

UWX

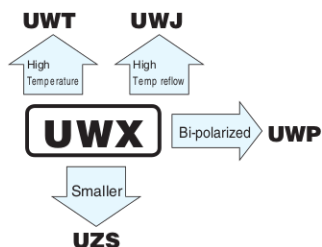
5.5mmL Chip Type



For SMD

Anti-Solvent
Feature

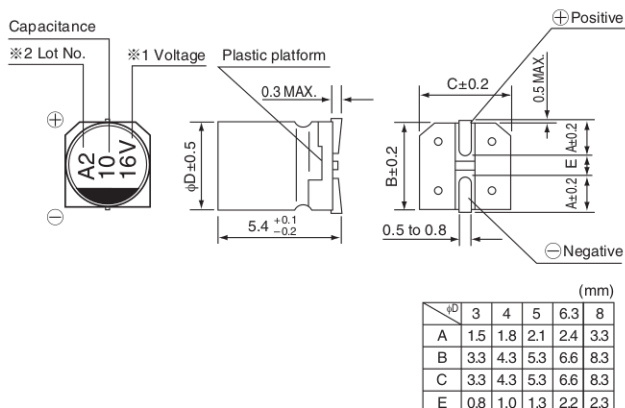
- Chip type with 5.5mm height.
- Designed for surface mounting on high density PC board.
- Applicable to automatic mounting machine fed with carrier tape.
- Load life of 2000 hours at 85°C.
- Compliant to the RoHS directive (2011/65/EU).



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.								
Tangent of loss angle (tan δ)	Measurement frequency : 120Hz at 20°C								
	Rated voltage (V)	4	6.3	10	16	25	35	50	Values in () applicable to WR, φ3 case size.
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)		
Stability at Low Temperature	Measurement frequency : 120Hz								
	Rated voltage (V)		4	6.3	10	16	25	35	50
	Impedance ratio	Z−25°C / Z+20°C	7	4	3	2	2	2	2
	ZT / Z20 (MAX.)	Z−40°C / Z+20°C	15	8	8	4	4	3	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 2000 hours at 85°C.				Capacitance change		Within ±20% of the initial capacitance value (Within ±25% for 4 V and φ3,WR series units)		
					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 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 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

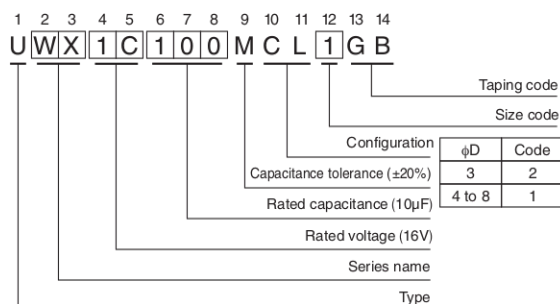


※ 1. Voltage mark for 6.3V is 「6V」.

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 [2] digit and put a in the 12th digit of type numbering system.

UWX

■ Dimensions

V		4	6.3	10	16	25	35	50
Cap. (μF)	Code	0G	0J	1A	1C	1E	1V	1H
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				
330	331	8 145	8 170					Case size φ D (mm) Rated ripple

() is also available with φ3mm upon request.

Rated ripple current (mA rms) 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 UWR

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