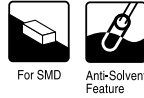


ALUMINUM ELECTROLYTIC CAPACITORS

UT series 6mmL Chip Type, Wide Temperature Range



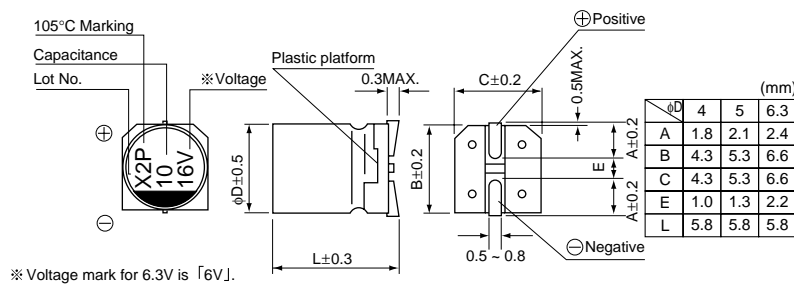
- Chip type with load life 2000 hours at +105°C.
- Designed for surface mounting on high density PC board.
- Applicable to automatic mounting machine using carrier tape.
- Adapted to the RoHS directive (2002/95/EC).



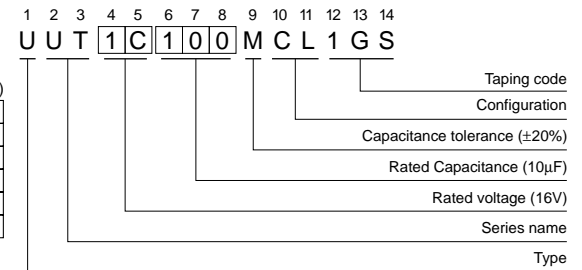
Specifications

| Item | Performance Characteristics | | | | | | | | | |
|------------------------------|--|-----------------|--------------------|-----|--|----|----|----|----|--|
| Category Temperature Range | -55 ~ +105°C | | | | | | | | | |
| Rated Voltage Range | 4 ~ 50V | | | | | | | | | |
| Rated Capacitance Range | 0.1 ~ 100μF | | | | | | | | | |
| Capacitance Tolerance | ±20% at 120Hz, 20°C | | | | | | | | | |
| Leakage Current | After 2 minutes' application of rated voltage, leakage current is not more than 0.01 CV or 3 (μA), whichever is greater. | | | | | | | | | |
| tan δ | Measurement frequency : 120Hz, Temperature : 20°C | | | | | | | | | |
| | Rated voltage (V) | 4 | 6.3 | 10 | 16 | 25 | 35 | 50 | | |
| Stability at Low Temperature | Measurement frequency : 120Hz | | | | | | | | | |
| | Rated voltage (V) | | 4 | 6.3 | 10 | 16 | 25 | 35 | 50 | |
| | Impedance ratio | Z-25°C / Z+20°C | 6 | 3 | 3 | 2 | 2 | 2 | 2 | |
| Endurance | ZT / Z20 (MAX.) | | 12 | 8 | 5 | 4 | 3 | 3 | 3 | |
| | After 2000 hours' application of rated voltage at 105°C, capacitors meet the characteristic requirements listed at right. | | Capacitance change | | Within ±25% of initial value (16V or less) Within ±20% of initial value (25V or more) | | | | | |
| Shelf Life | After leaving capacitors under no load at 105°C for 1000 hours, they meet the specified value for endurance characteristics listed above. | | tan δ | | 200% or less of initial specified value | | | | | |
| | After 2000 hours' application of rated voltage at 105°C, capacitors meet the characteristic requirements listed at right. | | Leakage current | | Initial specified value or less | | | | | |
| Resistance to soldering heat | The capacitors shall be kept on the hot plate maintained at 250°C for 30 seconds. After removing from the hot plate and restored at room temperature, they meet the characteristic requirements listed at right. | | Capacitance change | | Within ±10% of initial value | | | | | |
| | The capacitors shall be kept on the hot plate maintained at 250°C for 30 seconds. After removing from the hot plate and restored at room temperature, they meet the characteristic requirements listed at right. | | tan δ | | Initial specified value or less | | | | | |
| Marking | Black print on the case top. | | Leakage current | | Initial specified value or less | | | | | |

Chip Type



Type numbering system (Example : 16V 10μF)



Dimensions

| V | | 4 | | 6.3 | | 10 | | 16 | | 25 | | 35 | | 50 | |
|-----------|------|-----|----|-----|----|-----|----|-----|----|-----|----|-----|----|-----|-----|
| Cap. (μF) | Code | 0G | | 0J | | 1A | | 1C | | 1E | | 1V | | 1H | |
| 0.1 | 0R1 | | | | | | | | | | | | | 4 | 1.0 |
| 0.22 | R22 | | | | | | | | | | | | | 4 | 2.6 |
| 0.33 | R33 | | | | | | | | | | | | | 4 | 3.2 |
| 0.47 | R47 | | | | | | | | | | | | | 4 | 3.8 |
| 1 | 010 | | | | | | | | | | | | | 4 | 6.2 |
| 2.2 | 2R2 | | | | | | | | | | | | | 4 | 11 |
| 3.3 | 3R3 | | | | | | | | | | | | | 4 | 14 |
| 4.7 | 4R7 | | | | | | | | | | | | | 4 | 19 |
| 10 | 100 | | | | | | | 4 | 18 | 5 | 23 | 5 | 25 | 6.3 | 30 |
| 22 | 220 | 4 | 22 | 4 | 22 | 5 | 27 | 5 | 30 | 6.3 | 38 | 6.3 | 42 | | |
| 33 | 330 | 5 | 30 | 5 | 30 | 5 | 35 | 6.3 | 40 | 6.3 | 48 | | | | |
| 47 | 470 | 5 | 36 | 5 | 36 | 6.3 | 46 | 6.3 | 50 | | | | | | |
| 100 | 101 | 6.3 | 60 | 6.3 | 60 | 6.3 | 60 | | | | | | | | |

Rated ripple (mA rms) at 105°C 120Hz

Frequency coefficient of rated ripple current

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

- Taping specifications are given in page 24.
- Recommended land size, soldering by reflow are given in page 25
- Please select UX(p.66), UJ(p.68) series if high C/V products are required.
- Please refer to page 3 for the minimum order quantity.