

ALUMINUM ELECTROLYTIC CAPACITORS

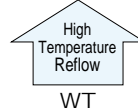


WZ Chip Type, Wide Temperature Range
High Temperature (260°C) Reflow
series



- Corresponding with 260°C peak reflow soldering
Recommended reflow condition : 260°C peak 5 sec 230°C over 60 sec 2 times
($\phi 8 \times 6.2$, $\phi 10 \times 10$: 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 (2002/95/EC).

WZ

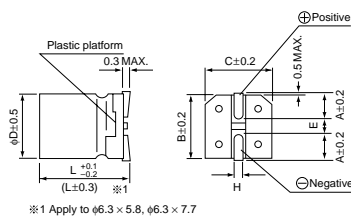
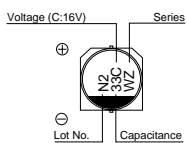


Specifications

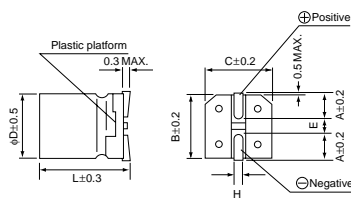
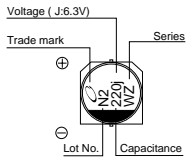
Item	Performance Characteristics							
Category Temperature Range	-55 to +105°C							
Rated Voltage Range	6.3 to 50V							
Rated Capacitance Range	0.1 to 1500 μ F							
Capacitance Tolerance	$\pm 20\%$ at 120Hz, 20°C							
Leakage Current	After 2 minutes' application of rated voltage, leakage current is not more than 0.01CV or 3 (μ A) , whichever is greater.							
Tangent of loss angle (tan δ)	Measurement frequency : 120Hz, Temperature : 20°C							
	Rated voltage (V)	6.3	10	16	25	35	50	
Stability at Low Temperature	Measurement frequency : 120Hz							
	Impedance ratio ZT / Z20 (MAX.)	Z-25°C / Z+20°C		4	3	2	2	2
		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 $\pm 25\%$ of the initial capacitance value for capacitors of 16V or less. Within $\pm 20\%$ 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 $\pm 10\%$ 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

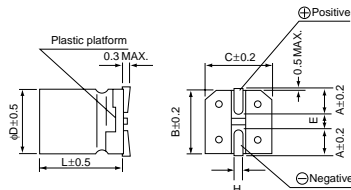
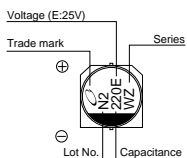
($\phi 4$ to $\phi 6.3$)



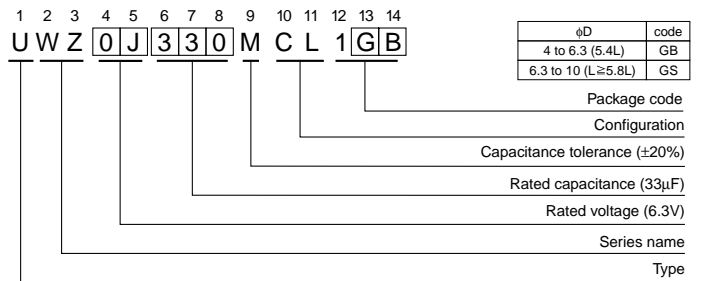
($\phi 8 \times 6.2$)



($\phi 8 \times 10$, $\phi 10 \times 10$)



Type numbering system (Example : 6.3V 33 μ F)



	(mm)							
$\phi D \times L$	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	5.4	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	
0.1	0R1											4×5.4	1.0
0.22	R22											4×5.4	2.6
0.33	R33											4×5.4	3.2
0.47	R47											4×5.4	3.8
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							Case size φD×L (mm)	Rated ripple
1500	152	10×10	310										

Rated ripple current (mArms) 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.