ALUMINUM ELECTROLYTIC CAPACITORS

nichicon

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

For SMD | Anti-Solvent Feature

NEW

- Corresponding with 260°C peak reflow soldering
  Recomended 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 ~ +105°C.
- Applicable to automatic mounting machine using carrier tape.
- Adapted to the RoHS directive (2002/95/EC).

WZ
High Temperature Reflow
WT

■Specifications

Item	Performance Characteristics
Category Temperature Range	–55 ~ +105°C
Rated Voltage Range	6.3 ~ 50V
Rated Capacitance Range	0.1 ~ 1500μF
Capacitance Tolerance	±20% at 120Hz, 20°C
Leakage Current	After 2 minutes' application of rated voltage, leakage current is not more than 0.01CV or 3 (μA) , whichever is greater.
tan δ	Measurement frequency : 120Hz, Temperature : 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 ZT / Z20 (MAX.)	Z–25°C / Z+20°C	4	3	2	2	2	2
	Z–40°C / Z+20°C	8	8	4	4	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 for capacitors of 16V or less. Within ±20% of initial value for capacitors of 25V or more.
tan δ	200% or less of initial specified value
Leakage current	Initial specified value or less

Shelf Life — After leaving capacitors under no load at 105°C for 1000 hours, they meet the specified value for endurance characteristics listed above.

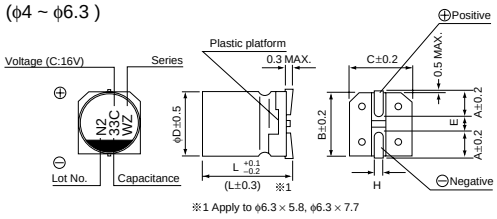
Resistance to soldering heat — The capacitors shall be kept on the hot plate maintained at 250°C for 30 seconds. After removing from the hot plate and restored at room temperature, they meet the characteristic requirements listed at right.

Capacitance change	Within ±10% of initial value
tan δ	Initial specified value or less
Leakage current	Initial specified value or less

Marking — Black print on the case top.

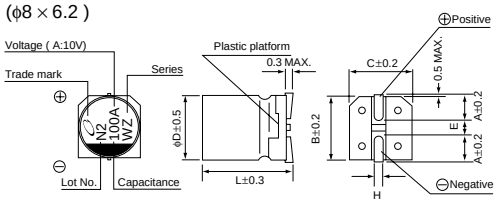
■Chip Type

(φ4 ~ φ6.3)

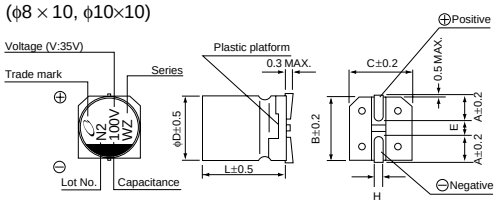


※1 Apply to φ6.3×5.8, φ6.3×7.7

(φ8×6.2)



(φ8×10, φ10×10)



● Dimension table in next page.

Type numbering system (Example : 6.3V 33μF)

1	2	3	4	5	6	7	8	9	10	11	12	13	14
U	W	Z	0	J	3	3	0	M	C	L	1	G	B

φD	code
4 ~ 6.3 (5.4L)	GB
6.3 ~ 10 (L≥5.8L)	GS

Package code
Configuration
Capacitance tolerance (±20%)
Rated Capacitance (33μF)
Rated voltage (6.3V)
Series name
Type

(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	5.4	7.7	6.2	10	10
H	0.5 ~ 0.8	0.5 ~ 0.8	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

WZ series

■Dimensions

φD×L (mm)

Cap. (μF) \ V	6.3		10		16		25		35		50	
Code	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	Rated ripple
1500	152	10×10	310										

Rated Ripple (mA rms) at 105°C 120Hz

●Frequency coefficient of rated ripple current

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

- Taping specifications are given in page 24.
- Recommended land size, soldering by reflow are given in page 25
- Please refer to page 3 for the minimum order quantity.