THE DATASHEET OF

UCV1V221MCL1GS

ALUMINUM ELECTROLYTIC CAPACITORS

nichicon

UCV

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
UCV

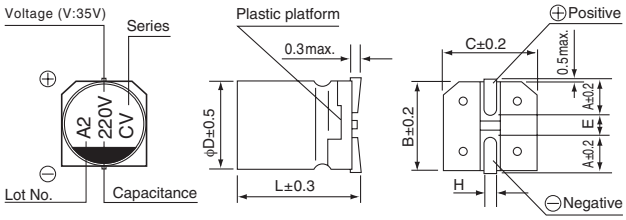
■Specifications

Item	Performance Characteristics
Category Temperature Range	−55 to +105°C
Rated Voltage Range	16 to 35V
Rated Capacitance Range	220 to 1500μF
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 0.01CV (μA).
Tangent of loss angle (tan δ)	Rated voltage (V): 16 / 25 / 35 tan δ (max.): 0.16 / 0.14 / 0.12 Measurement frequency : 120Hz at 20°C
Stability at Low Temperature	Rated voltage (V): 16 / 25 / 35 Impedance ratio ZT / Z20 (max.) Z(−25°C) / Z(+20°C): 2 / 2 / 2 Z(−40°C) / Z(+20°C): 3 / 3 / 3 Z(−55°C) / Z(+20°C): 4 / 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 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.

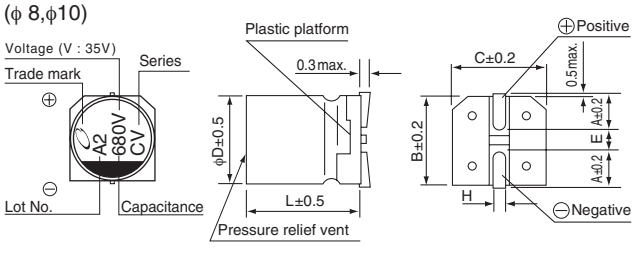
※ I : Leakage Current (μA), C : Rated Capacitance (μF), V : Rated Voltage (V)

■Chip Type

(φ 6.3)



(φ 8,φ10)



Type numbering system (Example : 35V 220μF)

1	2	3	4	5	6	7	8	9	10	11	12	13	14
U	C	V	1	V	2	2	1	M	C	L	1	G	S

- 1 2 3 : Type
- 4 5 : Series name
- 6 7 8 : Rated voltage (35V)
- 9 : Rated capacitance (220μF)
- 10 : Capacitance tolerance (±20%)
- 11 : Configuration
- 12 13 14 : Taping code

φD	Code
6.3	CL
8・10	NL

Voltage

V	16	25	35
Code	C	E	V

Standard (mm)

φDXL	6.3×7.7	8×10	10×10
A	2.4	2.9	3.2
B	6.6	8.3	10.3
C	6.6	8.3	10.3
E	2.2	3.1	4.5
L	7.7	10	10
H	0.5 to 0.8	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

●Dimension table in next page.

UCV

■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
16 (1C)	470	6.3×7.7	0.16	75.2	0.16	600	UCV1C471MCL1GS
	820	8×10	0.16	131.2	0.08	850	UCV1C821MNL1GS
	1500	10×10	0.16	240	0.06	1190	UCV1C152MNL1GS
25 (1E)	330	6.3×7.7	0.14	82.5	0.16	600	UCV1E331MCL1GS
	560	8×10	0.14	140	0.08	850	UCV1E561MNL1GS
	1000	10×10	0.14	250	0.06	1190	UCV1E102MNL1GS
35 (1V)	220	6.3×7.7	0.12	77	0.16	600	UCV1V221MCL1GS
	470	8×10	0.12	164.5	0.08	850	UCV1V471MNL1GS
	680	10×10	0.12	238	0.06	1190	UCV1V681MNL1GS

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

Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

- View UCV1V221MCL1GS on WIN SOURCE
- Nichicon Information

Optimize Your Supply Chain with WIN SOURCE Solutions

- Global Sourcing Solution
- Obsolete Management
- Cost Control Management
- Shortage Management
- Alternative Solution
- Excess Inventory Management