

ALUMINUM ELECTROLYTIC CAPACITORS

UBC

Chip Type, High Temperature Range, Vibration Resistance



- Highly dependable reliability withstanding load life of 1000 hours at +150°C.
- Suited for automobile electronics where heavy duty services are indispensable.
- Compliant to the RoHS directive (2011/65/EU).

UBC

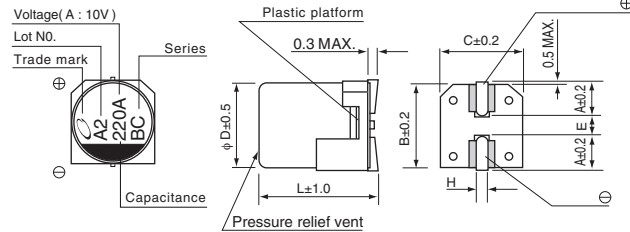


Specifications

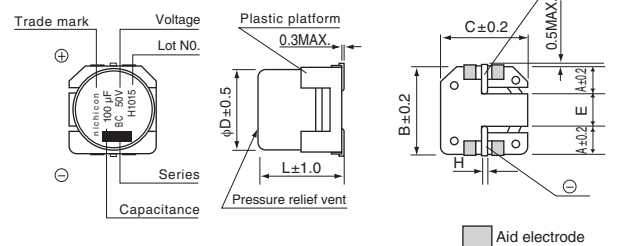
Item	Performance Characteristics												
Category Temperature Range	-40 to +150°C (φ8 to 10), -55 to +150°C (φ 12.5 to 18)												
Rated Voltage Range	10 to 50V												
Rated Capacitance Range	33 to 3300μF												
Capacitance Tolerance	±20% at 120Hz, 20°C												
Leakage Current	After 1 minute's application of rated voltage, leakage current is not more than 0.03CV or 4 (μA), whichever is greater.												
Tangent of loss angle (tan δ)	Rated voltage (V)	10	16	25	35	50	120Hz 20°C						
	tan δ (MAX.)	φ8, φ10	0.26	0.20	0.16	0.14		0.14					
		φ 12.5 to φ 18	0.22	0.18	0.16	0.14		0.12					
For capacitance of more than 1000μF, add 0.02 for every increase of 1000μF.													
Stability at Low Temperature	Rated voltage (V)	10	16	25	35	50	120Hz						
	Impedance ratio Z-40°C / Z+20°C (MAX.)	φ8, φ10	10	8	6	4		4					
		φ 12.5 to φ 18	8	6	4	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 1000 hours at 150°C.						<table border="1"> <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 150°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.												
Marking	Black print on the case top.												

Chip Type

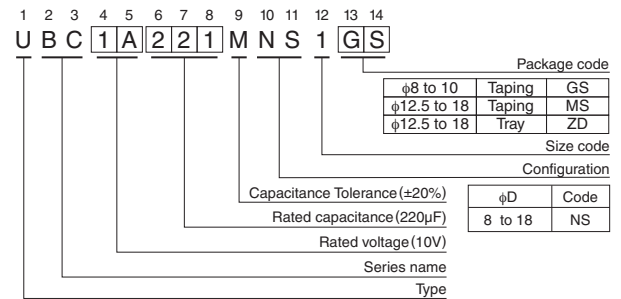
(φ8, φ10)



(φ12.5 to φ18)



Type numbering system (Example : 10V 220μF)



	(mm)				
φD	8	10	12.5	16	18
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	4.0	6.3	6.3
L	10	10	13.5	16.5, 21.5	21.5
H	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

Dimensions

Cap.(μF)	V	10		16		25		35		50	
		Code	1A	1C	1E	1V	1H	Case size φD × L (mm)	Rated ripple		
33	330									8 × 10	70
47	470									10 × 10	100
100	101			8 × 10	110	8 × 10	110	8 × 10	80	10 × 10	120
220	221	8 × 10	110	10 × 10	150	10 × 10	150	12.5 × 13.5	550	16 × 16.5	420
330	331	10 × 10	150			12.5 × 13.5	650	12.5 × 13.5	650	16 × 21.5	550
470	471			12.5 × 13.5	750	12.5 × 13.5	700	16 × 16.5	750	16 × 21.5	650
680	681	12.5 × 13.5	800	12.5 × 13.5	800	16 × 16.5	800	16 × 21.5	950	18 × 21.5	850
1000	102	12.5 × 13.5	900	16 × 16.5	850	16 × 21.5	1000	18 × 21.5	1150		1100
2200	222	18 × 21.5	1350	18 × 21.5	1350						
3300	332	18 × 21.5	1400								

Rated ripple current (mArms) at 150°C 100kHz

Frequency coefficient of rated ripple current

Frequency	120 Hz	300 Hz	1 kHz	10kHz or more
Coefficient	0.67	0.79	0.91	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.

CAT.8100F