







- Chip type with load life of 7000 hours at +105°C.
 Low impedance temperature range up to +105°C.
- Applicable to automatic mounting machine fed with carrier tape.
- Compliant to the RoHS directive (2011/65/EU).

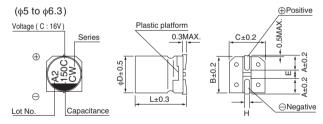


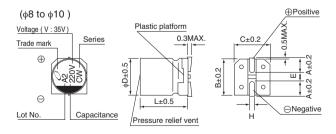


■ Specifications

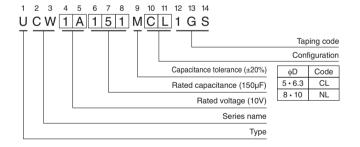
| Item | | | | Pei | rformance | e Char | acteristics | | | | |
|-------------------------------|---|-----------------------|--------------|------------|---|--------|--------------|--|---|--|--|
| Category Temperature Range | -25 to +105°C | | | | | | | | | | |
| Rated Voltage Range | 6.3 to 50V | | | | | | | | | | |
| Rated Capacitance Range | 10 to 470μF | | | | | | | | | | |
| Capacitance Tolerance | ±20% at 120Hz, 20°0 | C | | | | | | | | | |
| Leakage Current | After 2 minutes' appli | cation of rate | ed voltage, | leakage cı | urrent is i | not mo | ore than 0.0 | 01 CV or 3 (µ | uA) , whichever is greater. | | |
| | Measurement frequency : 120Hz at 20°C | | | | | | | | | | |
| Tangent of loss angle (tan δ) | Rated voltage (V) | Rated voltage (V) 6.3 | | 16 | 25 | | 35 | 50 | | | |
| | tan δ (MAX.) | 0.32 | 0.28 | 0.26 | 0.10 | 6 | 0.14 | 0.14 | | | |
| | Measurement frequency: 120Hz | | | | | | | | | | |
| | Rated volta | 6.3 | 10 | 16 | 16 25 | | 50 | | | | |
| Stability at Low Temperature | Impedance ratio ZT / Z20 (MAX.) | °C 4 | 3 | 2 | 2 | 2 | 2 | | | | |
| | | | | | | | | | | | |
| | The specifications list when the capacitors | | citance ch | nange | Within ±30% of the initial capacitance value | | | | | | |
| Endurance | | tan δ | | | 300% or less than the initial specified value | | | | | | |
| | after the rated voltage is applied for 7000 hours at 105°C. | | | | | | | | | | |
| 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 clause 4.1 at 20°C, they shall meet the specified values for the endurance characteristics listed above. | | | | | | | | | | |
| | The capacitors are ke | ept on a hot p | plate for 30 | seconds, v | vhich is | | Canacita | ance change | Within ±10% of the initial capacitance value | | |
| Resistance to soldering | 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. | | | | | | | ance change | Less than or equal to the initial specified value | | |
| heat | | | | | | | | $\begin{array}{ccc} \tan \delta & \text{Less than or equal to the initial spe} \\ \text{Leakage current} & \text{Less than or equal to the initial spe} \end{array}$ | | | |
| Marking | Black print on the case top. | | | | | | | | | | |

■Chip Type





Type numbering system (Example : $10V 150\mu F$)



| | | | | | (mm) |
|------|------------|------------|------------|------------|------------|
| φD×L | 5×7 | 6.3 × 7 | 6.3 × 8.7 | 8 × 10 | 10 × 10 |
| Α | 2.1 | 2.4 | 2.4 | 2.9 | 3.2 |
| В | 5.3 | 6.6 | 6.6 | 8.3 | 10.3 |
| С | 5.3 | 6.6 | 6.6 | 8.3 | 10.3 |
| E | 1.3 | 2.2 | 2.2 | 3.1 | 4.5 |
| L | 7.0 | 7.0 | 8.7 | 10 | 10 |
| Н | 0.5 to 0.8 | 0.5 to 0.8 | 0.5 to 0.8 | 0.8 to 1.1 | 0.8 to 1.1 |

Voltage

| voilago | | | | | | | |
|---------|-----|----|----|----|----|----|--|
| V | 6.3 | 10 | 16 | 25 | 35 | 50 | |
| Code | i | Α | C | F | V | Н | |



■ Dimensions

| Cara | V | 6.3 | | | 10 | | | 16 | | | 25 | | | 35 | | | 50 | | |
|--------------|------|-----------|------|-----|-------|--------|--------|---------|------|-----|---------|------|-----|---------|------|--------|------------------------|----------------|--------|
| Cap. (μF) | Code | 0J | | | 1A | | 1C | | 1E | | 1V | | | 1H | | | | | |
| 10 | 100 | | | | | | | | | | | | | 5×7 | 2.2 | 95 | | | |
| 22 | 220 | | ! | | | ! | ! | 5×7 | 2.2 | 95 | 5×7 | 2.2 | 95 | 5×7 | 2.2 | 95 | | ! ! | |
| 33 | 330 | | i | | 5×7 | 2.2 | 95 | | | | 6.3×7 | 1.1 | 140 | 6.3×8.7 | 1.0 | 230 | | | |
| 47 | 470 | 5×7 | 2.2 | 95 | | | | 6.3×7 | 1.1 | 140 | 6.3×7 | 1.1 | 140 | 6.3×8.7 | 1.0 | 230 | 8 × 10 | 0.53 | 350 |
| 100 | 101 | 6.3×7 | 1.1 | 140 | | İ | İ | 6.3×7 | 1.1 | 140 | 6.3×8.7 | 1.0 | 230 | | | i I | 8 × 10 | 0.53 | 350 |
| 150 | 151 | | | | 6.3×7 | 1.1 | 140 | 6.3×8.7 | 1.0 | 230 | | | | | | | | | |
| 220 | 221 | 6.3 × 8.7 | 1.0 | 230 | | | | 6.3×8.7 | 1.0 | 230 | 8×10 | 0.22 | 600 | 8×10 | 0.22 | 600 | 10 × 10 | 0.35 | 670 |
| 330 | 331 | 6.3 × 8.7 | 1.0 | 230 | | i I | i I | 8×10 | 0.22 | 600 | 8×10 | 0.22 | 600 | 10×10 | 0.16 | 850 | Case size | ii | Rated |
| 470 | 471 | 8×10 | 0.22 | 600 | | | | 8×10 | 0.22 | 600 | 10×10 | 0.16 | 850 | | | | $\phi D \times L (mm)$ | Impedance | ripple |

 $\label{eq:max_max} \mbox{Max. impedance } (\Omega) \mbox{ at 20°C 100kHz}, \\ \mbox{Rated ripple current (mArms) at 105°C 100kHz}$

• Frequency coefficient of rated ripple current

| Frequency | 50 Hz | 120 Hz | 300 Hz | 1 kHz | 10 kHz or more |
|-------------|-------|--------|--------|-------|----------------|
| Coefficient | 0.35 | 0.50 | 0.64 | 0.83 | 1.00 |

- 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.

Mouser Electronics

Authorized Distributor

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Nichicon:

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UCW1E471MNL1GS UCW1H101MNL1GS UCW1H470MNL1GS UCW1C471MNL1GS UCW1V220MCL1GS
UCW1V221MNL1GS UCW1V330MCL1GS UCW1V331MNL1GS UCW1H221MNL1GS UCW1A330MCL1GS
UCW0J101MCL1GS UCW0J221MCL1GS UCW0J331MCL1GS UCW0J470MNL1GS UCW1E220MCL1GS
UCW1A151MCL1GS UCW1E101MCL1GS UCW1C101MCL1GS UCW1C151MCL1GS UCW1C220MCL1GS
UCW1C221MCL1GS UCW1C331MNL1GS UCW1C470MCL1GS UCW0J470MCL1GS UCW0J471MNL1GS