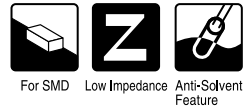


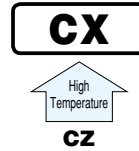
# ALUMINUM ELECTROLYTIC CAPACITORS

**CX** Chip Type, High Reliability  
Low temperature ESR specification  
series



**NEW**

- Chip type, high temperature range, for +135°C use.
- Added ESR specification after the test at -40°C.
- Applicable to automatic mounting machine fed with carrier tape.
- Compliant to the RoHS directive (2002/95/EC).

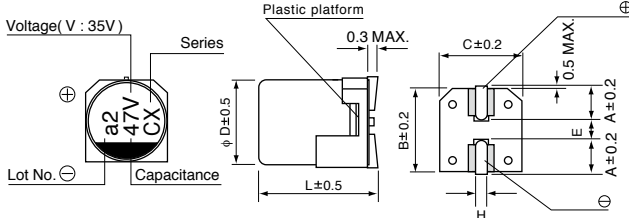


## Specifications

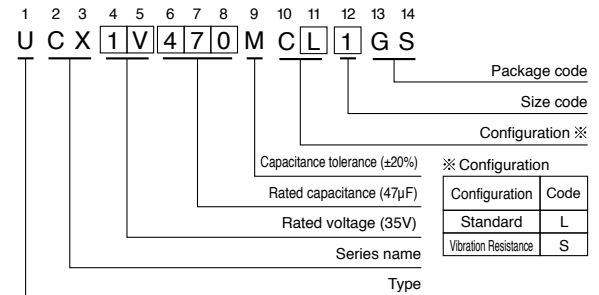
Item	Performance Characteristics						
Category Temperature Range	- 40 to +135°C						
Rated Voltage Range	10 to 35V						
Rated Capacitance Range	47 to 470μF						
Capacitance Tolerance	±20% at 120Hz, 20°C						
Leakage Current	After 2 minutes' application of rated voltage, leakage current is not more than 0.01CV or 3 (μA), whichever is greater.						
Tangent of loss angle (tan δ )	Rated voltage (V)	10	16	25	35	Measurement frequency : 120Hz, Temperature : 20°C	
	tan δ (MAX.)	0.30	0.23	0.18	0.16		
Stability at Low Temperature	Rated voltage (V)		10	16	25	35	Measurement frequency : 120Hz
	Impedance ratio ZT / Z20 (MAX.)	Z-40°C / Z+20°C	12	8	6	4	
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 135°C.					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
Shelf Life	After storing the capacitors under no load at 135°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 shall be kept on the hot plate for 30 seconds, which is maintained to 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.						

## Radial Lead Type

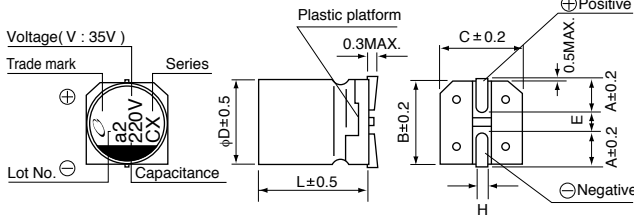
### (φ6.3)【Vibration Resistance】



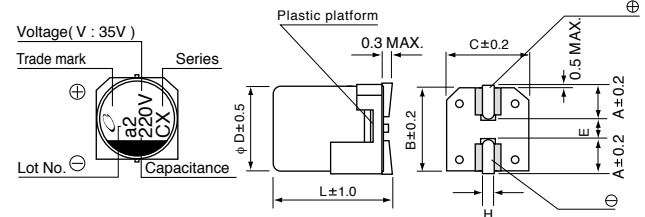
### Type numbering system (Example : 35V 47μF)



### (φ8 to φ10)【Standard】



### (φ8 to φ10)【Vibration Resistance】



### Standard

φDxL	8×10	10×10
A	2.9	3.2
B	8.3	10.3
C	8.3	10.3
E	3.1	4.5
L	10	10
H	0.8 to 1.1	0.8 to 1.1

### Vibration Resistance

φDxL	6.3×10	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	10.8	10	10
H	0.5 to 0.8	1.1 to 1.5	1.1 to 1.5

□ Aid electrode

### Rated Voltage

V	10	16	25	35
Code	A	C	E	V

Design, Specifications are subject to change without notice.

NICHICON CORPORATION

# ALUMINUM ELECTROLYTIC CAPACITORS

**CX** series

## ■Dimensions

(μF) Cap.	V	Code	10				16				25				35								
			1A				1C				1E				1V								
47	470																●6.3×10	0.25	4	15	197		
																	8×10	0.20	3	12	270		
68	680																8×10	0.20	3	12	270		
100	101						●6.3×10	0.25	4	15	197						8×10	0.20	3	12	270		
							8×10	0.20	3	12	270	8×10	0.20	3	12	270	●6.3×10	0.25	4	15	197		
							8×10	0.20	3	12	270	8×10	0.20	3	12	270	8×10	0.20	3	12	270		
220	221		8×10	0.20	3	12	270	8×10	0.20	3	12	270	10×10	0.15	2	12	500	10×10	0.15	2	10	500	
330	331		●8×10	0.20	3	12	270										10×10	0.15	2	10	500		
			10×10	0.15	2	10	500	10×10	0.15	2	10	500	10×10	0.15	2	10	500	Case size	Initial	Initial	After		
			10×10	0.15	2	10	500	10×10	0.15	2	10	500	10×10	0.15	2	10	500	φDXL (mm)	20℃	-40℃	1000hours	Endurance test	Rated ripple
470	471		10×10	0.15	2	10	500	10×10	0.15	2	10	500										ESR	

MAX. ESR (Ω) at 20°C / -40°C 100kHz, Rated ripple current(mArms) at 135°C 100kHz

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

## ●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

Design, Specifications are subject to change without notice.

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<a href="#"><u>UCX1E331MCL1GS</u></a>	<a href="#"><u>UCX1V221MCL1GS</u></a>	<a href="#"><u>UCX1V470MCS6GS</u></a>	<a href="#"><u>UCX1C471MCL1GS</u></a>	<a href="#"><u>UCX1C221MCL1GS</u></a>
<a href="#"><u>UCX1C331MCL1GS</u></a>	<a href="#"><u>UCX1C101MCL1GS</u></a>	<a href="#"><u>UCX1V101MCS6GS</u></a>	<a href="#"><u>UCX1H681MNS1MS</u></a>	<a href="#"><u>UCX1H391MNQ1MS</u></a>
<a href="#"><u>UCX1H102MNS1MS</u></a>	<a href="#"><u>UCX1V222MNS1MS</u></a>	<a href="#"><u>UCX1V152MNS1MS</u></a>	<a href="#"><u>UCX1H561MNQ1MS</u></a>	<a href="#"><u>UCX1H471MNS1MS</u></a>
<a href="#"><u>UCX1E272MNS1MS</u></a>	<a href="#"><u>UCX1H471MNQ1MS</u></a>	<a href="#"><u>UCX1H561MNS1MS</u></a>	<a href="#"><u>UCX1V182MNS1MS</u></a>	<a href="#"><u>UCX1H391MNS1MS</u></a>
<a href="#"><u>UCX1H821MNQ1MS</u></a>	<a href="#"><u>UCX1E332MNQ1MS</u></a>	<a href="#"><u>UCX1V222MNQ1MS</u></a>	<a href="#"><u>UCX1E332MNS1MS</u></a>	<a href="#"><u>UCX1H821MNS1MS</u></a>
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<a href="#"><u>UCX1V182MNQ1MS</u></a>				