

ALUMINUM ELECTROLYTIC CAPACITORS

nichicon

UN

Chip Type, Bi-Polarized, Higher Capacitance Range

series



For SMD



Bi-polarized



Anti-Solvent
Feature

- Chip Type, higher capacitance in larger case sizes ($\phi 12.5$, $\phi 16$, $\phi 18$, $\phi 20$)
- Designed for surface mounting on high density PC board.
- Bi-polarized series for operations over wide temperature range of -55 to $+105^{\circ}\text{C}$.
- Applicable to automatic mounting machine fed with carrier tape and tray.
- Compliant to the RoHS directive (2011/65/EU).

UN

Bi-polarized

UJ

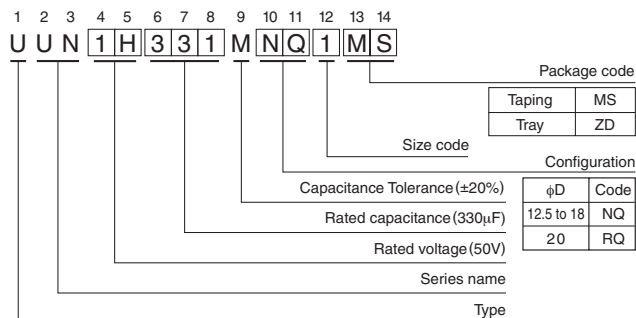
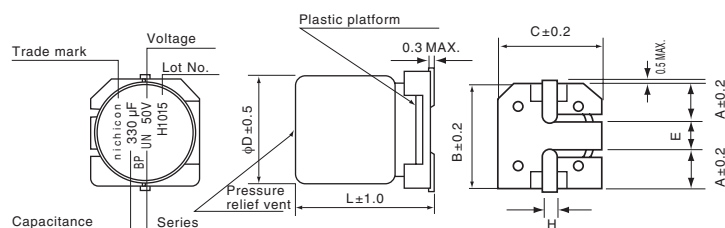


Specifications

Item	Performance Characteristics																		
Category Temperature Range	-55 to +105°C																		
Rated Voltage Range	6.3 to 100V																		
Rated Capacitance Range	22 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)	Measurement frequency : 120Hz at 20°C																		
	Rated voltage (V)	6.3	10	16	25	35	50	63	100										
	tan δ (MAX.)	0.26	0.22	0.18	0.16	0.14	0.12	0.10	0.09										
	For capacitance of more than 1000μF, add 0.02 for every increase of 1000μF.																		
Stability at Low Temperature	Measurement frequency: 120Hz																		
	Rated voltage (V)		6.3	10	16	25	35	50	63	100									
	Impedance ratio ZT / Z20 (MAX.)	Z-25°C / Z+20°C	5	4	3	2	2	2	2	2									
		Z-40°C / Z+20°C	10	8	6	4	3	3	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 105°C with the polarity inverted every 250 hours.																		
											Capacitance change	Within ±20% of the initial capacitance value							
											tan δ	200% 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 105°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

Type numbering system (Example : 50V 330 μF)



(mm)

ϕD	12.5×13.5	12.5×16	16×16.5	16×21.5	18×16.5	18×21.5	20×21.5
A	4.8	4.8	5.4	5.4	6.4	6.4	6.2
B	13.6	13.6	17.1	17.1	19.1	19.1	21.1
C	13.6	13.6	17.1	17.1	19.1	19.1	21.1
E	4.0	4.0	6.3	6.3	6.3	6.3	8.8
L	13.5	16.0	16.5	21.5	16.5	21.5	21.5
H	1.0 to 1.4	1.0 to 1.4	1.0 to 1.4	1.0 to 1.4	1.0 to 1.4	1.0 to 1.4	1.3 to 1.7

※ The vibration structure-resistant product is also available upon request, please ask for details.

● Dimension table in next page.

CAT.8100D

■ Dimensions

V		6.3	10	16	25	35	50	63	100
(μF) Cap.	Code	0J	1A	1C	1E	1V	1H	1J	2A
22	220								12.5 × 13.5 100
33	330								12.5 × 16 150
47	470						12.5 × 13.5 130	12.5 × 13.5 140	16 × 16.5 180
100	101					12.5 × 13.5 180	12.5 × 16 230	16 × 16.5 270	18 × 21.5 310
220	221				12.5 × 13.5 270	16 × 16.5 330	18 × 16.5 400 ▲ 16 × 21.5 400	18 × 21.5 440	
330	331			12.5 × 13.5 310	16 × 16.5 370	18 × 16.5 450 ▲ 16 × 21.5 450	18 × 21.5 540	20 × 21.5 590 ▲ 18 × 21.5 590	
470	471	12.5 × 13.5 270	12.5 × 13.5 340	16 × 16.5 420	16 × 16.5 490	18 × 21.5 590	20 × 21.5 640 ▲ 18 × 21.5 640		
1000	102	12.5 × 16 500	16 × 16.5 600	18 × 16.5 670 ▲ 16 × 21.5 670	18 × 21.5 780				
2200	222	18 × 16.5 740 ▲ 16 × 21.5 740	18 × 21.5 830						
3300	332	18 × 21.5 920							Case size φD × L (mm) Rated ripple

※ In this case, [6] will be put at 12th digit of type numbering system, "▲"

Rated ripple current (mA_{rms}) at 105°C 120Hz

● Frequency coefficient of rated ripple current

Cap.(μF)	Frequency	50 Hz	120 Hz	300 Hz	1 kHz	10 kHz or more
22 to 47		0.75	1.00	1.35	1.57	2.00
100 to 470		0.80	1.00	1.23	1.34	1.50
1000 to 3300		0.85	1.00	1.10	1.13	1.15

- 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.