

# ALUMINUM ELECTROLYTIC CAPACITORS

nichicon

UH series

Chip Type, High Reliability, Higher Capacitance Range



For SMD

Long Life

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.
- Applicable to automatic mounting machine fed with carrier tape and tray.
- Compliant to the RoHS directive (2002/95/EC).

Products which are scheduled to be discontinued.  
Not recommended for new designs

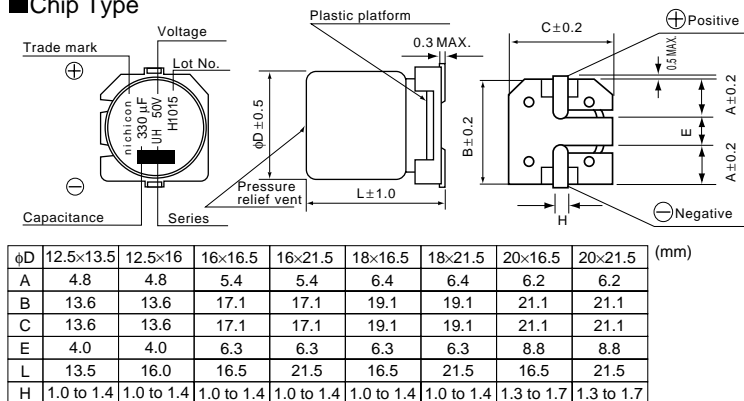
UH



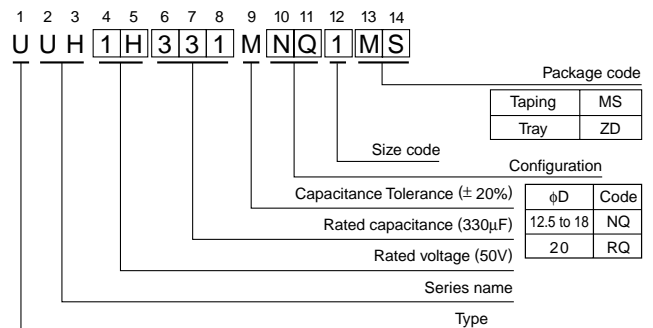
## Specifications

Item	Performance Characteristics						
Category Temperature Range	-55 to +125°C						
Rated Voltage Range	10 to 50V						
Rated Capacitance Range	100 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)	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-25°C / Z+20°C	4	3	2	2	
	ZT / Z20 (MAX.)	Z-40°C / Z+20°C	8	6	4	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 5000 hours at 125°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 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.						
Marking	Black print on the case top.						

## Chip Type



Type numbering system (Example : 50V 330 $\mu$ F)



## Dimensions

(μF) Cap.	V Code	10		16		25		35		50	
		1A		1C		1E		1V		1H	
100	101									12.5 × 13.5	170
220	221							12.5 × 13.5	200	16 × 16.5	250
330	331			12.5 × 13.5	210	12.5 × 13.5	230	16 × 16.5	280	16 × 21.5	340
470	471	12.5 × 13.5	230	12.5 × 13.5	250	16 × 16.5	310	18 × 16.5	380	18 × 21.5	430
1000	102	12.5 × 16	350	16 × 16.5	440	18 × 21.5	540	20 × 21.5	610		
2200	222	18 × 16.5	620	18 × 21.5	710						
3300	332	18 × 21.5	770								
										Case size $\phi D \times L$ (mm)	Rated ripple

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

Rated ripple current (mA rms) at 125°C 120Hz

## Frequency coefficient of rated ripple current

Cap.(μF)	Frequency	50 Hz	120 Hz	300 Hz	1 kHz	10 kHz or more
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.

CAT.8100B