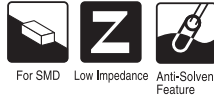


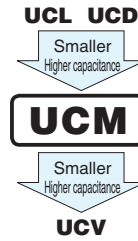
ALUMINUM ELECTROLYTIC CAPACITORS

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

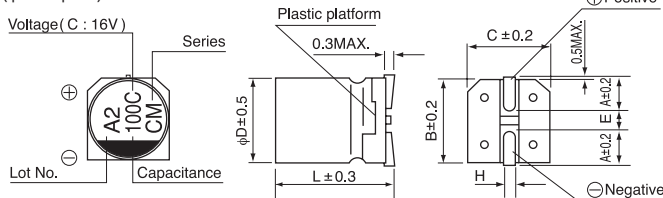


Specifications

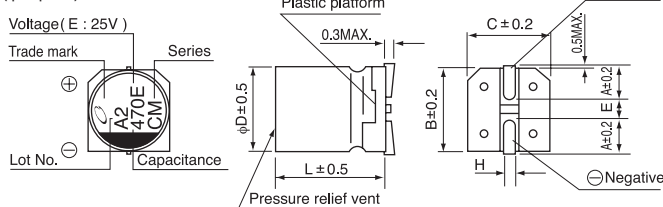
Item	Performance Characteristics																																						
Category Temperature Range	-55 to +105°C																																						
Rated Voltage Range	6.3 to 100V																																						
Rated Capacitance Range	10 to 5100μF																																						
Capacitance Tolerance	±20% at 120Hz, 20°C																																						
Leakage Current	After 2 minutes' application of rated voltage at 20°C, leakage current is not more than 0.01 CV or 3 (μA), whichever is greater.																																						
Tangent of loss angle (tan δ)	Measurement frequency : 120Hz at 20°C																																						
	<table border="1"> <tr> <td>Rated voltage (V)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>80</td> <td>100</td> </tr> <tr> <td>tan δ (MAX.)</td> <td>0.26</td> <td>0.19</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> <td>0.08</td> <td>0.08</td> <td>0.07</td> </tr> </table> <p>For capacitance of more than 1000μF, add 0.02 for every increase of 1000μF.(φ12.5 to φ18)</p>	Rated voltage (V)	6.3	10	16	25	35	50	63	80	100	tan δ (MAX.)	0.26	0.19	0.16	0.14	0.12	0.10	0.08	0.08	0.07																		
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Stability at Low Temperature	Measurement frequency : 120Hz																																						
	<table border="1"> <tr> <td>Rated voltage (V)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>80</td> <td>100</td> </tr> <tr> <td rowspan="3">Impedance ratio ZT / Z20 (MAX.)</td> <td>Z-25°C / Z+20°C</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z-40°C / Z+20°C</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> </tr> <tr> <td>Z-55°C / Z+20°C</td> <td>4</td> <td>4</td> <td>4</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> </tr> </table>	Rated voltage (V)	6.3	10	16	25	35	50	63	80	100	Impedance ratio ZT / Z20 (MAX.)	Z-25°C / Z+20°C	2	2	2	2	2	2	2	2	Z-40°C / Z+20°C	3	3	3	3	3	3	3	3	Z-55°C / Z+20°C	4	4	4	3	3	3	3	3
	Rated voltage (V)	6.3	10	16	25	35	50	63	80	100																													
Impedance ratio ZT / Z20 (MAX.)	Z-25°C / Z+20°C	2	2	2	2	2	2	2	2																														
	Z-40°C / Z+20°C	3	3	3	3	3	3	3	3																														
	Z-55°C / Z+20°C	4	4	4	3	3	3	3	3																														
Endurance	<p>The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 5000 hours (2000 hours for φD ≤ 10) at 105°C.</p> <table border="1"> <tr> <td>Capacitance change</td> <td>Within ±30% of the initial capacitance value</td> </tr> <tr> <td>tan δ</td> <td>200% or less than the initial specified value (For 63V or more : 300% or less than the initial specified value)</td> </tr> <tr> <td>Leakage current</td> <td>Less than or equal to the initial specified value</td> </tr> </table>	Capacitance change	Within ±30% of the initial capacitance value	tan δ	200% or less than the initial specified value (For 63V or more : 300% or less than the initial specified value)	Leakage current	Less than or equal to the initial specified value																																
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Leakage 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 heat	<p>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.</p> <table border="1"> <tr> <td>Capacitance change</td> <td>Within ±10% of the initial capacitance value</td> </tr> <tr> <td>tan δ</td> <td>Less than or equal to the initial specified value</td> </tr> <tr> <td>Leakage current</td> <td>Less than or equal to the initial specified value</td> </tr> </table>	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																																
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Leakage current	Less than or equal to the initial specified value																																						
Marking	Black print on the case top.																																						

Chip Type

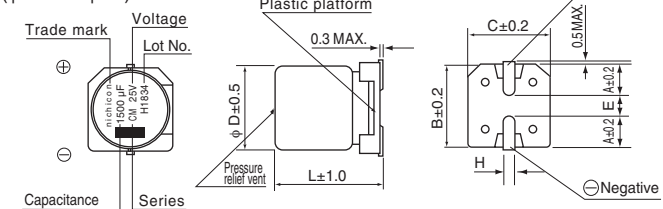
(φ4 to φ6.3)



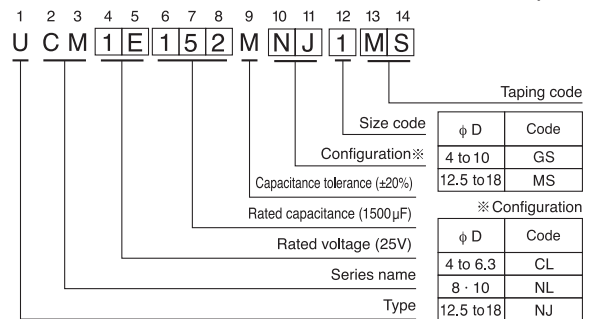
(φ8, φ10)



(φ12.5 to φ18)



Type numbering system (Example : 25V 1500μF)



φD×L	(mm)														
	4×5.8	5×5.8	6.3×5.8	6.3×7.7	8×10	10×10	12.5×13.5	12.5×21	16×16.5	16×21.5	18×16.5	18×21.5	18×21.5	18×21.5	
A	1.8	2.1	2.4	2.4	2.9	3.2	5.15	5.15	5.65	5.65	6.65	6.65	6.65	6.65	
B	4.3	5.3	6.6	6.6	8.3	10.3	13.6	13.6	17.1	17.1	19.1	19.1	19.1	19.1	
C	4.3	5.3	6.6	6.6	8.3	10.3	13.6	13.6	17.1	17.1	19.1	19.1	19.1	19.1	
E	1	1.3	2.2	2.2	3.1	4.5	3.3	3.3	5.8	5.8	5.8	5.8	5.8	5.8	
L	5.8	5.8	5.8	7.7	10	10	13.5	21	16.5	21.5	16.5	21.5	21.5	21.5	
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	1.0 to 1.4	1.0 to 1.4	1.0 to 1.4	1.0 to 1.4	1.0 to 1.4	1.0 to 1.4	1.0 to 1.4	1.0 to 1.4	

Voltage

V	6.3	10	16	25	35	50	63	80	100
Code	j	A	C	E	V	H	J	K	2A

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

● Dimension table in next page.

UCM

■ 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
6.3 (0J)	100	4×5.8	0.26	6.3	1.00	160	UCM0J101MCL1GS
	220	5×5.8	0.26	13.86	0.36	240	UCM0J221MCL1GS
	330	6.3×5.8	0.26	20.79	0.26	300	UCM0J331MCL1GS
	470	6.3×7.7	0.26	29.61	0.16	600	UCM0J471MCL1GS
	680	6.3×7.7	0.26	42.84	0.16	600	UCM0J681MCL1GS
	1500	8×10	0.26	94.5	0.080	850	UCM0J152MNL1GS
	2200	10×10	0.26	138.6	0.060	1190	UCM0J222MNL1GS
10 (1A)	68	4×5.8	0.19	6.8	1.00	160	UCM1A680MCL1GS
	150	5×5.8	0.19	15	0.36	240	UCM1A151MCL1GS
	220	6.3×5.8	0.19	22	0.26	300	UCM1A221MCL1GS
	330	6.3×7.7	0.19	33	0.16	600	UCM1A331MCL1GS
	470	6.3×7.7	0.19	47	0.16	600	UCM1A471MCL1GS
	1000	8×10	0.19	100	0.080	850	UCM1A102MNL1GS
	1500	10×10	0.19	150	0.060	1190	UCM1A152MNL1GS
16 (1C)	47	4×5.8	0.16	7.52	1.00	160	UCM1C470MCL1GS
	68	5×5.8	0.16	10.88	0.36	240	UCM1C680MCL1GS
	100	5×5.8	0.16	16	0.36	240	UCM1C101MCL1GS
	150	6.3×5.8	0.16	24	0.26	300	UCM1C151MCL1GS
	220	6.3×5.8	0.16	35.2	0.26	300	UCM1C221MCL1GS
	330	6.3×7.7	0.16	52.8	0.16	600	UCM1C331MCL1GS
	680	8×10	0.16	108.8	0.080	850	UCM1C681MNL1GS
	1000	10×10	0.16	160	0.060	1190	UCM1C102MNL1GS
25 (1E)	22	4×5.8	0.14	5.5	1.00	160	UCM1E220MCL1GS
	33	4×5.8	0.14	8.25	1.00	160	UCM1E330MCL1GS
	47	5×5.8	0.14	11.75	0.36	240	UCM1E470MCL1GS
	68	5×5.8	0.14	17	0.36	240	UCM1E680MCL1GS
	100	6.3×5.8	0.14	25	0.26	300	UCM1E101MCL1GS
	150	6.3×7.7	0.14	37.5	0.16	600	UCM1E151MCL1GS
	220	6.3×7.7	0.14	55	0.16	600	UCM1E221MCL1GS
	470	8×10	0.14	117.5	0.080	850	UCM1E471MNL1GS
	820	10×10	0.14	205	0.060	1190	UCM1E821MNL1GS
	1500	12.5×13.5	0.14	375	0.058	1420	UCM1E152MNL1MS
	2400	12.5×21	0.16	600	0.046	2080	UCM1E242MNL1MS
	2700	16×16.5	0.16	675	0.047	1910	UCM1E272MNL1MS
	3600	18×16.5	0.18	900	0.045	2060	UCM1E362MNL1MS
3900	16×21.5	0.18	975	0.034	2540	UCM1E392MNL1MS	
5100	18×21.5	0.22	1275	0.032	2640	UCM1E512MNL1MS	
35 (1V)	22	4×5.8	0.12	7.7	1.00	160	UCM1V220MCL1GS
	33	5×5.8	0.12	11.55	0.36	240	UCM1V330MCL1GS
	47	5×5.8	0.12	16.45	0.36	240	UCM1V470MCL1GS
	68	6.3×5.8	0.12	23.8	0.26	300	UCM1V680MCL1GS
	100	6.3×5.8	0.12	35	0.26	300	UCM1V101MCL1GS
	150	6.3×7.7	0.12	52.5	0.16	600	UCM1V151MCL1GS
	330	8×10	0.12	115.5	0.080	850	UCM1V331MNL1GS
	560	10×10	0.12	196	0.060	1190	UCM1V561MNL1GS
	910	12.5×13.5	0.12	318.5	0.058	1420	UCM1V911MNL1MS
	1600	12.5×21	0.12	560	0.046	2080	UCM1V162MNL1MS
	1800	16×16.5	0.12	630	0.047	1910	UCM1V182MNL1MS
	2200	18×16.5	0.14	770	0.045	2060	UCM1V222MNL1MS
	2700	16×21.5	0.14	945	0.034	2540	UCM1V272MNL1MS
	3600	18×21.5	0.16	1260	0.032	2640	UCM1V362MNL1MS

UCM

■ 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 (mA) (105°C/100kHz)	Part Number
50 (1H)	10	4×5.8	0.10	5	2.30	85	UCM1H100MCL6GS
	10	5×5.8	0.10	5	0.88	165	UCM1H100MCL1GS
	22	5×5.8	0.10	11	0.88	165	UCM1H220MCL1GS
	47	6.3×5.8	0.10	23.5	0.68	195	UCM1H470MCL1GS
	100	6.3×7.7	0.10	50	0.34	350	UCM1H101MCL1GS
	220	8×10	0.10	110	0.18	670	UCM1H221MNL1GS
	330	10×10	0.10	165	0.12	900	UCM1H331MNL1GS
	470	12.5×13.5	0.10	235	0.12	1340	UCM1H471MNL1GS
	750	12.5×21	0.10	375	0.080	1970	UCM1H751MNL1GS
	820	16×16.5	0.10	410	0.080	1820	UCM1H821MNL1GS
	1100	18×16.5	0.10	550	0.078	1980	UCM1H112MNL1GS
	1200	16×21.5	0.10	600	0.050	2440	UCM1H122MNL1GS
1600	18×21.5	0.10	800	0.050	2550	UCM1H162MNL1GS	
63 (1J)	47	6.3×7.7	0.08	29.61	0.80	190	UCM1J470MCL1GS
	100	8×10	0.08	63	0.40	300	UCM1J101MNL1GS
	220	10×10	0.08	138.6	0.25	500	UCM1J221MNL1GS
	360	12.5×13.5	0.08	226.8	0.14	1250	UCM1J361MNL1GS
	560	12.5×21	0.08	352.8	0.086	1850	UCM1J561MNL1GS
	620	16×16.5	0.08	390.6	0.082	1740	UCM1J621MNL1GS
	820	18×16.5	0.08	516.6	0.080	1880	UCM1J821MNL1GS
	910	16×21.5	0.08	573.3	0.055	2330	UCM1J911MNL1GS
	1200	18×21.5	0.08	756	0.054	2430	UCM1J122MNL1GS
80 (1K)	33	6.3×7.7	0.08	26.4	0.80	190	UCM1K330MCL1GS
	68	8×10	0.08	54.4	0.40	300	UCM1K680MNL1GS
	100	10×10	0.08	80	0.25	500	UCM1K101MNL1GS
	220	12.5×13.5	0.08	176	0.18	1050	UCM1K221MNL1GS
	360	12.5×21	0.08	288	0.11	1580	UCM1K361MNL1GS
	390	16×16.5	0.08	312	0.10	1500	UCM1K391MNL1GS
	510	18×16.5	0.08	408	0.098	1670	UCM1K511MNL1GS
	560	16×21.5	0.08	448	0.066	2040	UCM1K561MNL1GS
	750	18×21.5	0.08	600	0.063	2140	UCM1K751MNL1GS
100 (2A)	130	12.5×13.5	0.07	130	0.18	1050	UCM2A131MNL1GS
	220	12.5×21	0.07	220	0.11	1580	UCM2A221MNL1GS
	240	16×16.5	0.07	240	0.10	1500	UCM2A241MNL1GS
	330	18×16.5	0.07	330	0.098	1670	UCM2A331MNL1GS
	390	16×21.5	0.07	390	0.066	2040	UCM2A391MNL1GS
	510	18×21.5	0.07	510	0.063	2140	UCM2A511MNL1GS

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

Mouser Electronics

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