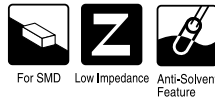
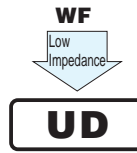


ALUMINUM ELECTROLYTIC CAPACITORS

UD series Chip Type, Low Impedance



- Chip type, low impedance temperature range up to +105°C.
- Designed for surface mounting on high density PC board.
- Applicable to automatic mounting machine using carrier tape.

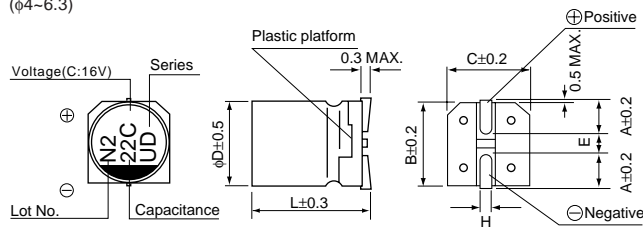


Specifications

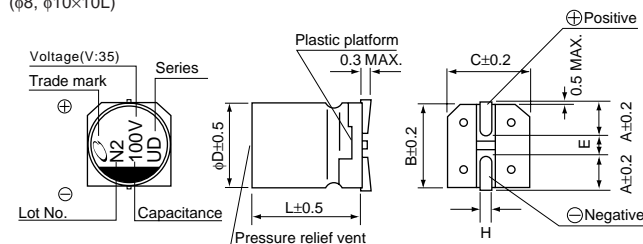
Item	Performance Characteristics																						
Category Temperature Range	—55~+105°C																						
Rated Voltage Range	6.3~50V																						
Rated Capacitance Range	1~1500μF																						
Capacitance Tolerance	±20% at 120Hz, 20°C																						
Leakage Current	After 2 minutes' application of rated voltage, leakage current is not more than 0.01 CV or 3 (μA), whichever is greater.																						
tan δ	Measurement frequency : 120Hz, Temperature : 20°C																						
	<table border="1"> <tr> <td>Rated voltage(V)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>() is φ8 over</td> </tr> <tr> <td>tan δ(MAX.)</td> <td>0.24(0.28)</td> <td>0.20(0.24)</td> <td>0.16(0.20)</td> <td>0.14(0.16)</td> <td>0.12(0.14)</td> <td>0.12(0.14)</td> <td></td> </tr> </table>	Rated voltage(V)	6.3	10	16	25	35	50	() is φ8 over	tan δ(MAX.)	0.24(0.28)	0.20(0.24)	0.16(0.20)	0.14(0.16)	0.12(0.14)	0.12(0.14)							
Rated voltage(V)	6.3	10	16	25	35	50	() is φ8 over																
tan δ(MAX.)	0.24(0.28)	0.20(0.24)	0.16(0.20)	0.14(0.16)	0.12(0.14)	0.12(0.14)																	
Stability at Low Temperature	Measurement frequency : 120Hz																						
	<table border="1"> <tr> <td colspan="2">Rated voltage(V)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> </tr> <tr> <td rowspan="2">Impedance ratio Z/Z20(MAX.)</td> <td>Z—25°C/Z+20°C</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z—55°C/Z+20°C</td> <td>5</td> <td>4</td> <td>4</td> <td>3</td> <td>3</td> <td>3</td> </tr> </table>	Rated voltage(V)		6.3	10	16	25	35	50	Impedance ratio Z/Z20(MAX.)	Z—25°C/Z+20°C	3	2	2	2	2	2	Z—55°C/Z+20°C	5	4	4	3	3
Rated voltage(V)		6.3	10	16	25	35	50																
Impedance ratio Z/Z20(MAX.)	Z—25°C/Z+20°C	3	2	2	2	2	2																
	Z—55°C/Z+20°C	5	4	4	3	3	3																
Endurance	After 1000 hours' application of rated voltage at 105°C, capacitors meet the characteristic requirements listed at right.																						
	Capacitance change	Within ±25% 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.																						
	Capacitance change	Within ±10% of initial value																					
	tan δ	Initial specified value or less																					
Resistance to soldering heat	The capacitors shall be kept on the hot plate maintained at 250°C for 30 seconds. After removing from the hot plate and restored at room temperature, they meet the characteristic requirements listed at right.																						
	Leakage current	Initial specified value or less																					
	Marking	Black print on the case top.																					

Chip Type

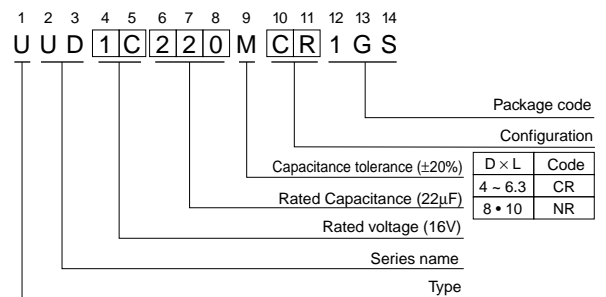
(φ4~6.3)



(φ8, φ10×10L)



Type numbering system (Example : 16V 22μF)



	(mm)					
	4 × 5.8	5 × 5.8	6.3 × 5.8	6.3 × 7.7	8 × 10	10 × 10
A	1.8	2.1	2.4	2.4	2.9	3.2
B	4.3	5.3	6.6	6.6	8.3	10.3
C	4.3	5.3	6.6	6.6	8.3	10.3
E	1.0	1.3	2.2	2.2	3.1	4.5
L	5.8	5.8	5.8	7.7	10	10
H	0.5 - 0.8	0.5 - 0.8	0.5 - 0.8	0.5 - 0.8	0.8 - 1.1	0.8 - 1.1

Voltage

V	6.3	10	16	25	35	50
Code	j	A	C	E	V	H

■ Dimension table in next page.



■ Dimensions

Cap. (μ F)	V Code	6.3			10			16			25			35			50		
		0J			1A			1C			1E			1V			1H		
1	010																4×5.8	5.00	30
2.2	2R2																4×5.8	5.00	30
3.3	3R3																4×5.8	5.00	30
4.7	4R7																4×5.8	1.80	80
10	100											4×5.8	1.80	80			5×5.8	0.76	150
15	150									4×5.8	1.80	80					5×5.8	0.76	150
22	220				4×5.8	1.80	80			5×5.8	0.76	150					5×5.8	0.76	150
27	270	4×5.8	1.80	80						5×5.8	0.76	150					6.3×5.8	0.44	230
33	330	5×5.8	0.76	150						6.3×5.8	0.44	230					6.3×5.8	0.44	230
47	470	5×5.8	0.76	150	6.3×5.8	0.44	230			6.3×5.8	0.44	230					6.3×5.8	0.44	230
56	560	5×5.8	0.76	150	6.3×5.8	0.44	230			6.3×5.8	0.44	230					6.3×5.8	0.44	230
68	680	6.3×5.8	0.44	230						6.3×5.8	0.44	230					6.3×5.8	0.44	230
100	101	6.3×5.8	0.44	230	6.3×5.8	0.44	230			6.3×5.8	0.44	230					6.3×7.7	0.34	280
150	151	6.3×5.8	0.44	230	6.3×5.8	0.44	230			6.3×7.7	0.34	280					6.3×7.7	0.34	280
220	221	6.3×5.8	0.44	230	6.3×7.7	0.34	280			6.3×7.7	0.34	280					8×10	0.17	450
330	331	6.3×7.7	0.34	280						8×10	0.17	450					8×10	0.17	450
470	471	8×10	0.17	450						8×10	0.17	450					10×10	0.09	670
680	681	8×10	0.17	450	10×10	0.09	670			10×10	0.09	670							
1000	102	8×10	0.17	450	10×10	0.09	670												
1500	152	10×10	0.09	670															

Max. impedance (Ω) at 20°C 100kHz, Rated Ripple(mA rms)at 105°C 100kHz

■ Frequency coefficient of rated ripple current

Frequency	50 Hz	120 Hz	300 Hz	1 kHz	10 kHz~
Coefficient	0.35	0.50	0.64	0.83	1.00

■ Taping Specifications are given in page 21.

Please refer to page 3 for the minimum order quantity.