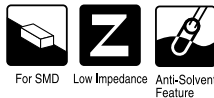


ALUMINUM ELECTROLYTIC CAPACITORS

nichicon

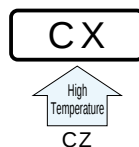
CX

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 (2011/65/EU).

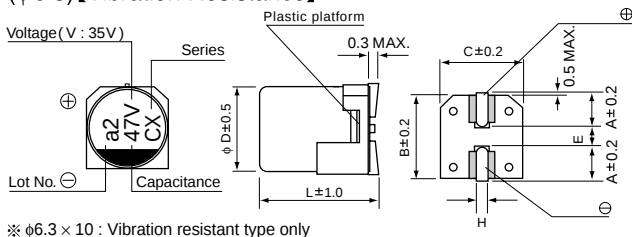


Specifications

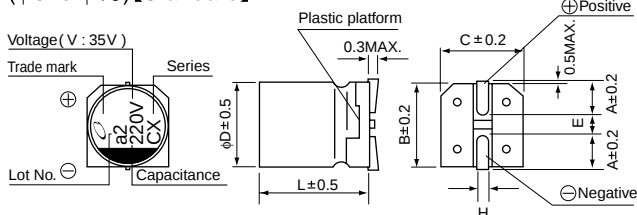
Item	Performance Characteristics							
Category Temperature Range	-40 to +135°C							
Rated Voltage Range	10 to 50V							
Rated Capacitance Range	47 to 3300μF							
Capacitance Tolerance	±20% at 120Hz, 20°C							
Leakage Current	After 2 minutes' application of rated voltage, leakage current is not more than 0.01CV or 3(μA), whichever is greater.							
Tangent of loss angle (tan δ)	Rated voltage (V)	10	16	25	35	50	Measurement frequency : 120Hz at 20°C	
	tan δ (MAX.)	0.30	0.23	0.18	0.16	0.16		
Stability at Low Temperature	Rated voltage (V)		10	16	25	35	50	Measurement frequency : 120Hz
	Impedance ratio ZT / Z20 (MAX.)	Z-40°C / Z+20°C	12	8	6	4	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 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.							

Radial Lead Type

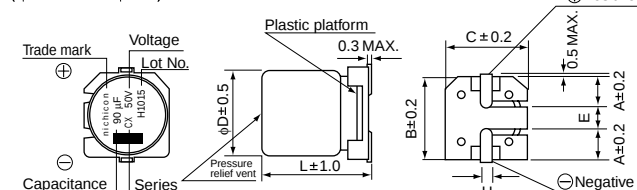
(φ6.3) [Vibration Resistance]



(φ8 to φ10) [Standard]



(φ12.5 to φ18) [Standard]



Standard

φD×L	8×10	10×10	12.5×13.5	16×16.5, 21.5	18×16.5, 21.5
A	2.9	3.2	4.8	5.4	6.4
B	8.3	10.3	13.6	17.1	19.1
C	8.3	10.3	13.6	17.1	19.1
E	3.1	4.5	4	6.3	6.3
L	10	10	13.5	16.5, 21.5	16.5, 21.5
H	0.8 to 1.1	0.8 to 1.1	1.0 to 1.4	1.0 to 1.4	1.0 to 1.4

Vibration Resistance

φD×L	6.3×10	8×10	10×10	12.5×13.5	16×16.5, 21.5	18×16.5, 21.5
A	2.4	2.9	3.2	4.8	5.4	6.4
B	6.6	8.3	10.3	13.6	17.1	19.1
C	6.6	8.3	10.3	13.6	17.1	19.1
E	2.2	3.1	4.5	4	6.3	6.3
L	10.8	10	10	13.5	16.5, 21.5	16.5, 21.5
H	0.5 to 0.8	1.1 to 1.5	1.1 to 1.5	1.0 to 1.4	1.0 to 1.4	1.0 to 1.4

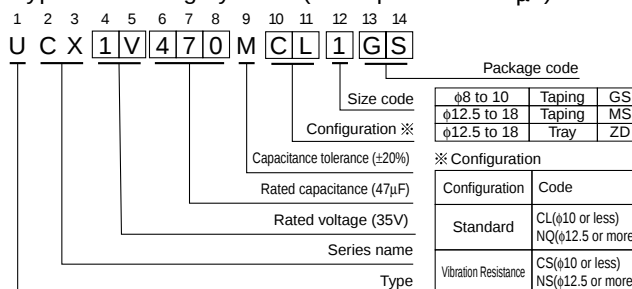
■ Aid electrode

Rated Voltage

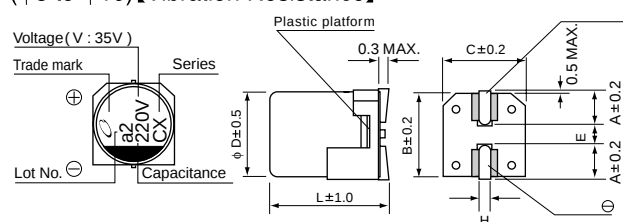
V	10	16	25	35	50
Code	A	C	E	V	H

- Dimension table in next page.

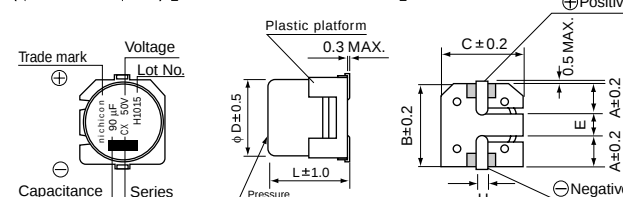
Type numbering system (Example : 35V 47μF)



(φ8 to φ10) [Vibration Resistance]



(φ12.5 to φ18) [Vibration Resistance]



CAT.8100C-1

■ Dimensions

Cap.(μF)	V	10					16					25					35					50				
		Code					1A					1C					1E					1V				
47	470																									
68	680																									
100	101																									
220	221	8 × 10	0.20	3	12	270						8 × 10	0.20	3	12	270	10 × 10	0.15	2	10	500	10 × 10	0.15	2	10	500
330	331	• 8 × 10 10 × 10	0.20 0.15	3 2	12 10	270 500						10 × 10	0.15	2	10	500	10 × 10	0.15	2	10	500					
390	391																									
470	471	10 × 10	0.15	2	10	500						10 × 10	0.15	2	10	500										
560	561																									
680	681																									
820	821																									
1000	102																									
1200	122																									
1500	152																									
1800	182																									
2200	222																									
2700	272																									
3300	332																									

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

- Taping specifications are given in page 23.
- Recommended land size, soldering by reflow are given in page 18, 19.
- Please refer to page 3 for the minimum order quantity.