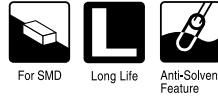


UJ series

Chip Type, Higher Capacitance Range



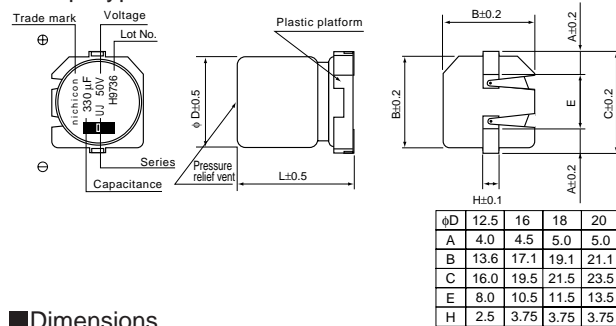
- Chip Type, higher capacitance in larger case sizes ($\phi 12.5, \phi 16, \phi 18, \phi 20$)
- Designed for surface mounting on high density PC board.
- Applicable to automatic mounting machine using carrier tape and tray.



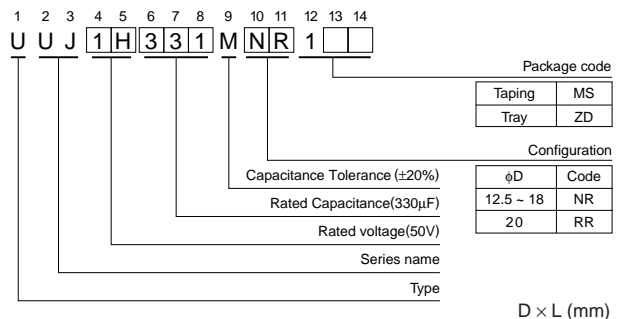
Specifications

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 ~ 6800 μ F												
Capacitance Tolerance	$\pm 20\%$ 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(μ A), whichever is greater. I = 0.04CV+100 (μ A)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 1000 μ F, add 0.02 for every increase of 1000 μ F.													
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	6	10		
Endurance	After 5000 hours' application of rated voltage at 105°C, capacitors meet the characteristics requirements listed at right.												
	Leakage current	Initial specified value or less											
	Capacitance change	Within $\pm 20\%$ of initial 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.											
		tan δ										200% or less of initial specified value	

Chip Type



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



Dimensions

V (V)	6.3	10	16	25	35	50
(μ F) Cap. Code	0J	1A	1C	1E	1V	1H
220	221					12.5 × 16 320
330	331			12.5 × 13.5 360	12.5 × 16 360	● 16 × 16.5 440
470	471			12.5 × 13.5 400	● 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
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 (V)	63	100	160	200	250	400	450
(μ F) Cap. Code	1J	2A	2C	2D	2E	2G	2W
3.3	3R3						12.5 × 13.5 40
4.7	4R7						12.5 × 16 50
10	100			12.5 × 13.5 80	12.5 × 16 105	12.5 × 16 50	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
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 $\phi 12.5 \times 21$ 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, "★".

Rated Ripple (mA rms) at 105°C 120Hz

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

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.