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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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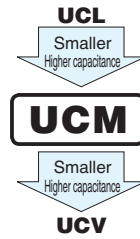
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## UCM Chip Type, Low Impedance



- Chip type, 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).

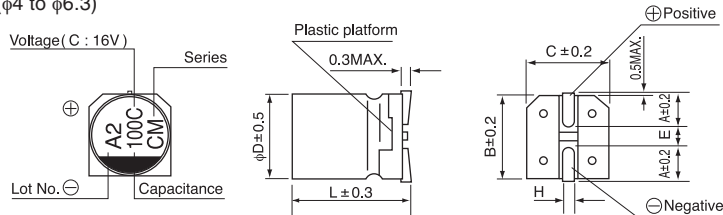


### Specifications

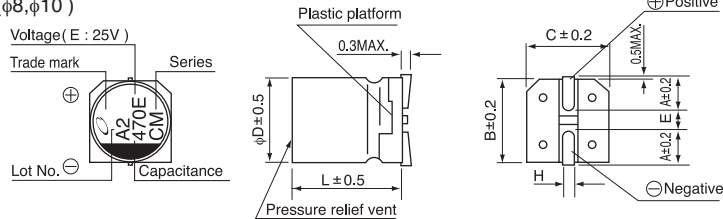
| Item                          | Performance Characteristics   |   |
|-------------------------------|---|---|
| Category Temperature Range    | -55 to +105°C   |   |
| Rated Voltage Range           | 6.3 to 50V  |   |
| Rated Capacitance Range       | 10 to 2200μF  |   |
| Capacitance Tolerance         | ±20% at 120Hz, 20°C   |   |
| Leakage Current               | After 2 minutes' application of rated voltage, leakage current is not more than 0.01 CV   |   |
| Tangent of loss angle (tan δ) | Rated voltage (V)   | 6.3    10    16    25    35    50   |
|                               | tan δ (MAX.)  | 0.26    0.19    0.16    0.14    0.12    0.10  |
| Stability at Low Temperature  | Measurement frequency : 120Hz at 20°C   |   |
|                               | Rated voltage (V)   | 6.3    10    16    25    35    50   |
|                               | Impedance ratio<br>ZT / Z20 (MAX.)  | Z-25°C / Z+20°C    2    2    2    2    2    2<br>Z-40°C / Z+20°C    3    3    3    3    3    3<br>Z-55°C / Z+20°C    4    4    4    3    3    3 |
|                               | Measurement frequency : 120Hz   |   |
| 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 105°C.  |   |
|                               | Capacitance change  | Within ±30% 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. |   |
|                               | Capacitance change  | Within ±10% of the initial capacitance value  |
|                               | tan δ   | 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  | 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

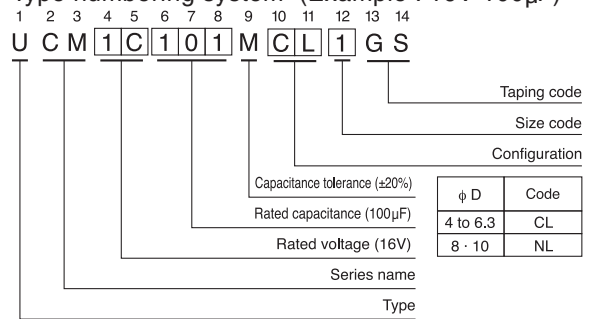
(φ4 to φ6.3)



(φ8, φ10)



### Type numbering system (Example : 16V 100μF)



|      | (mm)       |            |            |            |            |            |
|------|------------|------------|------------|------------|------------|------------|
| φD×L | 4×5.8      | 5×5.8      | 6.3×5.8    | 6.3×7.7    | 8×10       | 10×10      |
| A    | 1.8        | 2.1        | 2.4        | 2.4        | 2.9        | 3.2        |
| B    | 4.3        | 5.3        | 6.6        | 6.6        | 8.3        | 10.3       |
| C    | 4.3        | 5.3        | 6.6        | 6.6        | 8.3        | 10.3       |
| E    | 1.0        | 1.3        | 2.2        | 2.2        | 3.1        | 4.5        |
| L    | 5.8        | 5.8        | 5.8        | 7.7        | 10         | 10         |
| H    | 0.5 to 0.8 | 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

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

● Dimension table in next page.

## UCM

### ■ Dimensions

| Cap.<br>( $\mu$ F) | V<br>Code | 6.3       |      |      | 10        |      |      | 16        |      |         | 25        |      |         | 35        |      |         | 50                             |           |                 |
|--------------------|-----------|-----------|------|------|-----------|------|------|-----------|------|---------|-----------|------|---------|-----------|------|---------|--------------------------------|-----------|-----------------|
|                    |           | 0J        |      |      | 1A        |      |      | 1C        |      |         | 1E        |      |         | 1V        |      |         | 1H                             |           |                 |
| 10                 | 100       |           |      |      |           |      |      |           |      |         |           |      |         |           |      |         | ● 4 × 5.8                      | 2.30      | 85              |
|                    |           |           |      |      |           |      |      |           |      |         |           |      |         |           |      |         | 5 × 5.8                        | 0.88      | 165             |
| 22                 | 220       |           |      |      |           |      |      |           |      | 4 × 5.8 | 1.00      | 160  | 4 × 5.8 | 1.00      | 160  | 5 × 5.8 | 0.88                           | 165       |                 |
| 33                 | 330       |           |      |      |           |      |      |           |      | 4 × 5.8 | 1.00      | 160  | 5 × 5.8 | 0.36      | 240  |         |                                |           |                 |
| 47                 | 470       |           |      |      |           |      |      | 4 × 5.8   | 1.00 | 160     | 5 × 5.8   | 0.36 | 240     | 5 × 5.8   | 0.36 | 240     | 6.3 × 5.8                      | 0.68      | 195             |
| 68                 | 680       |           |      |      | 4 × 5.8   | 1.00 | 160  | 5 × 5.8   | 0.36 | 240     | 5 × 5.8   | 0.36 | 240     | 6.3 × 5.8 | 0.26 | 300     |                                |           |                 |
| 100                | 101       | 4 × 5.8   | 1.00 | 160  |           |      |      | 5 × 5.8   | 0.36 | 240     | 6.3 × 5.8 | 0.26 | 300     | 6.3 × 5.8 | 0.26 | 300     | 6.3 × 7.7                      | 0.34      | 350             |
| 150                | 151       |           |      |      | 5 × 5.8   | 0.36 | 240  | 6.3 × 5.8 | 0.26 | 300     | 6.3 × 7.7 | 0.16 | 600     | 6.3 × 7.7 | 0.16 | 600     |                                |           |                 |
| 220                | 221       | 5 × 5.8   | 0.36 | 240  | 6.3 × 5.8 | 0.26 | 300  | 6.3 × 5.8 | 0.26 | 300     | 6.3 × 7.7 | 0.16 | 600     |           |      |         | 8 × 10                         | 0.18      | 670             |
| 330                | 331       | 6.3 × 5.8 | 0.26 | 300  | 6.3 × 7.7 | 0.16 | 600  | 6.3 × 7.7 | 0.16 | 600     |           |      |         |           |      |         | 8 × 10                         | 0.08      | 850             |
| 470                | 471       | 6.3 × 7.7 | 0.16 | 600  | 6.3 × 7.7 | 0.16 | 600  |           |      |         | 8 × 10    | 0.08 | 850     |           |      |         |                                |           |                 |
| 560                | 561       |           |      |      |           |      |      |           |      |         |           |      |         | 10 × 10   | 0.06 | 1190    |                                |           |                 |
| 680                | 681       | 6.3 × 7.7 | 0.16 | 600  |           |      |      | 8 × 10    | 0.08 | 850     |           |      |         |           |      |         |                                |           |                 |
| 820                | 821       |           |      |      |           |      |      |           |      |         | 10 × 10   | 0.06 | 1190    |           |      |         |                                |           |                 |
| 1000               | 102       |           |      |      | 8 × 10    | 0.08 | 850  | 10 × 10   | 0.06 | 1190    |           |      |         |           |      |         |                                |           |                 |
| 1500               | 152       | 8 × 10    | 0.08 | 850  | 10 × 10   | 0.06 | 1190 |           |      |         |           |      |         |           |      |         |                                |           |                 |
| 2200               | 222       | 10 × 10   | 0.06 | 1190 |           |      |      |           |      |         |           |      |         |           |      |         | Case size<br>$\phi$ D × L (mm) | Impedance | Rated<br>ripple |

MAX. Impedance ( $\Omega$ ) at 20°C 100kHz, Rated ripple current(mArms) at 105°C 100kHz  
 ● In this case, [6] will be put at 12th digit of type numbering system.

### ● 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.