

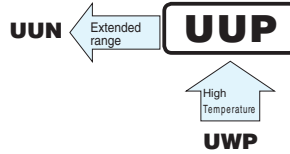
ALUMINUM ELECTROLYTIC CAPACITORS

UUP

6mmL Chip Type, Bi-Polarized



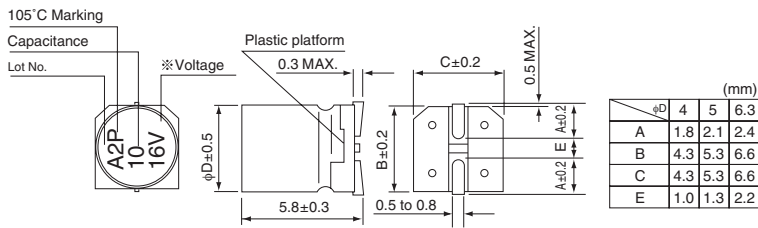
- Chip type, bi-polarized withstanding high temperature range up to +105°C.
- Designed for surface mounting on high density PC board.
- Applicable to automatic mounting machine fed with carrier tape.
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).
- AEC-Q200 compliant. Please contact us for details.



Specifications

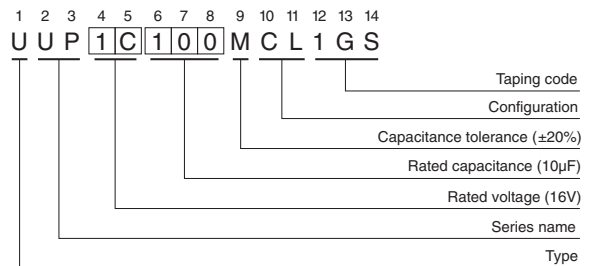
| Item | Performance Characteristics | | | | | | | |
|-------------------------------|---|-----------------|--------------------|------|---|------|------|----|
| Category Temperature Range | -55 to +105°C | | | | | | | |
| Rated Voltage Range | 6.3 to 50V | | | | | | | |
| Rated Capacitance Range | 0.1 to 47μF | | | | | | | |
| 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 0.05 CV 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 | Z-25°C / Z+20°C | 4 | 3 | 2 | 2 | 2 | 2 |
| | ZT / Z20 (MAX.) | 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 105°C with the polarity every 250 hours. | | Capacitance change | | Within ±20% of the initial capacitance value | | | |
| | | | tan δ | | 200% or less than the initial specified value | | | |
| Shelf Life | After storing the capacitors under no load at 105°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. | | Leakage current | | Less than or equal to the initial specified value | | | |
| | | | | | | | | |
| 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. | | | | | | | |

Chip Type



※ Voltage mark for 6.3V is 「6V」

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.

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■ Dimensions

| Rated Voltage (V) (code) | Rated Capacitance (μ F) | Case Size ϕ D \times L (mm) | tan δ | Leakage Current (μ A) (at 20°C after 2 minutes) | Rated Ripple (mArms) (105°C/120Hz) | Part Number |
|--------------------------------|------------------------------------|---------------------------------------|--------------|---|--|----------------|
| 6.3 (0J) | 22 | 5 \times 5.8 | 0.24 | 10 | 28 | UUP0J220MCL1GS |
| | 33 | 6.3 \times 5.8 | 0.24 | 10.395 | 37 | UUP0J330MCL1GS |
| | 47 | 6.3 \times 5.8 | 0.24 | 14.805 | 45 | UUP0J470MCL1GS |
| 10 (1A) | 10 | 4 \times 5.8 | 0.20 | 10 | 17 | UUP1A100MCL1GS |
| | 22 | 6.3 \times 5.8 | 0.20 | 11 | 33 | UUP1A220MCL1GS |
| | 33 | 6.3 \times 5.8 | 0.20 | 16.5 | 41 | UUP1A330MCL1GS |
| 16 (1C) | 4.7 | 4 \times 5.8 | 0.17 | 10 | 12 | UUP1C4R7MCL1GS |
| | 10 | 5 \times 5.8 | 0.17 | 10 | 23 | UUP1C100MCL1GS |
| | 22 | 6.3 \times 5.8 | 0.17 | 17.6 | 37 | UUP1C220MCL1GS |
| | 33 | 6.3 \times 5.8 | 0.17 | 26.4 | 49 | UUP1C330MCL1GS |
| 25 (1E) | 3.3 | 5 \times 5.8 | 0.17 | 10 | 12 | UUP1E3R3MCL1GS |
| | 4.7 | 5 \times 5.8 | 0.17 | 10 | 16 | UUP1E4R7MCL1GS |
| | 10 | 6.3 \times 5.8 | 0.17 | 12.5 | 27 | UUP1E100MCL1GS |
| 35 (1V) | 2.2 | 4 \times 5.8 | 0.15 | 10 | 8.4 | UUP1V2R2MCL1GS |
| | 3.3 | 5 \times 5.8 | 0.15 | 10 | 16 | UUP1V3R3MCL1GS |
| | 4.7 | 5 \times 5.8 | 0.15 | 10 | 18 | UUP1V4R7MCL1GS |
| | 10 | 6.3 \times 5.8 | 0.15 | 17.5 | 29 | UUP1V100MCL1GS |
| 50 (1H) | 0.1 | 4 \times 5.8 | 0.15 | 10 | 1.0 | UUP1H0R1MCL1GS |
| | 0.22 | 4 \times 5.8 | 0.15 | 10 | 2.0 | UUP1HR22MCL1GS |
| | 0.33 | 4 \times 5.8 | 0.15 | 10 | 2.8 | UUP1HR33MCL1GS |
| | 0.47 | 4 \times 5.8 | 0.15 | 10 | 4.0 | UUP1HR47MCL1GS |
| | 1 | 4 \times 5.8 | 0.15 | 10 | 8.4 | UUP1H010MCL1GS |
| | 2.2 | 5 \times 5.8 | 0.15 | 10 | 13 | UUP1H2R2MCL1GS |
| | 3.3 | 5 \times 5.8 | 0.15 | 10 | 17 | UUP1H3R3MCL1GS |
| | 4.7 | 6.3 \times 5.8 | 0.15 | 11.75 | 20 | UUP1H4R7MCL1GS |

- Taping specifications are given in page 20.
- Recommended land size, soldering by reflow are given in page 16, 17.
- Please select UUN(p.187) if high CV products are required.
- Please refer to page 3 for the minimum order quantity.