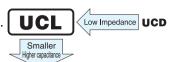
Chip Type, Low Impedance



UCM

- 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,(EU)2015/863).
- AEC-Q200 compliant. Please contact us for details.

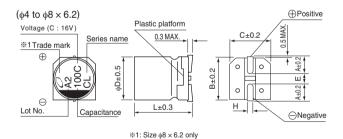


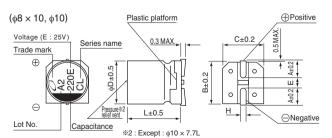


Specifications

| Item | Performance Characteristics | | | | | | | | | | | |
|---------------------------------------|---|--------------------------|--------------------|--|-----------------------------|--|---|------------------|-------------------|--|--|--|
| Category Temperature Range | - 55 to +105°C | | | | | | | | | | | |
| Rated Voltage Range | 6.3 to 50V | 6.3 to 50V | | | | | | | | | | |
| Rated Capacitance Range | 10 to 2200μF | | | | | | | | | | | |
| Capacitance Tolerance | ± 20% at 120Hz, 2 | 20°C | | | | | | | | | | |
| Leakage Current | After 2 minutes' ap | oplication of rated vol | tages at 20°C, lea | ıkage curre | ent is not more t | han 0.01 | CV or 3 (µ/ | A), whichever is | greater. | | | |
| | | | | | | | Measur | ement frequency | y : 120Hz at 20°C | | | |
| Tangent of loss angle (tan δ) | Rated voltage (V |) | 6.3 | 10 | 16 | | 25 | 35 | 50 | | | |
| rangemen roos angle (lame) | tan δ (MAX.) | | 0.26 | 0.19 | 0.16 | | 0.14 | 0.12 | 0.10 | | | |
| | Measurement frequency: 120Hz | | | | | | | | | | | |
| | Rated voltage (V |) | 6.3 | 10 | 16 | | 25 | 35 | 50 | | | |
| Stability at Low Temperature | Impedance ratio ZT / Z20 (MAX.) | Z-25°C / Z+20°C | 2 | 2 | 2 | | 2 | 2 | 2 | | | |
| | | Z-40°C / Z+20°C | 3 | 3 | 3 | | 3 | 3 | 3 | | | |
| | | Z-55°C / Z+20°C | 4 | 4 | 4 | | 3 | 3 | 3 | | | |
| | The specifications | listed at right shall be | Capac | Capacitance Change Within ± 30% of the initial capacitance value | | | | ance value | | | | |
| Endurance | | tored to 20°C after the | | tan δ | tan δ 200% or | | or less than the initial specified value | | | | | |
| | applied for 2000 h | ours at 105°C. | Leaka | eakage current Less than or equal to 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. | | | | | | | | | | | |
| Resistance to soldering | The capacitors are kept on a hot plate for 30 seconds, whic maintained at 250°C. The capacitors shall meet the charact | | | | arietic Capacitanice Change | | Within ± 10% of the initial capacitance value | | | | | |
| heat | | d at right when they a | | | | Less than or equal to the initial specified value Less than or equal to the initial specified value | | | | | | |
| Marking | Black print on the case top. | | | | | | | | | | | |

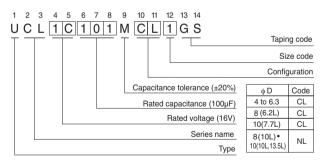
■Chip Type





| Voltage | | | | | | |
|---------|-----|----|----|----|----|----|
| V | 6.3 | 10 | 16 | 25 | 35 | 50 |
| Code | j | Α | С | Е | V | Н |

Type numbering system (Example: 16V 100µF)



| | | | | | | | | | (mm) |
|------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| φD×L | 4 × 5.8 | 5 × 5.8 | 6.3 × 5.8 | 6.3 × 7.7 | 8 × 6.2 | 8 × 10 | 10 × 7.7 | 10 × 10 | 10 × 13.5 |
| Α | 1.8 | 2.1 | 2.4 | 2.4 | 3.3 | 2.9 | 3.2 | 3.2 | 3.2 |
| В | 4.3 | 5.3 | 6.6 | 6.6 | 8.3 | 8.3 | 10.3 | 10.3 | 10.3 |
| С | 4.3 | 5.3 | 6.6 | 6.6 | 8.3 | 8.3 | 10.3 | 10.3 | 10.3 |
| E | 1.0 | 1.3 | 2.2 | 2.2 | 2.3 | 3.1 | 4.5 | 4.5 | 4.5 |
| L | 5.8 | 5.8 | 5.8 | 7.7 | 6.2 | 10 | 7.7 | 10 | 13.5 |
| Н | 0.5 to 0.8 | 0.8 to 1.1 | 0.8 to 1.1 | 0.8 to 1.1 | 0.8 to 1.1 |

• Frequency coefficient of rated ripple current

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

UCL

■Dimensions

| Rated Voltage (V) (code) | Rated Capacitance (µF) | Case Size φD×L(mm) | tan δ | Leakage Current (µA) (at 20°C after 2 minutes) | Impedance(Ω) MAX. (20°C/100kHz) | Rated Ripple (mArms) (105°C/100kHz) | Part Number |
|--------------------------------|------------------------------|-----------------------|-------|--|---------------------------------------|---|----------------|
| | 22 | 4×5.8 | 0.26 | 3 | 0.85 | 160 | UCL0J220MCL1GS |
| | 47 | 4×5.8 | 0.26 | 3 | 0.85 | 160 | UCL0J470MCL6GS |
| | 47 | 5×5.8 | 0.26 | 3 | 0.36 | 240 | UCL0J470MCL1GS |
| | 100 | 5×5.8 | 0.26 | 6.3 | 0.36 | 240 | UCL0J101MCL6GS |
| | 100 | 6.3×5.8 | 0.26 | 6.3 | 0.26 | 300 | UCL0J101MCL1GS |
| | 220 | 6.3×5.8 | 0.26 | 13.86 | 0.26 | 300 | UCL0J221MCL1GS |
| 6.3 | 330 | 6.3×7.7 | 0.26 | 20.79 | 0.16 | 600 | UCL0J331MCL1GS |
| (0J) | 330 | 8×6.2 | 0.26 | 20.79 | 0.18 | 500 | UCL0J331MCL6GS |
| | 470 | 8×10 | 0.26 | 29.61 | 0.08 | 850 | UCL0J471MNL1GS |
| | 470 | 10×7.7 | 0.26 | 29.61 | 0.10 | 850 | UCL0J471MCL6GS |
| | 1000 | 8×10 | 0.26 | 63 | 0.08 | 850 | UCL0J102MNL1GS |
| | 1500 | 10×10 | 0.26 | 94.5 | 0.06 | 1190 | UCL0J152MNL1GS |
| | 1800 | 10×10 | 0.26 | 113.4 | 0.08 | 850 | UCL0J182MNL1GS |
| | 2200 | 10×13.5 | 0.26 | 138.6 | 0.06 | 1190 | UCL0J222MNL1GS |
| | 22 | 4×5.8 | 0.19 | 3 | 0.85 | 160 | UCL1A220MCL1GS |
| | 33 | 4×5.8 | 0.19 | 3.3 | 0.85 | 160 | UCL1A330MCL6GS |
| | 33 | 5×5.8 | 0.19 | 3.3 | 0.36 | 240 | UCL1A330MCL1GS |
| | 47 | 6.3×5.8 | 0.19 | 4.7 | 0.26 | 300 | UCL1A470MCL1GS |
| | 100 | 6.3×5.8 | 0.19 | 10 | 0.26 | 300 | UCL1A101MCL1GS |
| | 150 | 6.3×5.8 | 0.19 | 15 | 0.26 | 300 | UCL1A151MCL1GS |
| | 220 | 6.3×7.7 | 0.19 | 22 | 0.16 | 600 | UCL1A221MCL1GS |
| 10 | 220 | 8×6.2 | 0.19 | 22 | 0.18 | 500 | UCL1A221MCL6GS |
| (1A) | 330 | 8×10 | 0.19 | 33 | 0.08 | 850 | UCL1A331MNL1GS |
| | 330 | 10×7.7 | 0.19 | 33 | 0.10 | 850 | UCL1A331MCL6GS |
| | 470 | 8×10 | 0.19 | 47 | 0.08 | 850 | UCL1A471MNL1GS |
| | 470 | 10×7.7 | 0.19 | 47 | 0.10 | 850 | UCL1A471MCL6GS |
| | 680 | 8×10 | 0.19 | 68 | 0.08 | 850 | UCL1A681MNL1GS |
| | 1000 | 10×10 | 0.19 | 100 | 0.06 | 1190 | UCL1A102MNL1GS |
| | 1200 | 10×10 | 0.19 | 120 | 0.08 | 850 | UCL1A122MNL1GS |
| | 1500 | 10×13.5 | 0.19 | 150 | 0.06 | 1190 | UCL1A152MNL1GS |
| | 10 | 4×5.8 | 0.16 | 3 | 0.85 | 160 | UCL1C100MCL1GS |
| | 22 | 4×5.8 | 0.16 | 3.52 | 0.85 | 160 | UCL1C220MCL6GS |
| | 22 | 5×5.8 | 0.16 | 3.52 | 0.36 | 240 | UCL1C220MCL1GS |
| | 47 | 5×5.8 | 0.16 | 7.52 | 0.36 | 240 | UCL1C470MCL6GS |
| | 47 | 6.3×5.8 | 0.16 | 7.52 | 0.26 | 300 | UCL1C470MCL1GS |
| | 68 | 6.3×5.8 | 0.16 | 10.88 | 0.26 | 300 | UCL1C680MCL1GS |
| | 100 | 6.3×5.8 | 0.16 | 16 | 0.26 | 300 | UCL1C101MCL1GS |
| | 100 | 6.3×7.7 | 0.16 | 16 | 0.16 | 600 | UCL1C101MCL6GS |
| 16 | 150 | 6.3×7.7 | 0.16 | 24 | 0.16 | 600 | UCL1C151MCL1GS |
| (1C) | 220 | 6.3×7.7 | 0.16 | 35.2 | 0.16 | 600 | UCL1C221MCL1GS |
| | 220 | 8×6.2 | 0.16 | 35.2 | 0.18 | 500 | UCL1C221MCL6GS |
| | 330 | 8×10 | 0.16 | 52.8 | 0.08 | 850 | UCL1C331MNL1GS |
| ļ | 330 | 10×7.7 | 0.16 | 52.8 | 0.10 | 850 | UCL1C331MCL6GS |
| | 470 | 8×10 | 0.16 | 75.2 | 0.08 | 850 | UCL1C471MNL1GS |
| | 470 | 10×7.7 | 0.16 | 75.2 | 0.10 | 850 | UCL1C471MCL6GS |
| | 680 | 10×10 | 0.16 | 108.8 | 0.06 | 1190 | UCL1C681MNL1GS |
| | 820 | 10×10 | 0.16 | 131.2 | 0.08 | 850 | UCL1C821MNL1GS |
| - | 1000 | 10×13.5 | 0.16 | 160 | 0.06 | 1190 | UCL1C102MNL1GS |

UCL

■ Dimensions

| Rated Voltage (V) (code) | Rated Capacitance (µF) | Case Size φD×L(mm) | tan δ | Leakage Current (µA) (at 20°C after 2 minutes) | Impedance (Ω) MAX. (20°C/100kHz) | Rated Ripple (mArms) (105°C/100kHz) | Part Number |
|--------------------------------|------------------------------|-----------------------|-------|--|-----------------------------------|---|----------------|
| | 10 | 4×5.8 | 0.14 | 3 | 0.85 | 160 | UCL1E100MCL1GS |
| | 22 | 5×5.8 | 0.14 | 5.5 | 0.36 | 240 | UCL1E220MCL1GS |
| | 33 | 5×5.8 | 0.14 | 8.25 | 0.36 | 240 | UCL1E330MCL6GS |
| | 33 | 6.3×5.8 | 0.14 | 8.25 | 0.26 | 300 | UCL1E330MCL1GS |
| | 47 | 6.3×5.8 | 0.14 | 11.75 | 0.26 | 300 | UCL1E470MCL1GS |
| | 68 | 6.3×5.8 | 0.14 | 17 | 0.26 | 300 | UCL1E680MCL1GS |
| | 100 | 6.3×7.7 | 0.14 | 25 | 0.16 | 600 | UCL1E101MCL1GS |
| 25 | 100 | 8×6.2 | 0.14 | 25 | 0.18 | 500 | UCL1E101MCL6GS |
| (1E) | 150 | 8×10 | 0.14 | 37.5 | 0.08 | 850 | UCL1E151MNL1GS |
| | 150 | 10×7.7 | 0.14 | 37.5 | 0.10 | 850 | UCL1E151MCL6GS |
| | 220 | 8×10 | 0.14 | 55 | 0.08 | 850 | UCL1E221MNL1GS |
| | 220 | 10×7.7 | 0.14 | 55 | 0.10 | 850 | UCL1E221MCL6GS |
| | 330 | 8×10 | 0.14 | 82.5 | 0.08 | 850 | UCL1E331MNL1GS |
| | 470 | 10×10 | 0.14 | 117.5 | 0.06 | 1190 | UCL1E471MNL1GS |
| | 560 | 10×10 | 0.14 | 140 | 0.08 | 850 | UCL1E561MNL1GS |
| | 680 | 10×13.5 | 0.14 | 170 | 0.06 | 1190 | UCL1E681MNL1GS |
| | 10 | 4×5.8 | 0.12 | 3.5 | 0.85 | 160 | UCL1V100MCL6GS |
| | 10 | 5×5.8 | 0.12 | 3.5 | 0.36 | 240 | UCL1V100MCL1GS |
| | 22 | 5×5.8 | 0.12 | 7.7 | 0.36 | 240 | UCL1V220MCL1GS |
| | 33 | 6.3×5.8 | 0.12 | 11.55 | 0.26 | 300 | UCL1V330MCL1GS |
| | 47 | 6.3×5.8 | 0.12 | 16.45 | 0.26 | 300 | UCL1V470MCL1GS |
| | 68 | 6.3×7.7 | 0.12 | 23.8 | 0.16 | 600 | UCL1V680MCL1GS |
| | 100 | 6.3×7.7 | 0.12 | 35 | 0.16 | 600 | UCL1V101MCL6GS |
| 35 (1V) | 100 | 8×10 | 0.12 | 35 | 0.08 | 850 | UCL1V101MNL1GS |
| (14) | 150 | 8×10 | 0.12 | 52.5 | 0.08 | 850 | UCL1V151MNL1GS |
| | 150 | 10×7.7 | 0.12 | 52.5 | 0.10 | 850 | UCL1V151MCL6GS |
| | 220 | 8×10 | 0.12 | 77 | 0.08 | 850 | UCL1V221MNL1GS |
| | 220 | 10×7.7 | 0.12 | 77 | 0.10 | 850 | UCL1V221MCL6GS |
| | 330 | 10×10 | 0.12 | 115.5 | 0.06 | 1190 | UCL1V331MNL1GS |
| | 390 | 10×10 | 0.12 | 136.5 | 0.08 | 850 | UCL1V391MNL1GS |
| | 470 | 10×13.5 | 0.12 | 164.5 | 0.06 | 1190 | UCL1V471MNL1GS |
| 50 | 100 | 8×10 | 0.10 | 50 | 0.18 | 670 | UCL1H101MNL1GS |
| (1H) | 220 | 10×10 | 0.10 | 110 | 0.12 | 900 | UCL1H221MNL1GS |
| | | | | | | | 1 |

For taping specifications, recommended land size/soldering by reflow and minimum order quantity, please refer to the Guidelines for Aluminum Electrolytic Capacitors.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Nichicon:

UCL0J152MCL1GS UCL1V331MNQ1GS