

ALUMINUM ELECTROLYTIC CAPACITORS

nichicon

UCH

Chip Type, High Reliability.
Low temperature ESR specification.



For SMD



Long Life



Anti-Solvent Feature

Expanded

- Added ESR specification after the test at -40°C.
- Applicable to automatic mounting machine fed with carrier tape.
- Compliant to the RoHS directive (2011/65/EU).
- AEC-Q200 compliant. Please contact us for details.

UCH ← Low ESR **UCZ**

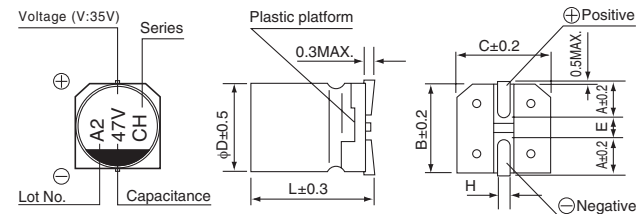


Specifications

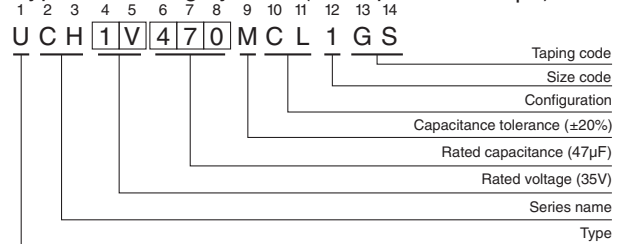
Item	Performance Characteristics										
Category Temperature Range	-40 to +125°C										
Rated Voltage Range	25 to 35V										
Rated Capacitance Range	47 to 560μF										
Capacitance Tolerance	±20% at 120Hz, 20°C										
Leakage Current	After 2 minutes' application of rated voltage at 20°C, leakage current is not more than 0.01CV (μA).										
Tangent of loss angle (tan δ)	<table><tr><td>Rated voltage (V)</td><td>25</td><td>35</td></tr><tr><td>tan δ (MAX.)</td><td>0.18</td><td>0.16</td></tr></table>	Rated voltage (V)	25	35	tan δ (MAX.)	0.18	0.16	Measurement frequency : 120Hz at 20°C			
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Stability at Low Temperature	<table><tr><td>Rated voltage (V)</td><td>25</td><td>35</td></tr><tr><td>Impedance ratio ZT / Z20 (MAX.)</td><td>Z-40°C / Z+20°C</td><td>3</td><td>3</td></tr></table>	Rated voltage (V)	25	35	Impedance ratio ZT / Z20 (MAX.)	Z-40°C / Z+20°C	3	3	Measurement frequency : 120Hz		
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Impedance ratio ZT / Z20 (MAX.)	Z-40°C / Z+20°C	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 2000 hours at 125°C.		<table><tr><td>Capacitance change</td><td>Within ±30% of the initial capacitance value</td></tr><tr><td>tan δ</td><td>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	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 125°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.		<table><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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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

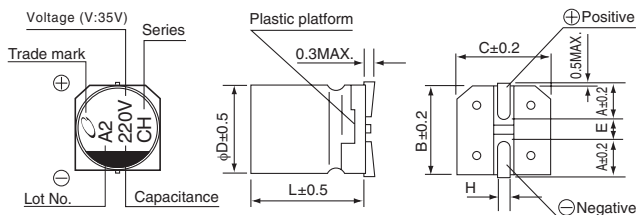
(φ 6.3)



Type numbering system (Example : 35V 47μF)



(φ8, φ10)



Voltage		
V	25	35
Code	E	V

	(mm)		
φD×L	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

Dimensions

V		25					35				
Cap. (μF)	Code	1E					1V				
47	470						6.3 × 7.7	0.30	3	6	197
100	101						6.3 × 7.7	0.30	3	6	197
150	151	6.3 × 7.7	0.30	3	6	197					
220	221						8 × 10	0.20	2	4.5	270
330	331	8 × 10	0.20	2	4.5	270	10 × 10	0.15	1.5	3.5	500
560	561	10 × 10	0.15	1.5	3.5	500					

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

Case size φD × L (mm)	Initial 20°C 100kHz	Initial -40°C 100kHz	after endurance test 2000hours 40°C 400kHz	Rated ripple
	ESR			

Rated ripple Current (mArms) at 125°C 100kHz

CAT.8100H