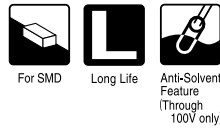


ALUMINUM ELECTROLYTIC CAPACITORS

nichicon



Chip Type, Higher Capacitance Range

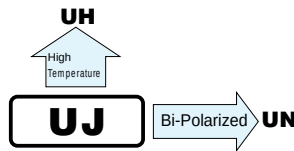


For SMD

Long Life

Anti-Solvent
Feature
(Through
100V only)

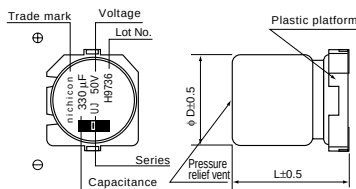
- Chip Type, higher capacitance in larger case sizes (φ12.5, φ16, φ18, φ20)
- Designed for surface mounting on high density PC board.
- Applicable to automatic mounting machine using carrier tape and tray.



Specifications

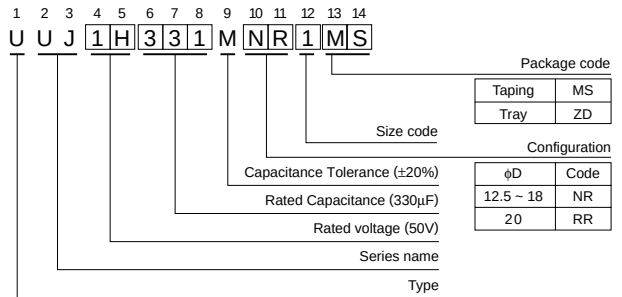
Item	Performance Characteristics													
Category Temperature Range	-55 ~ +105°C (6.3 ~ 100V), -40 ~ +105°C (160 ~ 450V)													
Rated Voltage Range	6.3~450V													
Rated Capacitance Range	3.3~6800μF													
Capacitance Tolerance	±20% at 120Hz, 20°C													
Leakage Current	Rated voltage (V)			6.3 ~ 100						160~450				
	—			After 1 minutes' application of rated voltage, leakage current is not more than 0.03CV or 4 (μA), whichever is greater.						I = 0.04CV+100 (μA) max.(1 minute's)				
tan δ	Rated voltage (V)			6.3	10	16	25	35	50	63	100	160 ~ 250	400 · 450	120Hz
	tan δ (MAX)			0.26	0.22	0.18	0.16	0.14	0.12	0.10	0.08	0.15	0.20	20°C
	For capacitance of more than 1000μF, add 0.02 for every increase of 1000μF.													
Stability at Low Temperature	Rated voltage (V)			6.3	10	16	25	35	50	63	100	160 ~ 250	400 · 450	120Hz
	Impedance ratio Z-25°C / Z+20°C			5	4	3	2	2	2	2	3	6		
	ZT / Z20 (MAX.) Z-40°C / Z+20°C			10	8	6	4	3	3	3	3	6	10	
Endurance	After 5000 hours' application of rated voltage at 105°C, capacitors meet the characteristic requirements listed at right.								Leakage current		Initial specified value or less			
									Capacitance change		Within ±20% of initial value			
									tan δ		200% or less of initial specified value			
Shelf Life	After leaving capacitors under no load at 105°C for 1000 hours, they meet the specified value for endurance characteristics listed above.													
Marking	Black print on the case top.													

Chip Type



	B±0.2	A±0.2	E	C±0.2
	B±0.2	A±0.2	H±0.1	
φD	12.5	16	18	20
A	4.0	4.5	5.0	5.0
B	13.6	17.1	19.1	21.1
C	16.0	19.5	21.5	23.5
E	8.0	10.5	11.5	13.5
H	2.5	3.75	3.75	3.75

Type numbering system (Example : 50V 330μF)



Dimensions

V (μF) Cap.		Code	6.3		10		16		25		35		50	
			0J		1A		1C		1E		1V		1H	
220	221										12.5 × 13.5	280	12.5 × 16	320
330	331								12.5 × 13.5	320	12.5 × 16	360	● 16 × 16.5	440
470	471						12.5 × 13.5	360	12.5 × 16	400	● 16 × 16.5	490	△ 18 × 16.5	550
1000	102	12.5 × 13.5	440	12.5 × 16	500	● 16 × 16.5	630	△ 18 × 16.5	700	△ 18 × 16.5	750	18 × 21.5	820	
2200	222	● 16 × 16.5	750	● 16 × 16.5	810	△ 18 × 16.5	930	18 × 21.5	1050	20 × 21.5	1150			
3300	332	△ 18 × 16.5	930	△ 18 × 16.5	1000	18 × 21.5	1150							
4700	472	★ 18 × 21.5	1100	18 × 21.5	1200									
6800	682	20 × 21.5	1350	20 × 21.5	1450									

V (μF) Cap. Code		63		100		160		200		250		400		450	
		1J		2A		2C		2D		2E		2G		2W	
3.3	3R3													12.5 × 13.5	40
4.7	4R7									12.5 × 13.5	65	12.5 × 16	50	12.5 × 16	50
10	100							12.5 × 13.5	80	12.5 × 16	105	16 × 16.5	85	16 × 16.5	85
22	220							12.5 × 16	105	● 16 × 16.5	180	18 × 21.5	130	18 × 21.5	130
33	330					12.5 × 13.5	95	● 16 × 16.5	220	△ 18 × 16.5	230	20 × 21.5	160	20 × 21.5	160
47	470			12.5 × 13.5	160	● 16 × 16.5	260	△ 18 × 16.5	270	★ 18 × 21.5	280				
68	680	12.5 × 13.5	175	12.5 × 16	205	△ 18 × 16.5	320	★ 18 × 21.5	330	20 × 21.5	340				
100	101	12.5 × 16	225	● 16 × 16.5	285	★ 16 × 21.5	380	20 × 21.5	410						
220	221	● 16 × 16.5	385	△ 18 × 16.5	440										
330	331	△ 18 × 16.5	490	20 × 21.5	500										
470	471	18 × 21.5	590											Case size	Rated Ripple

Size φ12.5 × 21 is available for capacitors marked, "●". Size φ16 × 21.5L is available for capacitors marked, "△". Size φ20 × 16.5L is available for capacitors marked, "★".

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

Rated Ripple (mA rms) at 105°C 120Hz

Frequency coefficient of rated ripple current

V	Cap. (μF)	Frequency	50Hz	120Hz	300Hz	1kHz	10kHz~
6.3 ~ 100	~ 68		0.75	1.00	1.35	1.57	2.00
		100 ~ 470	0.80	1.00	1.23	1.34	1.50
		1000 ~ 6800	0.85	1.00	1.10	1.13	1.15
160 ~ 450	3.3 ~ 100		0.80	1.00	1.25	1.40	1.60

- Taping specifications are given in page 22.
- Recommended land size are given in page 23
- Please refer to page 3 for the minimum order quantity.

CAT.8100T