nichicon

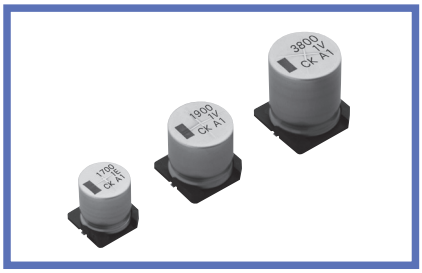
UCK

Chip Type, Low Impedance.

For SMD　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 Qualified. Please contact us for details.

UCM
Smaller
Higher capacitance
UCK



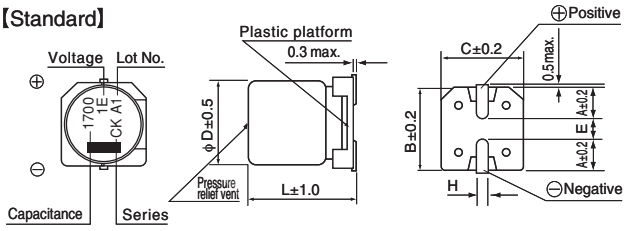
■Specifications

Item	Performance Characteristics
Category Temperature Range	−55 to +105°C
Rated Voltage Range	25 to 35V
Rated Capacitance Range	1100 to 5900μF
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)	Please refer to the values in the dimension table on the next page.
Stability at Low Temperature	Rated voltage (V): 25 / 35 Impedance ratio ZT / Z20 (max.): Z(−25°C) / Z(+20°C): 2 / 2; Z(−40°C) / Z(+20°C): 3 / 3; Z(−55°C) / Z(+20°C): 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 5000 hours 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.

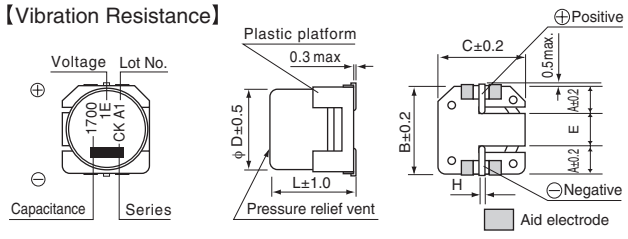
※ I : Leakage Current (μA), C : Rated Capacitance (μF), V : Rated Voltage (V)

■Chip Type ※φ12.5×21L : The vibration structure-resistant product can't support.

【Standard】



【Vibration Resistance】



Type numbering system (Example : 25V 1700μF)

1	2	3	4	5	6	7	8	9	10	11	12	13	14
U	C	K	1	E	1	7	2	M	N	J	1	M	S

Taping code
Size code
Configuration
Capacitance tolerance (±20%)
Rated capacitance (1700μF)
Rated voltage (25V)
Series name
Type

Configuration	Code
Standard	NJ
Vibration Resistance	NS

Standard (mm)

φDXL	12.5×13.5	12.5×21	16×16.5	16×21.5	18×16.5	18×21.5
A	5.15	5.15	5.65	5.65	6.65	6.65
B	13.6	13.6	17.1	17.1	19.1	19.1
C	13.6	13.6	17.1	17.1	19.1	19.1
E	(3.3)	(3.3)	(5.8)	(5.8)	(5.8)	(5.8)
L	13.5	21	16.5	21.5	16.5	21.5
H	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

Vibration Resistance (mm)

φDXL	12.5	16	18
A	4.8	5.4	6.4
B	13.6	17.1	19.1
C	13.6	17.1	19.1
E	(4.0)	(6.3)	(6.3)
L	13.5	16.5, 21.5	16.5, 21.5
H	1.0 to 1.4	1.0 to 1.4	1.0 to 1.4

● 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

● Dimension table in next page.

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■Dimensions

Rated Voltage (V) (code)	Rated Capacitance (μF)	Case Size φD×L (mm)	tan δ	Leakage Current (μA) (at 20℃ after 2 minutes)	Impedance (Ω) max. (20℃/100kHz)	Rated Ripple (mArms) (105℃/100kHz)	Part Number
25 (1E)	1700	12.5×13.5	0.14	425	0.060	1420	UCK1E172M□□1MS
	2600	12.5×21	0.16	650	0.046	2080	UCK1E262M□□1MS
	2900	16×16.5	0.16	725	0.047	1910	UCK1E292M□□1MS
	3800	18×16.5	0.24	950	0.045	2060	UCK1E382M□□1MS
	4500	16×21.5	0.20	1125	0.034	2540	UCK1E452M□□1MS
	5900	18×21.5	0.22	1475	0.032	2640	UCK1E592M□□1MS
35 (1V)	1100	12.5×13.5	0.12	385	0.060	1420	UCK1V112M□□1MS
	1700	12.5×21	0.12	595	0.046	2080	UCK1V172M□□1MS
	1900	16×16.5	0.12	665	0.047	1910	UCK1V192M□□1MS
	2400	18×16.5	0.20	840	0.045	2060	UCK1V242M□□1MS
	2900	16×21.5	0.14	1015	0.034	2540	UCK1V292M□□1MS
	3800	18×21.5	0.16	1330	0.032	2640	UCK1V382M□□1MS

□□ : Enter the appropriate configuration code.

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