



Chip Type, Higher Capacitance Range



For SMD



Long Life

Anti-Solvent
Feature

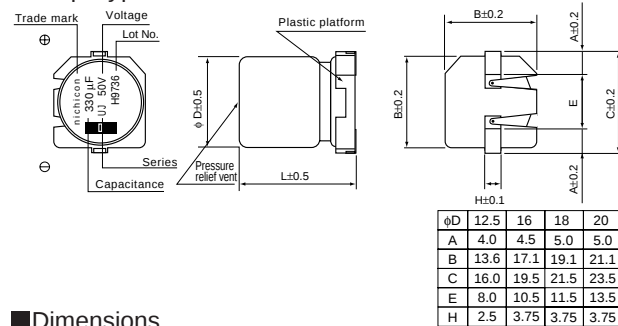
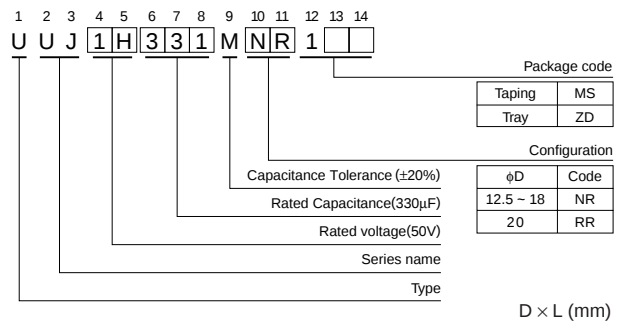
- Chip Type, higher capacitance in larger case sizes ($\phi 12.5, \phi 16, \phi 18, \phi 20$)
- Designed for surface mounting on high density PC board.
- Applicable to automatic mounting machine using carrier tape and tray.



Specifications

Item	Performance Characteristics												
Category Temperature Range	— 55 ~ +105℃ (6.3 ~ 100V),— 40 + ~ 105℃ (160 ~ 450V)												
Rated Voltage Range	6.3 ~ 450V												
Rated Capacitance Range	3.3 ~ 6800μF												
Capacitance Tolerance	±20% at 120Hz, 20℃												
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℃
	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℃/Z+20℃	5	4	3	2	2	2	2	2	3	6	
	ZT/Z20(MAX.)	Z — 40℃/Z+20℃	10	8	6	4	3	3	3	3	6	10	
Endurance	After 5000 hours' application of rated voltage at 105℃, capacitors meet the characteristics 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℃ for 1000 hours, they meet the specified value for endurance characteristics listed above.												
Marking	Black print on the case top.												

Chip Type

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

Dimensions

V	6.3	10	16	25	35	50
(μ F) Cap.	0J	1A	1C	1E	1V	1H
220	221				12.5 × 13.5	12.5 × 16
330	331			12.5 × 13.5	12.5 × 16	16 × 16.5
470	471		12.5 × 13.5	12.5 × 16	16 × 16.5	18 × 16.5
1000	102	12.5 × 13.5	12.5 × 16	16 × 16.5	18 × 16.5	18 × 21.5
2200	222	16 × 16.5	16 × 16.5	18 × 16.5	20 × 21.5	
3300	332	18 × 16.5	18 × 16.5	18 × 21.5		
4700	472	18 × 21.5	18 × 21.5			
6800	682	20 × 21.5	20 × 21.5			

V	63	100	160	200	250	400	450
(μ F) Cap.	1J	2A	2C	2D	2E	2G	2W
3.3	3R3						12.5 × 13.5
4.7	4R7						12.5 × 16
10	100			12.5 × 13.5	12.5 × 16	12.5 × 16	16 × 16.5
22	220			12.5 × 16	16 × 16.5	18 × 21.5	18 × 21.5
33	330		12.5 × 13.5	16 × 16.5	18 × 16.5	20 × 21.5	20 × 21.5
47	470	12.5 × 13.5	16 × 16.5	18 × 16.5	20 × 21.5		
68	680	12.5 × 13.5	12.5 × 16	18 × 16.5	20 × 21.5		
100	101	12.5 × 16	16 × 16.5	18 × 21.5	20 × 21.5		
220	221	16 × 16.5	18 × 16.5				
330	331	18 × 16.5	20 × 21.5				
470	471	18 × 21.5					

Size $\phi 12.5 \times 21$ is available for capacitors marked, "•". Size $\phi 16 \times 21.5L$ is available for capacitors marked, "△". Size $\phi 20 \times 16.5L$ 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. (μ F)	Frequency	50Hz	120Hz	300Hz	1kHz	10kHz ~
6.3 ~ 100	~ 68	~ 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 21.

Please refer to page 3 for the minimum order quantity.

CAT.8100P