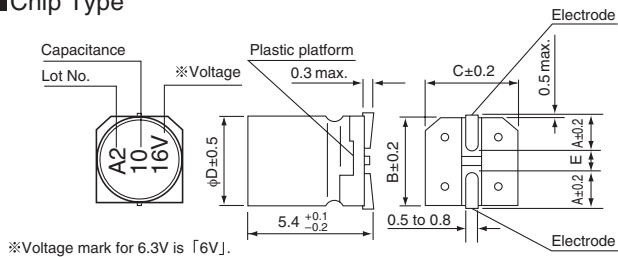


Specifications

| Item | Performance Characteristics | | | | | | | |
|-------------------------------|--|---|------|------|------|------|------|----|
| Category Temperature Range | -40 to +85°C | | | | | | | |
| Rated Voltage Range | 6.3 to 50V | | | | | | | |
| Rated Capacitance Range | 0.1 to 100μF | | | | | | | |
| Capacitance Tolerance | ±20% at 120Hz, 20°C | | | | | | | |
| Leakage Current ※ | After 2 minutes' application of rated voltage at 20°C, leakage current is not more than 0.05CV or 10 (μA) ,whichever is greater. | | | | | | | |
| Tangent of loss angle (tan δ) | Measurement frequency : 120Hz at 20°C | | | | | | | |
| | Rated voltage (V) | 6.3 | 10 | 16 | 25 | 35 | 50 | |
| | tan δ (max.) | 0.24 | 0.20 | 0.17 | 0.17 | 0.15 | 0.15 | |
| Stability at Low Temperature | Measurement frequency : 120Hz | | | | | | | |
| | Rated voltage (V) | | 6.3 | 10 | 16 | 25 | 35 | 50 |
| | Impedance ratio ZT / Z20 (max.) | Z(-25°C) / Z(+20°C) | 4 | 3 | 2 | 2 | 2 | 2 |
| | | Z(-40°C) / Z(+20°C) | 8 | 6 | 4 | 4 | 3 | 3 |
| Endurance | The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 1000 hours at 85°C with the polarity inverted every 250 hours. | | | | | | | |
| | Capacitance change | Within ±20% of the initial capacitance value | | | | | | |
| | tan δ | 200% or less than the initial specified value | | | | | | |
| | Leakage current | Less than or equal to the initial specified value | | | | | | |
| Shelf Life | After storing the capacitors under no load at 85°C for 1000 hours and then performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they shall meet the specified values for the endurance characteristics listed above. | | | | | | | |
| Resistance to soldering heat | The capacitors are kept on a hot plate for 30 seconds, which is maintained at 250°C. The capacitors shall meet the characteristic requirements listed at right when they are removed from the plate and restored to 20°C. | | | | | | | |
| | Capacitance change | Within ±10% of the initial capacitance value | | | | | | |
| | tan δ | Less than or equal to the initial specified value | | | | | | |
| | Leakage current | Less than or equal to the initial specified value | | | | | | |
| Marking | Black print on the case top. | | | | | | | |

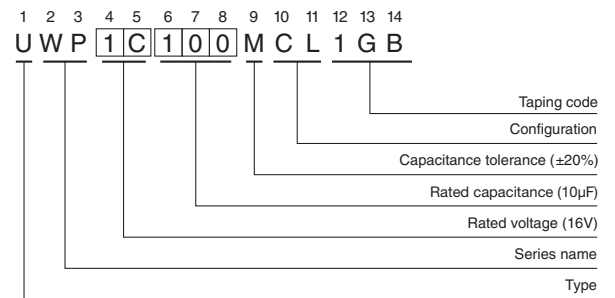
※ I : Leakage Current (μA), C : Rated Capacitance (μF), V : Rated Voltage (V)

Chip Type



| | (mm) | | | |
|----|------|-----|-----|-----|
| φD | 4 | 5 | 6.3 | 8 |
| A | 1.8 | 2.1 | 2.4 | 3.3 |
| B | 4.3 | 5.3 | 6.6 | 8.3 |
| C | 4.3 | 5.3 | 6.6 | 8.3 |
| E | 1.0 | 1.3 | 2.2 | 2.3 |

Type numbering system (Example : 16V 10μF)



Frequency coefficient of rated ripple current

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

●Dimension table in next page.

UWP

■ Dimensions

| Rated Voltage (V) (code) | Rated Capacitance (μF) | Case Size φD×L (mm) | tan δ | Leakage Current (μA) (at 20°C after 2 minutes) | Rated Ripple (mArms) (85°C/120Hz) | Part Number |
|-----------------------------|------------------------|------------------------|-------|---|--------------------------------------|----------------|
| 6.3 (0J) | 22 | 5×5.4 | 0.24 | 10 | 28 | UWP0J220MCL1GB |
| | 33 | 6.3×5.4 | 0.24 | 10.395 | 37 | UWP0J330MCL1GB |
| | 47 | 6.3×5.4 | 0.24 | 14.805 | 45 | UWP0J470MCL1GB |
| | 100 | 8×5.4 | 0.24 | 31.5 | 82 | UWP0J101MCL1GB |
| 10 (1A) | 10 | 4×5.4 | 0.20 | 10 | 17 | UWP1A100MCL1GB |
| | 22 | 6.3×5.4 | 0.20 | 11 | 33 | UWP1A220MCL1GB |
| | 33 | 6.3×5.4 | 0.20 | 16.5 | 41 | UWP1A330MCL1GB |
| | 47 | 8×5.4 | 0.20 | 23.5 | 61 | UWP1A470MCL1GB |
| 16 (1C) | 4.7 | 4×5.4 | 0.17 | 10 | 12 | UWP1C47MCL1GB |
| | 10 | 5×5.4 | 0.17 | 10 | 23 | UWP1C100MCL1GB |
| | 22 | 6.3×5.4 | 0.17 | 17.6 | 37 | UWP1C220MCL1GB |
| | 33 | 6.3×5.4 | 0.17 | 26.4 | 49 | UWP1C330MCL1GB |
| | 47 | 8×5.4 | 0.17 | 37.6 | 75 | UWP1C470MCL1GB |
| 25 (1E) | 3.3 | 5×5.4 | 0.17 | 10 | 12 | UWP1E33MCL1GB |
| | 4.7 | 5×5.4 | 0.17 | 10 | 16 | UWP1E47MCL1GB |
| | 10 | 6.3×5.4 | 0.17 | 12.5 | 27 | UWP1E100MCL1GB |
| | 22 | 8×5.4 | 0.17 | 27.5 | 50 | UWP1E220MCL1GB |
| | 33 | 8×5.4 | 0.17 | 41.25 | 61 | UWP1E330MCL1GB |
| 35 (1V) | 2.2 | 4×5.4 | 0.15 | 10 | 8.4 | UWP1V22MCL1GB |
| | 3.3 | 5×5.4 | 0.15 | 10 | 16 | UWP1V33MCL1GB |
| | 4.7 | 5×5.4 | 0.15 | 10 | 18 | UWP1V47MCL1GB |
| | 10 | 6.3×5.4 | 0.15 | 17.5 | 29 | UWP1V100MCL1GB |
| | 22 | 8×5.4 | 0.15 | 38.5 | 54 | UWP1V220MCL1GB |
| 50 (1H) | 0.1 | 4×5.4 | 0.15 | 10 | 1.0 | UWP1H01MCL1GB |
| | 0.22 | 4×5.4 | 0.15 | 10 | 2.0 | UWP1HR22MCL1GB |
| | 0.33 | 4×5.4 | 0.15 | 10 | 2.8 | UWP1HR33MCL1GB |
| | 0.47 | 4×5.4 | 0.15 | 10 | 4.0 | UWP1HR47MCL1GB |
| | 1 | 4×5.4 | 0.15 | 10 | 8.4 | UWP1H010MCL1GB |
| | 2.2 | 5×5.4 | 0.15 | 10 | 13 | UWP1H22MCL1GB |
| | 3.3 | 5×5.4 | 0.15 | 10 | 17 | UWP1H33MCL1GB |
| | 4.7 | 6.3×5.4 | 0.15 | 11.75 | 20 | UWP1H47MCL1GB |
| | 10 | 8×5.4 | 0.15 | 25 | 36 | UWP1H100MCL1GB |

- For taping specifications, recommended land size/soldering by reflow and minimum order quantity, please refer to the Guidelines for Aluminum Electrolytic Capacitors.
- Please select UUN if high C/V products are required.