ALUMINUM ELECTROLYTIC CAPACITORS

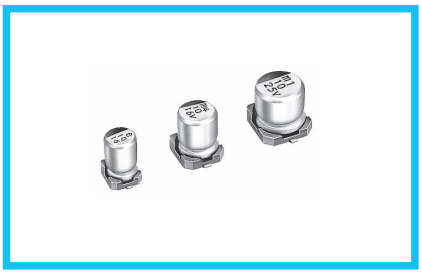
nichicon

UWX

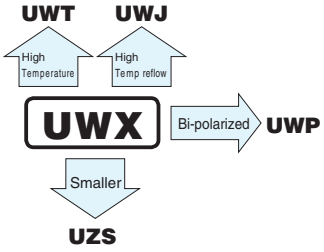
5.5mmL Chip Type

For SMD

Anti-Solvent Feature



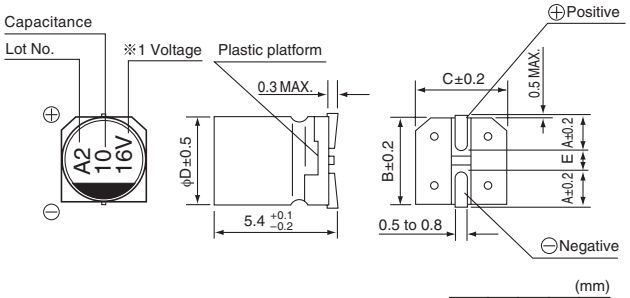
- Chip type with 5.5mm height.
- Designed for surface mounting on high density PC board.
- Applicable to automatic mounting machine fed with carrier tape.
- Load life of 2000 hours at 85°C.
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).
- AEC-Q200 compliant. Please contact us for details.



■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 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.
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 Impedance ratio 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 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

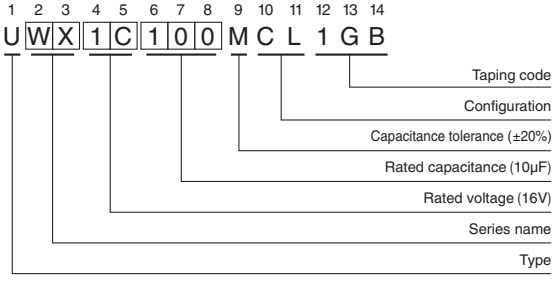


(mm)

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

※1. Voltage mark for 6.3V is「6V」.

Type numbering system (Example : 16V 10μF)



● 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

● Dimension table in next page.

UWX

■Dimensions

Rated Voltage (V) (code)	Rated Capacitance (μF)	Case Size φD×L(mm)	tan δ	Leakage Current (μA) (at 20℃ after 2 minutes)	Rated Ripple (mArms) (85℃/120Hz)	Part Number
4 (0G)	33	4×5.4	0.35	3	28	UWX0G330MCL1GB
	47	4×5.4	0.35	3	33	UWX0G470MCL1GB
	56	5×5.4	0.35	3	42	UWX0G560MCL1GB
	100	5×5.4	0.35	4	56	UWX0G101MCL1GB
	150	6.3×5.4	0.35	6	79	UWX0G151MCL1GB
	220	6.3×5.4	0.35	8.8	96	UWX0G221MCL1GB
	330	8×5.4	0.35	13.2	145	UWX0G331MCL1GB
6.3 (0J)	22	4×5.4	0.26	3	28	UWX0J220MCL1GB
	33	5×5.4	0.26	3	37	UWX0J330MCL1GB
	33	4×5.4	0.30	3	34	UWR0J330MCL1GB
	47	5×5.4	0.26	3	45	UWX0J470MCL1GB
	47	4×5.4	0.30	3	40	UWR0J470MCL1GB
	56	6.3×5.4	0.26	3.528	52	UWX0J560MCL1GB
	56	5×5.4	0.30	3.528	46	UWR0J560MCL1GB
	100	6.3×5.4	0.26	6.3	70	UWX0J101MCL1GB
	100	5×5.4	0.30	6.3	47	UWR0J101MCL1GB
	150	6.3×5.4	0.26	9.45	71	UWX0J151MCL1GB
	220	8×5.4	0.26	13.86	110	UWX0J221MCL1GB
	220	6.3×5.4	0.30	13.86	74	UWR0J221MCL1GB
	330	8×5.4	0.26	20.79	170	UWX0J331MCL1GB
10 (1A)	22	5×5.4	0.20	3	33	UWX1A220MCL1GB
	22	4×5.4	0.24	3	30	UWR1A220MCL1GB
	33	5×5.4	0.20	3.3	41	UWX1A330MCL1GB
	33	4×5.4	0.24	3.3	34	UWR1A330MCL1GB
	47	6.3×5.4	0.20	4.7	52	UWX1A470MCL1GB
	47	5×5.4	0.24	4.7	47	UWR1A470MCL1GB
	56	6.3×5.4	0.20	5.6	57	UWX1A560MCL1GB
	56	5×5.4	0.24	5.6	50	UWR1A560MCL1GB
	100	6.3×5.4	0.20	10	76	UWX1A101MCL1GB
	100	5×5.4	0.24	10	54	UWR1A101MCL1GB
	150	8×5.4	0.20	15	111	UWX1A151MCL1GB
	150	6.3×5.4	0.24	15	76	UWR1A151MCL1GB
	220	8×5.4	0.20	22	135	UWX1A221MCL1GB
16 (1C)	10	4×5.4	0.16	3	23	UWX1C100MCL1GB
	22	5×5.4	0.16	3.52	37	UWX1C220MCL1GB
	22	4×5.4	0.19	3.52	30	UWR1C220MCL1GB
	33	6.3×5.4	0.16	5.28	49	UWX1C330MCL1GB
	33	5×5.4	0.19	5.28	44	UWR1C330MCL1GB
	47	6.3×5.4	0.16	7.52	58	UWX1C470MCL1GB
	47	5×5.4	0.19	7.52	52	UWR1C470MCL1GB
	56	6.3×5.4	0.16	8.96	63	UWX1C560MCL1GB
	56	5×5.4	0.19	8.96	57	UWR1C560MCL1GB
	100	6.3×5.4	0.16	16	86	UWX1C101MCL1GB

UWX

■Dimensions

Rated Voltage (V) (code)	Rated Capacitance (μF)	Case Size φD×L(mm)	tan δ	Leakage Current (μA) (at 20℃ after 2 minutes)	Rated Ripple (mArms) (85℃/120Hz)	Part Number
25 (1E)	4.7	4×5.4	0.14	3	16	UWX1E4R7MCL1GB
	10	5×5.4	0.14	3	27	UWX1E100MCL1GB
	10	4×5.4	0.16	3	24	UWR1E100MCL1GB
	22	6.3×5.4	0.14	5.5	42	UWX1E220MCL1GB
	22	5×5.4	0.16	5.5	38	UWR1E220MCL1GB
	33	6.3×5.4	0.14	8.25	52	UWX1E330MCL1GB
	33	5×5.4	0.16	8.25	46	UWR1E330MCL1GB
	47	8×5.4	0.14	11.75	70	UWX1E470MCL1GB
	47	6.3×5.4	0.16	11.75	60	UWR1E470MCL1GB
	56	8×5.4	0.14	14	76	UWX1E560MCL1GB
	56	6.3×5.4	0.16	14	65	UWR1E560MCL1GB
	100	8×5.4	0.14	25	110	UWX1E101MCL1GB
35 (1V)	4.7	4×5.4	0.12	3	18	UWX1V4R7MCL1GB
	10	5×5.4	0.12	3.5	29	UWX1V100MCL1GB
	10	4×5.4	0.14	3.5	24	UWR1V100MCL1GB
	22	6.3×5.4	0.12	7.7	46	UWX1V220MCL1GB
	22	5×5.4	0.14	7.7	39	UWR1V220MCL1GB
	33	8×5.4	0.12	11.55	62	UWX1V330MCL1GB
	33	6.3×5.4	0.14	11.55	53	UWR1V330MCL1GB
	47	8×5.4	0.12	16.45	80	UWX1V470MCL1GB
50 (1H)	1	4×5.4	0.12	3	8.4	UWX1H010MCL1GB
	2.2	4×5.4	0.12	3	13	UWX1H2R2MCL1GB
	3.3	4×5.4	0.12	3	17	UWX1H3R3MCL1GB
	4.7	5×5.4	0.12	3	20	UWX1H4R7MCL1GB
	4.7	4×5.4	0.14	3	18	UWR1H4R7MCL1GB
	10	6.3×5.4	0.12	5	33	UWX1H100MCL1GB
	10	5×5.4	0.14	5	30	UWR1H100MCL1GB
	22	8×5.4	0.12	11	52	UWX1H220MCL1GB
	22	6.3×5.4	0.14	11	43	UWR1H220MCL1GB
	33	8×5.4	0.12	16.5	71	UWX1H330MCL1GB

- Taping specifications are given in page 20.
- Recommended land size, soldering by reflow are given in page 16, 17.
- Please select UUR(p.171), UUG(p.181) if high C/V products are reqired.
- Please refer to page 3 for the minimum order quantity.