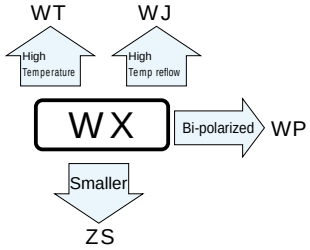
ALUMINUM ELECTROLYTIC CAPACITORS

nichicon

WX 5.5mmL Chip Type series

For SMD | Anti-Solvent Feature

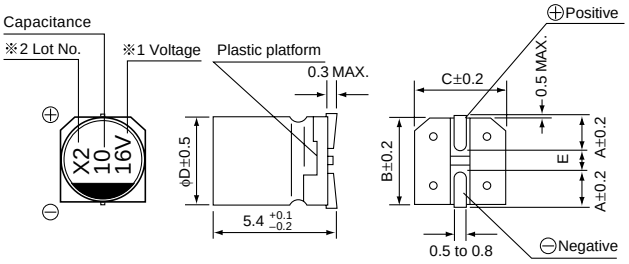
- Chip type with 5.5mm height.
- Designed for surface mounting on high density PC board.
- Applicable to automatic mounting machine using carrier tape.
- Load life of 2000 hours at 85°C.
- Adapted to the RoHS directive (2002/95/EC).



■Specifications

Item	Performance Characteristics
Category Temperature Range	–40 to +85°C
Rated Voltage Range	4 to 50V
Rated Capacitance Range	0.1 to 330µF
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): 4 / 6.3 / 10 / 16 / 25 / 35 / 50 tan δ (MAX.): 0.35 (0.40) / 0.26 (0.30) / 0.20 (0.24) / 0.16 (0.19) / 0.14 (0.16) / 0.12 (0.14) / 0.12 (0.14) Values in ( ) applicable to WR, φ3 case size.
Stability at Low Temperature	Measurement frequency : 120Hz Rated voltage (V): 4 / 6.3 / 10 / 16 / 25 / 35 / 50 Impedance ratio ZT / Z20 (MAX.) Z–25°C / Z+20°C: 7 / 4 / 3 / 2 / 2 / 2 / 2 Z–40°C / Z+20°C: 15 / 8 / 8 / 4 / 4 / 3 / 3
Endurance	After 2000 hours' application of rated voltage at 85°C, capacitors meet the characteristic requirements listed at right. Capacitance change: Within ±20% of initial value (Within ±25% for 4 V and φ3,WR series units) tan δ: 200% or less of initial specifed value Leakage Current: Initial specifed value or less
Shelf Life	After storing the capacitors under no load at 85°C for 1000 hours, and after performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they will 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

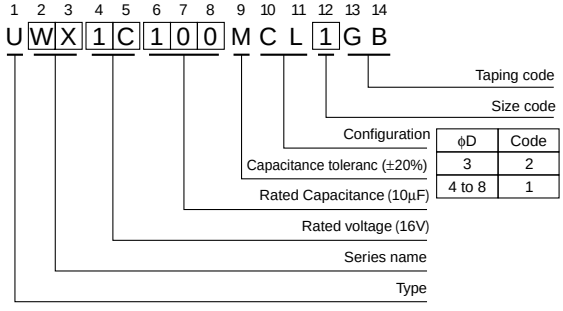


(mm)

φD	3	4	5	6.3	8
A	1.5	1.8	2.1	2.4	3.3
B	3.3	4.3	5.3	6.6	8.3
C	3.3	4.3	5.3	6.6	8.3
E	0.8	1.0	1.3	2.2	2.3

※1. Voltage mark for 6.3V is 「6V」.
In case of marking for φ3 units, "V" for rated voltage is omitted.
※2. In case of marking for φ3 units, Lot No.is expressed by a digit (month code).

Type numbering system (Example : 16V 10µF)



- In the case of size φ3 in ( ),parentheses, use WX in the 2nd and 3rd digit and put a 2 in the 12th digit of type numbering system.

● Dimension table in next page.

WX series

■Dimensions

Cap. (μF) \ V	Code	4		6.3		10		16		25		35		50	
		0G		0J		1A		1C		1E		1V		1H	
0.1	0R1													4 (3)	1.0
0.22	R22													4 (3)	2.0
0.33	R33													4 (3)	2.8
0.47	R47													4 (3)	4.0
1	010													4 (3)	8.4 (8.0)
2.2	2R2											3	8.4	4 (3)	13 (10)
3.3	3R3											3	10	4	17
4.7	4R7									4 (3)	16 (12)	4	18	● 5	20 (18)
10	100							4 (3)	23 (18)	● 5	27 (24)	● 5	29 (24)	○ 6.3	33 (30)
22	220	3	19	4 (3)	28 (21)	● 5	33 (30)	● 5	37 (30)	○ 6.3	42 (38)	○ 6.3	46 (39)	□ 8	52 (43)
33	330	4	28	● 5	37 (34)	● 5	41 (34)	○ 6.3	49 (44)	○ 6.3	52 (46)	□ 8	62 (53)	8	71
47	470	4	33	● 5	45 (40)	○ 6.3	52 (47)	○ 6.3	58 (52)	□ 8	70 (60)	8	80		
56	560	5	42	○ 6.3	52 (46)	○ 6.3	57 (50)	○ 6.3	63 (57)	□ 8	76 (65)				
100	101	5	56	○ 6.3	70 (47)	○ 6.3	76 (54)	6.3	86	8	110				
150	151	6.3	79	6.3	71	□ 8	111 (76)								
220	221	6.3	96	□ 8	110 (74)	8	135							Case size φD (mm)	Rated ripple
330	331	8	145	8	170										

( ) is also available with φ3mm upon request.

Rated Ripple (mArms) at 85°C 120Hz

• In the case of size φ3 in ( ),parentheses, use WX at 2nd and 3rd digit and put 2 at the 12th digit of type numbering system.

( ) = φ3 units and WR Series

Size φ4 is available for capacitors marked. " ● "
Size φ5 is available for capacitors marked. " ○ "
Size φ6.3 is available for capacitors marked. " □ "
} In such a case, WR will be put at 2nd and 3rd digit of type numbering system.

●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 select UR(p.86), UG(p.91) series if high C/V products are reqired.
- Please refer to page 3 for the minimum order quantity.