# ALUMINUM ELECTROLYTIC CAPACITORS

# nichicon



Chip Type, High Reliability. Low temperature ESR specification.



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

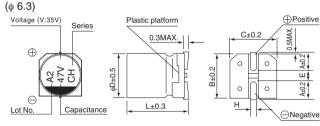




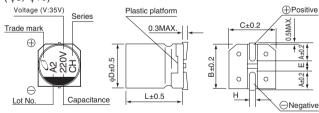
### Specifications

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 $\delta$ )	Rated voltage (V) 25 35   tan δ (MAX.) 0.18 0.16					
Stability at Low Temperature	Rated voltage (V) 25 35   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.Capacitance changeWithin $\pm 30\%$ of the initial capacitance value tan $\delta$ Solution of the initial capacitance valueLeakage currentLess 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. The capacitance change within $\pm 10\%$ of the initial capacitance value tan $\delta$ 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

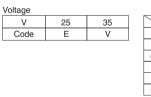






Type numbering system (Example : 35V 47µF) 1 2 3 4 5 6 7 8 9 10 11 12 13 14 UCHIV470MCL1GS





			(mm)
#DXL	6.3×7.7	8×10	10×10
А	2.4	2.9	3.2
В	6.6	8.3	10.3
С	6.6	8.3	10.3
Е	2.2	3.1	4.5
L	7.7	10	10
Н	0.5 to 0.8	0.8 to 1.1	0.8 to 11

#### Dimensions

	V	25					35				
Сар. (µF)	Code	1E					1V				
47	470				1		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		1	1		
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		1	1	· · ·	
			-					Initial	Initial	after I	

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#### • 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

Rated ripple Current (mArms) at 125°C 100kHz • Taping specifications are given in page 23.

20°C 100kHz

-40°C

100kHz

ESR

 $\begin{array}{c} \text{Case size} \\ \phi D \times L \\ (mm) \end{array}$ 

· Recommended land size, soldering by reflow are given in page 18, 19. · Please refer to page 3 for the minimum order quantity.

-40°C 400kHz

Rated

ripple