

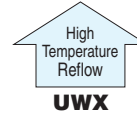
UWJ

5.5mmL Chip Type
High Temperature (260°C) Reflow



- Corresponding with 260°C peak reflow soldering
Recommended reflow condition : 260°C peak 5 sec. 230°C over 60 sec. 2 times
- Chip type with 5.5mm height.
- Designed for surface mounting on high density PC board.
- Applicable to automatic mounting machine fed with carrier tape.
- Load life of 2000 hours at 85°C
- Compliant to the RoHS directive (2011/65/EU).

UWJ

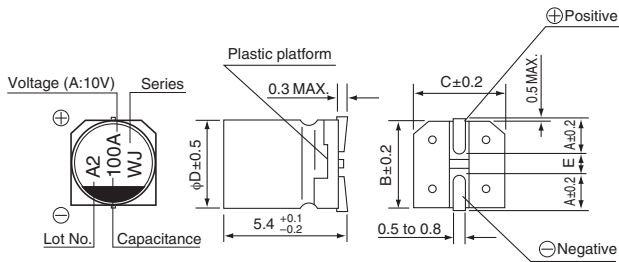


Values marked with an ※ in the dimension table are scheduled to be discontinued and are not recommended for new designs.

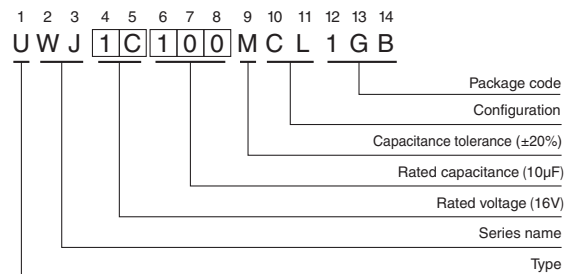
Specifications

| Item | Performance Characteristics | | | | | | | |
|-------------------------------|--|-----------------|--------------------|------|---|------|------|---|
| Category Temperature Range | -40 to +85°C | | | | | | | |
| Rated Voltage Range | 6.3 to 50V | | | | | | | |
| Rated Capacitance Range | 0.1 to 150μF | | | | | | | |
| Capacitance Tolerance | ±20% at 120Hz, 20°C | | | | | | | |
| Leakage Current | After 2 minutes' application of rated voltage, leakage current is not more than 0.01CV or 3 (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.) | 0.26 | 0.20 | 0.16 | 0.14 | 0.12 | 0.12 | |
| 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 | 8 | 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 2000 hours at 85°C. | | 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. | | | | | | | |

Chip Type



Type numbering system (Example : 16V 10μF)



| Voltage | 6.3 | 10 | 16 | 25 | 35 | 50 |
|---------|-----|----|----|----|----|----|
| Code | j | A | C | E | V | H |

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

● Dimension table in next page.



■ Dimensions

| V | | 6.3 | | 10 | | 16 | | 25 | | 35 | | 50 | |
|-----------|------|-----|----|-----|----|-----|----|-----|----|-----|----|----------------------|-----------------|
| | | 0J | | 1A | | 1C | | 1E | | 1V | | 1H | |
| Cap. (μF) | Code | | | | | | | | | | | | |
| 0.1 | 0R1 | | | | | | | | | | | ※ 4 | 1.0 |
| 0.22 | R22 | | | | | | | | | | | ※ 4 | 2.0 |
| 0.33 | R33 | | | | | | | | | | | ※ 4 | 2.8 |
| 0.47 | R47 | | | | | | | | | | | ※ 4 | 4.0 |
| 1 | 010 | | | | | | | | | | | 4 | 8.4 |
| 2.2 | 2R2 | | | | | | | | | | | 4 | 13 |
| 3.3 | 3R3 | | | | | | | | | | | 4 | 17 |
| 4.7 | 4R7 | | | | | | | 4 | 16 | 4 | 18 | 5 | 20 |
| 10 | 100 | | | | | 4 | 23 | 5 | 27 | 5 | 29 | 6.3 | 33 |
| 22 | 220 | 4 | 28 | 5 | 33 | 5 | 37 | 6.3 | 42 | 6.3 | 45 | | |
| 33 | 330 | 5 | 37 | 5 | 41 | 6.3 | 49 | 6.3 | 52 | | | | |
| 47 | 470 | 5 | 45 | 6.3 | 52 | 6.3 | 58 | | | | | | |
| 100 | 101 | 6.3 | 70 | 6.3 | 76 | 6.3 | 86 | | | | | | |
| 150 | 151 | 6.3 | 71 | | | | | | | | | Case size φD (mm) | Rated ripple |

Rated ripple current (mArms) at 85°C 120Hz

● 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 |

- Taping specifications are given in page 23.
- Recommended land size, soldering by reflow are given in page 18, 19.
- Please refer to page 3 for the minimum order quantity.