

# ALUMINUM ELECTROLYTIC CAPACITORS

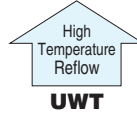
# UWZ

Chip Type, Wide Temperature Range  
High Temperature (260°C) Reflow



- Corresponding with 260°C peak reflow soldering  
Recommended reflow condition : 260°C peak 5 sec 230°C over 60 sec 2 times  
(φ8 × 6.2, φ10 × 10 : 1 time)
- Chip type operating over wide temperature range of to -55 to +105°C.
- Applicable to automatic mounting machine fed with carrier tape.
- Compliant to the RoHS directive (2011/65/EU).

## UWZ

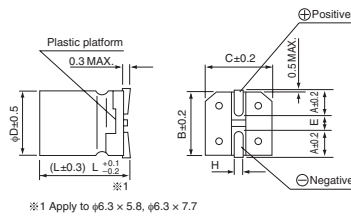
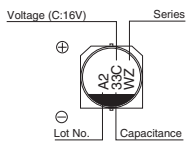


## Specifications

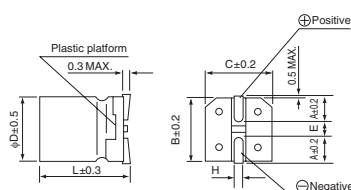
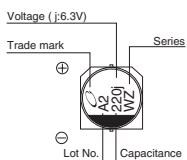
Item	Performance Characteristics						
Category Temperature Range	-55 to +105°C						
Rated Voltage Range	6.3 to 50V						
Rated Capacitance Range	1 to 1500μF						
Capacitance Tolerance	±20% at 120Hz, 20°C						
Leakage Current	After 2 minutes' application of rated voltage at 20°C, leakage current is not more than 0.01CV or 3 (μA), whichever is greater.						
Tangent of loss angle (tan δ)	Measurement frequency : 120Hz at 20°C						
	Rated voltage (V)	6.3	10	16	25	35	50
	tan δ (MAX.)	0.30	0.24	0.20	0.16	0.14	0.14
Stability at Low Temperature	Measurement frequency : 120Hz						
	Rated voltage (V)	6.3	10	16	25	35	50
	Impedance ratio	Z-25°C / Z+20°C	4	3	2	2	2
	ZT / Z20 (MAX.)	Z-40°C / Z+20°C	8	8	4	4	3
Endurance	The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 1000 hours at 105°C.		Capacitance change	Within ±25% of the initial capacitance value for capacitors of 16V or less. Within ±20% of the initial capacitance value for capacitors of 25V or more.			
			tan δ	200% 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 105°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.						
Resistance to soldering heat	The capacitors are kept on a hot plate for 30 seconds, which is maintained at 250°C. The capacitors shall meet the characteristic requirements listed at right when they are removed from the plate and restored to 20°C.		Capacitance change	Within ±10% of the initial capacitance value			
			tan δ	Less than or equal to the initial specified value			
			Leakage current	Less than or equal to the initial specified value			
Marking	Black print on the case top.						

## Chip Type

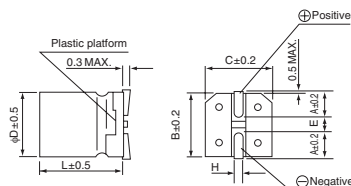
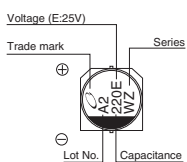
(φ4 to φ6.3)



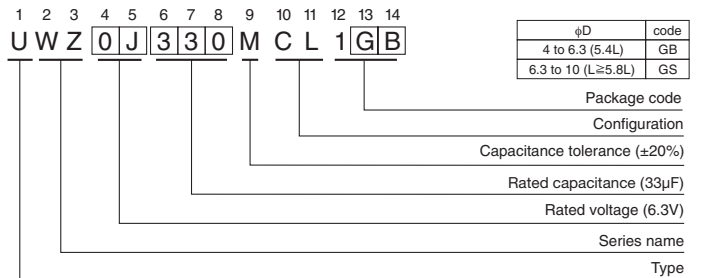
(φ8 × 6.2)



(φ8 × 10, φ10 × 10)



## Type numbering system (Example : 6.3V 33μF)



	(mm)							
φD × L	4 × 5.4	5 × 5.4	6.3 × 5.4	6.3 × 5.8	6.3 × 7.7	8 × 6.2	8 × 10	10 × 10
A	1.8	2.1	2.4	2.4	2.4	3.3	2.9	3.2
B	4.3	5.3	6.6	6.6	6.6	8.3	8.3	10.3
C	4.3	5.3	6.6	6.6	6.6	8.3	8.3	10.3
E	1.0	1.3	2.2	2.2	2.2	2.3	3.1	4.5
L	5.4	5.4	5.4	5.8	7.7	6.2	10	10
H	0.5 to 0.8	0.5 to 0.8	0.5 to 0.8	0.5 to 0.8	0.5 to 0.8	0.5 to 0.8	0.8 to 1.1	0.8 to 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. (μF)	V Code	6.3		10		16		25		35		50	
		0J		1A		1C		1E		1V		1H	
1	010											4 × 5.4	6.3
2.2	2R2											4 × 5.4	11
3.3	3R3											4 × 5.4	14
4.7	4R7							4 × 5.4	13	4 × 5.4	15	5 × 5.4	19
10	100					4 × 5.4	18	5 × 5.4	23	5 × 5.4	25	6.3 × 5.4	30
22	220	4 × 5.4	22	5 × 5.4	27	5 × 5.4	30	6.3 × 5.4	38	6.3 × 5.4	42	8 × 6.2	51
33	330	5 × 5.4	30	5 × 5.4	35	6.3 × 5.4	40	6.3 × 5.4	48	8 × 6.2	59	6.3 × 7.7	60
47	470	5 × 5.4	36	6.3 × 5.4	46	6.3 × 5.4	50	8 × 6.2	66	6.3 × 5.8	63	6.3 × 7.7	63
100	101	6.3 × 5.4	60	6.3 × 5.4	60	6.3 × 5.4	60	6.3 × 7.7	91	6.3 × 7.7	84	8 × 10	140
150	151	6.3 × 5.8	86	6.3 × 5.8	86	6.3 × 7.7	95	8 × 10	140	8 × 10	155	10 × 10	180
220	221	8 × 6.2	102	6.3 × 7.7	105	6.3 × 7.7	105	8 × 10	155	10 × 10	190	10 × 10	220
330	331	6.3 × 7.7	105	8 × 10	195	8 × 10	195	10 × 10	190	10 × 10	300		
470	471	8 × 10	210	8 × 10	210	8 × 10	210	10 × 10	300				
680	681	8 × 10	210	10 × 10	310	10 × 10	310						
1000	102	10 × 10	230	10 × 10	310								
1500	152	10 × 10	310										
												Case size φ D × L (mm)	Rated ripple

Rated ripple current (mA<sub>rms</sub>) at 105°C 120Hz

## ● Frequency coefficient of rated ripple current

Frequency	50 Hz	120 Hz	300 Hz	1 kHz	10 kHz or more
Coefficient	0.70	1.00	1.17	1.36	1.50

- 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.