# ALUMINUM ELECTROLYTIC CAPACITORS

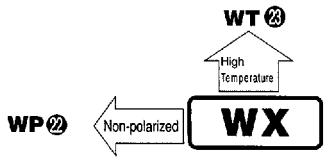
nichicon

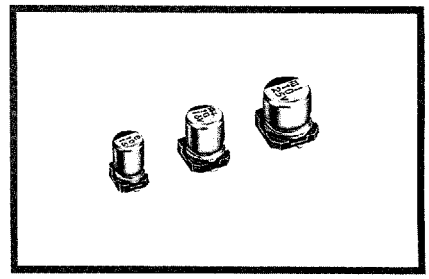


**WX** 5.5mmL Chip Type series

For SMD | Anti-Solvent Feature

- Chip type with 5.5mm height.
- Designed for surface mounting on high density PC board.
- Applicable to automatic mounting machine using carrier tape.
- Load life of 2000 hours at 85℃.

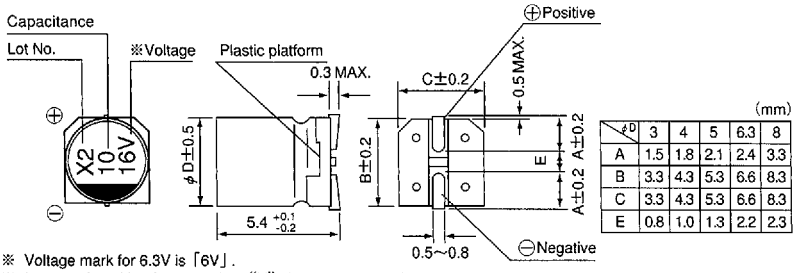


## ■Specifications

| Item | Performance Characteristics |
|---|---|
| Operating Temperature Range | −40～+85℃ |
| Voltage Range | 4～50V |
| Capacitance Range | 0.1～330μF |
| Capacitance Tolerance | ±20% at 120Hz, 20℃ |
| Leakage Current | After 2 minutes' application of rated voltage, leakage current is not more than 0.01CV or 3(μA),whichever is greater. |
| tan δ | Measurement frequency : 120Hz, Temperature : 20℃<br>Rated voltage (V): 4 / 6.3 / 10 / 16 / 25 / 35 / 50<br>tan δ (MAX.): 0.35(0.40) / 0.26(0.30) / 0.20(0.24) / 0.16(0.19) / 0.14(0.16) / 0.12(0.14) / 0.12(0.14)<br>Values in ( ) applicable to φ3 case size. |
| Stability at Low Temperature | Measurement frequency : 120Hz<br>Rated voltage (V): 4 / 6.3 / 10 / 16 / 25 / 35 / 50<br>Impedance ratio ZT/Z20 (MAX.) Z−25℃/Z+20℃: 7 / 4 / 3 / 2 / 2 / 2 / 2<br>Z−40℃/Z+20℃: 15 / 8 / 8 / 4 / 4 / 3 / 3 |
| Load Life | After 2000 hours' application of rated voltage at 85℃,capacitors meet the characteristics requirements listed at right.<br>Capacitance change: Within ±20% of initial value (Within ±25% for 4 V and φ3 units)<br>tan δ: 200% or less of initial specified value<br>Leakage Current: Initial specifed value or less |
| Shelf Life | After leaving capacitors under no load at 85℃ for 1000 hours, they meet the specified value for load life characteristics listed above. |
| Resistance to soldering heat | The capacitors shall be kept on the hot plate maintained at 250℃ for 30 seconds. After removing from the hot plate and restored at room temperature, they meet the characteristics requirements listed at right.<br>Capacitance change: Within ±10% of initial value<br>tan δ: Initial specified value or less<br>Leakage current: Initial specified value or less |
| Marking | Black print on the case top. |
| Applicable Standards | JIS C-5141 and JIS C-5102. |

## ■Chip Type




(mm)

| φD | 3 | 4 | 5 | 6.3 | 8 |
|---|---|---|---|---|---|
| A | 1.5 | 1.8 | 2.1 | 2.4 | 3.3 |
| B | 3.3 | 4.3 | 5.3 | 6.6 | 8.3 |
| C | 3.3 | 4.3 | 5.3 | 6.6 | 8.3 |
| E | 0.8 | 1.0 | 1.3 | 2.2 | 2.3 |

※ Voltage mark for 6.3V is 「6V」.
※ In case of marking for 3φ units, "V" for rated voltage is omitted and Lot No, is expressed only by a digit (month code).

### Type numbering system (Example : 16V 10μF)

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| U | W | X | 1 | C | 1 | 0 | 0 | M | C | R | 1 | G | B |

Taping code
Case dia.code
Configuration

| φD | Code |
|---|---|
| 3 | 2 |
| 4～8 | 1 |

Capacitance tolerance (±20%)
Capacitance (10μF)
Rated voltage (16V)
Series name
Type

## ■Dimensions

| Cap.(μF) \ V | Code | 4 | | 6.3 | | 10 | | 16 | | 25 | | 35 | | 50 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0G | | 0J | | 1A | | 1C | | 1E | | 1V | | 1H | |
| 0.1 | 0R1 | | | | | | | | | | | | | 4(3) | 1.0 |
| 0.22 | R22 | | | | | | | | | | | | | 4(3) | 2.0 |
| 0.33 | R33 | | | | | | | | | | | | | 4(3) | 2.8 |
| 0.47 | R47 | | | | | | | | | | | | | 4(3) | 4.0 |
| 1 | 010 | | | | | | | | | | | | | 4(3) | 8.4(8.0) |
| 2.2 | 2R2 | | | | | | | | | | | 3 | 8.4 | 4(3) | 13(10) |
| 3.3 | 3R3 | | | | | | | | | | | 3 | 10 | 4 | 17 |
| 4.7 | 4R7 | | | | | | | | | 4(3) | 16(12) | 4 | 18 | 5 | 20 |
| 10 | 100 | | | | | | | 4(3) | 23(18) | 5 | 27 | 5 | 29 | 6.3 | 33 |
| 22 | 220 | 3 | 19 | 4(3) | 28(21) | 5 | 33 | 5 | 37 | 6.3 | 42 | 6.3 | 46 | 8 | 52 |
| 33 | 330 | 4 | 28 | 5 | 37 | 5 | 41 | 6.3 | 49 | 6.3 | 52 | 8 | 62 | 8 | 71 |
| 47 | 470 | 4 | 33 | 5 | 45 | 6.3 | 52 | 6.3 | 58 | 8 | 70 | 8 | 80 | | |
| 100 | 101 | 5 | 56 | 6.3 | 70 | 6.3 | 76 | 6.3 | 86 | 8 | 95 | | | | |
| 220 | 221 | 6.3 | 96 | 8 | 110 | 8 | 135 | | | | | | | | |
| 330 | 331 | 8 | 145 | 8 | 170 | | | | | | | | | | |

Case size | Allowable ripple

( ) is also available with φ3mm upon request.

Allowable Ripple (mA rms) at 85℃ 120Hz



● Taping Specifications are given in page 18.