

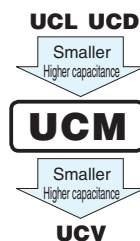
UCM

Chip Type, Low Impedance



Expanded

- 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.

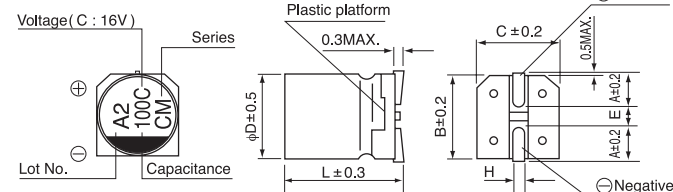


■ Specifications

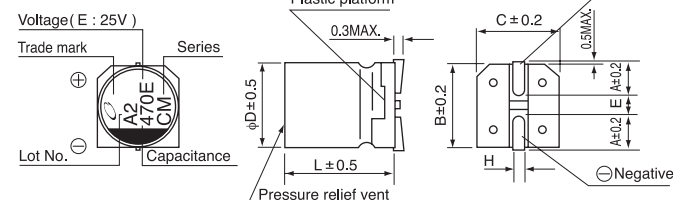
Item	Performance Characteristics										
Category Temperature Range	-55 to +105°C										
Rated Voltage Range	6.3 to 100V										
Rated Capacitance Range	10 to 5100μF										
Capacitance Tolerance	±20% at 120Hz, 20°C										
Leakage Current	After 2 minutes' application of rated voltage at 20°C, 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										
	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	
For capacitance of more than 1000μF, add 0.02 for every increase of 1000μF.(φ12.5 to φ18)											
Stability at Low Temperature	Measurement frequency : 120Hz										
	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	2
		Z-40°C / Z+20°C	3	3	3	3	3	3	3	3	3
Z-55°C / Z+20°C		4	4	4	3	3	3	3	3	3	
Endurance	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.					Capacitance change		Within ±30% of the initial capacitance value			
						tan δ		200% or less than the initial specified value			
						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	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		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			
Marking	Black print on the case top.										

■ Chip Type

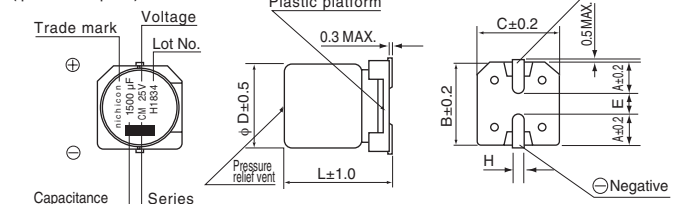
(φ4 to φ6.3)



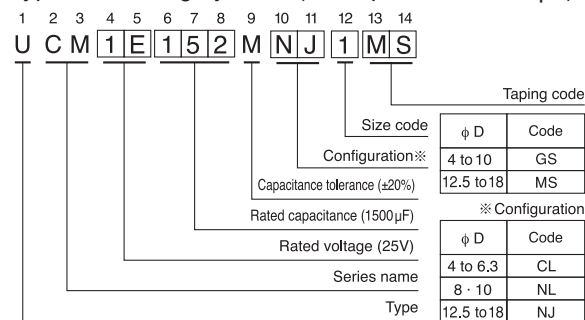
(φ8, φ10)



(φ12.5 to φ18)



Type numbering system (Example : 25V 1500μF)



φD×L	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
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
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
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
E	1	1.3	2.2	2.2	3.1	4.5	3.3	3.3	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
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

Voltage

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

● Dimension table in next page.

UCM

■ Dimensions

Cap. (μ F)	V 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	10□10	0.12	900
470	471	6.3□7.7	0.16	600	6.3□7.7	0.16	600				8□10	0.08	850				12.5□13.5	0.12	1340
560	561													10□10	0.06	1190			
680	681	6.3□7.7	0.16	600				8□10	0.08	850									
750	751																12.5□21	0.08	1970
820	821										10□10	0.06	1190				16□16.5	0.08	1820
910	911													12.5□13.5	0.058	1420			
1000	102				8□10	0.08	850	10□10	0.06	1190									
1100	112																18□16.5	0.078	1980
1200	122																16□21.5	0.05	2440
1500	152	8□10	0.08	850	10□10	0.06	1190				12.5□13.5	0.058	1420						
1600	162													12.5□21	0.046	2080	18□21.5	0.05	2550
1800	182													16□16.5	0.047	1910			
2200	222	10□10	0.06	1190										18□16.5	0.045	2060			
2400	242										12.5□21	0.046	2080						
2700	272										16□16.5	0.047	1910	16□21.5	0.034	2540			
3600	362										18□16.5	0.045	2060	18□21.5	0.032	2640			
3900	392										16□21.5	0.034	2540				Case size $\phi D \square L$ (mm)	Impedance	Rated ripple
5100	512										18□21.5	0.032	2640						

● In this case, [6] will be put at 12th digit of type numbering system.

Cap. (μ F)	V Code	63			80			100		
		1J			1K			2A		
130	131							12.5□13.5	0.18	1050
220	221				12.5□13.5	0.18	1050	12.5□21	0.11	1580
240	241							16□16.5	0.10	1500
330	331							18□16.5	0.098	1670
360	361	12.5□13.5	0.14	1250	12.5□21	0.11	1580			
390	391				16□16.5	0.10	1500	16□21.5	0.066	2040
510	511				18□16.5	0.098	1670	18□21.5	0.063	2140
560	561	12.5□21	0.086	1850	16□21.5	0.066	2040			
620	621	16□16.5	0.082	1740						
750	751				18□21.5	0.063	2140			
820	821	18□16.5	0.08	1880						
910	911	16□21.5	0.055	2330				Case size $\phi D \square L$ (mm)	Impedance	Rated ripple
1200	122	18□21.5	0.054	2430						

MAX. Impedance (Ω) at 20°C 100kHz, 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.