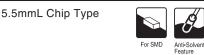
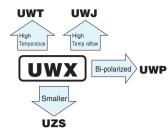
# ALUMINUM ELECTROLYTIC CAPACITORS

# nichicon



- Chip type with 5.5mm height.
- Designed for surface mounting on high density PC board.
- Applicable to automatic mounting machine fed with carrier tape.
- Load life of 2000 hours at 85°C.
- Compliant to the RoHS directive (2011/65/EU).

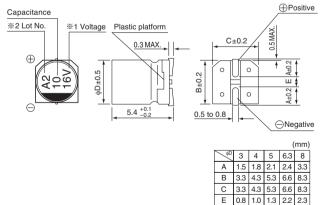




#### Specifications

Item	Performance Characteristics												
Category Temperature Range	-40 to +85°C												
Rated Voltage Range	4 to 50V												
Rated Capacitance Range	1 to 330µF												
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.												
	Measurement frequency : 120Hz at 20°C												
Tangent of loss angle (tan $\delta)$	Rated voltage (V) 4		6.3	10		16 2		5	35				
	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 (0.1	4)	Values in (	) applicable to WR, ¢3 case size.
	Measurement frequency : 120Hz												
	Rated vo	ltage (V)		4	6.	.3	10	16	25	3	5	50	
Stability at Low Temperature	Impedance ratio	Z-25°C /	Z+20°C	7	4	4	3	2	2	2	2	2	
	ZT / Z20 (MAX.)	Z-40°C /	Z+20°C	15	6	В	8	4	4	;	3	3	
	The specifications listed at right shall be met Capacitance change Within ±20% of the initial capacitance value (Within ±25% for 4 V and 63.WR series units)												
E d a se	when the capacitors are restored to 20°C after the rated voltage is applied for 2000 hours at						icitance c	nange	5				
Endurance											ss than the initial specified value		
	85°C.												
Shelf Life	After storing the capacitors under no load at 85°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	The capacitors are kept on a hot plate for 30 seconds, which is Capacitance change Within ±10% of the initial capacitance v										the initial canacitance value		
	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.							tan δ				Less than or equal to the initial specified value	
heat									Leakage current Less than or equal to the initial spe				
Marking	Black print on the	case top.											

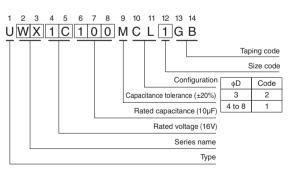
## Chip Type



%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 \$43 units, Lot No.is expressed by a digit (month code).

## Type numbering system (Example : 16V $10 \mu F)$



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

# UWX

### Dimensions

V		4	4		6.3		10		16		25		35		50	
Cap. (µF)	Code	0G		0J		1A		1C		1E		1V		1H		
1	010		1											4 (3)	8.4(8.0)	
2.2	2R2		1		1							3	8.4	4 (3)	13 (10)	
3.3	3R3											3	10	4	17	
4.7	4R7		1		1		1		1	4 (3)	16 (12)	4	18	• 5	20 (18)	
10	100		1				1	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)	o <b>6.3</b>	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	o 6.3	52 (46)	° 6.3	57 (50)	o 6.3	63 (57)	□ 8	76 (65)		1		1	
100	101	5	56	o 6.3	70 (47)	o 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		1				1	Case size	Rated	
330	331	8	145	8	170				1				1	φD (mm)	ripple	

( ) is also available with  $\phi 3mm$  upon request.

Rated ripple current (mArms) at 85°C 120Hz ( ) =  $\phi$ 3 units and UWR

• In the case of size  $\phi$ 3 in ( ),parentheses, use WX at 2nd and 3rd digit and put[2] at the 12th digit of type numbering system. ( ) = (

Size  $\phi 4$  is available for capacitors marked. " • " Size  $\phi 5$  is available for capacitors marked. " • " Size  $\phi 6.3$  is available for capacitors marked. "  $\Box$  "

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 UUR(p.154), UUG(p.160) if high C/V products are reqired.
- Please refer to page 3 for the minimum order quantity.