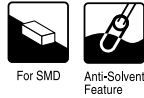
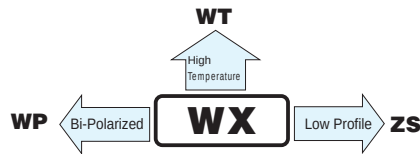


WX series

5.5mmL Chip Type



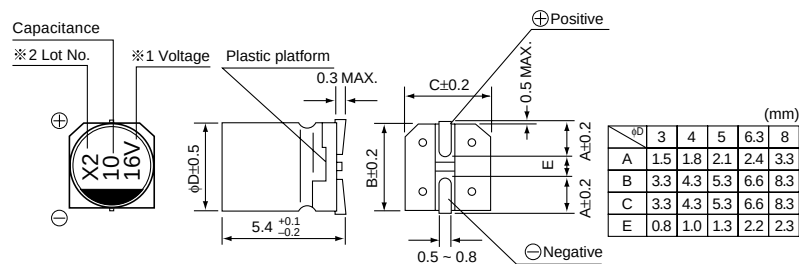
- Chip type with 5.5mm height.
- Designed for surface mounting on high density PC board.
- Applicable to automatic mounting machine using carrier tape.
- Load life of 2000 hours at 85°C.



Specifications

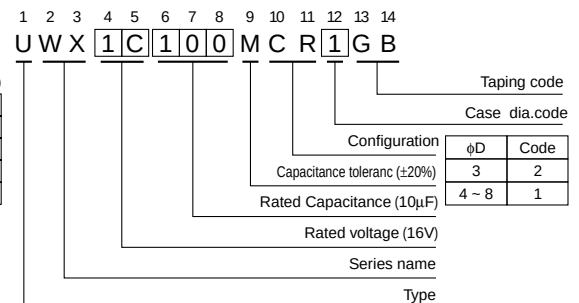
Item	Performance Characteristics								
Category Temperature Range	— 40 ~ +85°C								
Rated Voltage Range	4 ~ 50V								
Rated Capacitance Range	0.1 ~ 330μF								
Capacitance Tolerance	±20% at 120Hz, 20°C								
Leakage Current	After 2 minutes' application of rated voltage, leakage current is 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 characteristics requirements listed at right.				Capacitance change		Within ±20% of initial value (Within ±2%5 for 4 V and φ3,WR series units)		
					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 85°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 characteristics 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



- ※ 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)



■ Dimension table in next page.

■ Dimensions

V		4		6.3		10		16		25		35		50	
Cap. (μF)	Code	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								
	331	8	145	8	170									Case size	Rated ripple

() is also available with φ3mm upon request.

Rated Ripple (mA rms) at 85°C 120Hz

() = 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, $\overline{W}$ $\overline{R}$ will be put at 2nd and 3rd digit of type numbering system.

■ Frequency coefficient of allowable 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 21.

Please refer to page 3 for the minimum order quantity.