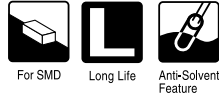


ALUMINUM ELECTROLYTIC CAPACITORS



UH series Chip Type, High Reliability, Higher Capacitance Range



- 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

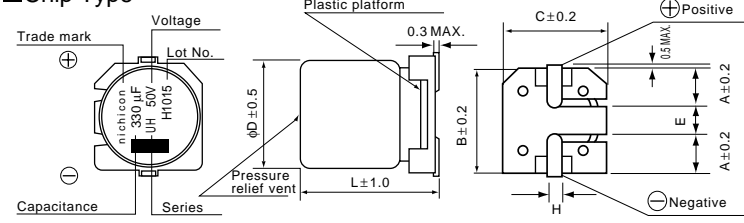
UH



Specifications

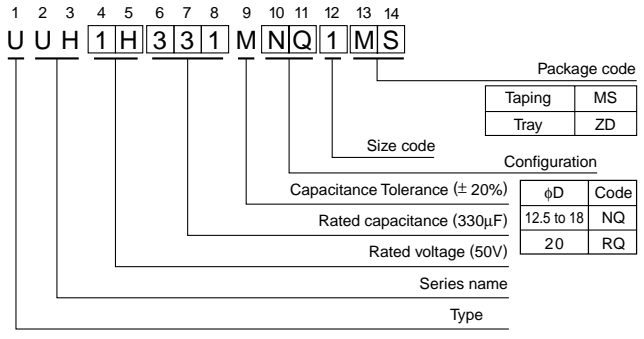
Item	Performance Characteristics							
Category Temperature Range	-55 to +125°C							
Rated Voltage Range	10 to 50V							
Rated Capacitance Range	100 to 3300 μ F							
Capacitance Tolerance	$\pm 20\%$ at 120Hz, 20°C							
Leakage Current	After 1 minute's application of rated voltage, leakage current is not more than 0.03CV or 4 (μ A), 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 1000 μ F, add 0.02 for every increase of 1000 μ F.								
Stability at Low Temperature	Rated voltage (V)	10	16	25	35	50	120Hz	
	Impedance ratio ZT / Z20 (MAX.)	Z-25°C / Z+20°C	4	3	2	2		2
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 $\pm 30\%$ 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



ϕD	12.5x13.5	12.5x16	16x16.5	16x21.5	18x16.5	18x21.5	20x16.5	20x21.5	(mm)
A	4.8	4.8	5.4	5.4	6.4	6.4	6.2	6.2	
B	13.6	13.6	17.1	17.1	19.1	19.1	21.1	21.1	
C	13.6	13.6	17.1	17.1	19.1	19.1	21.1	21.1	
E	4.0	4.0	6.3	6.3	6.3	6.3	8.8	8.8	
L	13.5	16.0	16.5	21.5	16.5	21.5	16.5	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	1.3 to 1.7	

Type numbering system (Example : 50V 330 μ F)



Dimensions

Cap. (μ F)	Code	10		16		25		35		50	
		1A		1C		1E		1V		1H	
100	101									12.5 x 13.5	170
220	221							12.5 x 13.5	200	16 x 16.5	250
330	331			12.5 x 13.5	210	12.5 x 13.5	230	16 x 16.5	280	16 x 21.5	340
470	471	12.5 x 13.5	230	12.5 x 13.5	250	16 x 16.5	310	18 x 16.5	380	18 x 21.5	430
1000	102	12.5 x 16	350	16 x 16.5	440	18 x 21.5	540	16 x 21.5	380		
2200	222	18 x 16.5	620	18 x 21.5	710	20 x 16.5	540	20 x 21.5	610		
3300	332	18 x 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 (mArms) at 125°C 120Hz

Frequency coefficient of rated ripple current

Cap. (μ F)	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