



**THE DATASHEET OF
W25Q512NWEIM**



ALUMINUM ELECTROLYTIC CAPACITORS

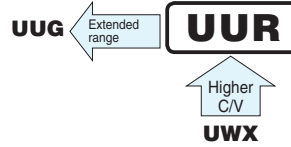
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Chip Type, High CV



- Chip type, higher capacitance.
- Designed for surface mounting on high density PC board.
- Applicable to automatic mounting machine fed with carrier tape.
- Compliant to the RoHS directive (2011/65/EU, (EU)2015/863).
- AEC-Q200 compliant. Please contact us for details.

Products which are scheduled to be discontinued.
Not recommended for new designs.



Specifications

Item	Performance Characteristics									
Category Temperature Range	-40 to +85°C									
Rated Voltage Range	4 to 100V									
Rated Capacitance Range	3.3 to 1500μF									
Capacitance Tolerance	±20% at 120Hz, 20°C									
Leakage Current ※	After 1 minute's application of rated voltage at 20°C, leakage current is not more than 0.03CV (μA).									
Tangent of loss angle (tan δ)	Measurement frequency : 120Hz at 20°C									
	Rated voltage (V)	4	6.3	10	16	25	35	50	63	100
Stability at Low Temperature	Measurement frequency: 120Hz									
	Rated voltage (V)	4	6.3	10	16	25	35	50	63	100
	Impedance ratio Z(-25°C) / Z(+20°C)	7	5	4	3	2	2	2	2	2
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								
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.									
	Capacitance change	Within ±10% of the initial capacitance value								
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.									
	tan δ	Less than or equal to the initial specified value								
Marking	Black print on the case top.									
	Leakage current	Less than or equal to the initial specified value								

※ I : Leakage Current (μA), C : Rated Capacitance (μF), V : Rated Voltage (V)

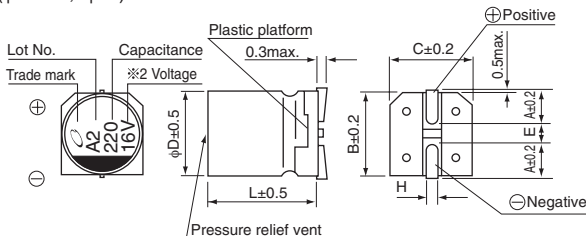
Chip Type



Type numbering system (Example : 10V 100μF)



(φ8 x 10, φ10)



φ D x L	6.3 x 5.8	6.3 x 7.7	8 x 6.2	8 x 10	10 x 10
A	2.4	2.4	3.3	2.9	3.2
B	6.6	6.6	8.3	8.3	10.3
C	6.6	6.6	8.3	8.3	10.3
E	2.2	2.2	2.3	3.1	4.5
L	5.8	7.7	6.2	10	10
H	0.5 to 0.8	0.5 to 0.8	0.5 to 0.8	0.8 to 1.1	0.8 to 1.1

Frequency coefficient of rated ripple current

Cap. (μF)	Frequency	50 Hz	120 Hz	300 Hz	1 kHz	10 kHz or more
Less than 47		0.80	1.00	1.15	1.40	1.67
	100 to 1500	0.85	1.00	1.08	1.20	1.30

● Dimension table in next page.

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■ Dimensions

Rated Voltage (V) (code)	Rated Capacitance (μF)	Case Size φD×L (mm)	tan δ	Leakage Current (μA) (at 20°C after 1 minute)	Rated Ripple (mArms) (85°C/120Hz)	Part Number
4 (0G)	330	6.3×5.8	0.35	39.6	152	UUR0G331MCL1GS
	470	6.3×7.7	0.35	56.4	200	UUR0G471MCL1GS
	680	8×10	0.35	81.6	284	UUR0G681MNL1GS
	1000	8×10	0.35	120	344	UUR0G102MNL1GS
	1500	10×10	0.35	180	347	UUR0G152MNL1GS
6.3 (0J)	220	8×6.2	0.28	41.58	160	UUR0J221MCL1GS
	220	6.3×5.8	0.28	41.58	143	UUR0J221MCL6GS
	330	8×6.2	0.28	62.37	190	UUR0J331MCL1GS
	330	6.3×7.7	0.28	62.37	188	UUR0J331MCL6GS
	470	8×10	0.28	88.83	265	UUR0J471MNL1GS
	680	8×10	0.28	128.52	318	UUR0J681MNL1GS
	1000	10×10	0.28	189	400	UUR0J102MNL1GS
	1000	8×10	0.28	189	372	UUR0J102MNL6GS
	1500	10×10	0.28	283.5	489	UUR0J152MNL1GS
10 (1A)	100	6.3×5.8	0.24	30	70	UUR1A101MCL1GS
	150	6.3×5.8	0.24	45	85	UUR1A151MCL1GS
	220	8×6.2	0.24	66	175	UUR1A221MCL1GS
	220	6.3×7.7	0.24	66	173	UUR1A221MCL6GS
	330	8×10	0.24	99	240	UUR1A331MNL1GS
	470	8×10	0.24	141	290	UUR1A471MNL1GS
	680	10×10	0.24	204	374	UUR1A681MNL1GS
	1000	10×10	0.24	300	454	UUR1A102MNL1GS
16 (1C)	100	8×6.2	0.20	48	125	UUR1C101MCL1GS
	150	6.3×7.7	0.20	72	151	UUR1C151MCL1GS
	220	8×10	0.20	105.6	215	UUR1C221MNL1GS
	220	6.3×7.7	0.20	105.6	162	UUR1C221MCL6GS
	330	8×10	0.20	158.4	270	UUR1C331MNL1GS
	470	10×10	0.20	225.6	330	UUR1C471MNL1GS
	470	8×10	0.20	225.6	307	UUR1C471MNL6GS
	680	10×10	0.20	326.4	396	UUR1C681MNL1GS
25 (1E)	47	6.3×5.8	0.16	35.25	65	UUR1E470MCL1GS
	100	8×6.2	0.16	75	145	UUR1E101MCL1GS
	100	6.3×7.7	0.16	75	143	UUR1E101MCL6GS
	150	8×10	0.16	112.5	192	UUR1E151MNL1GS
	220	10×10	0.16	165	250	UUR1E221MNL1GS
	220	8×10	0.16	165	232	UUR1E221MNL6GS
	330	10×10	0.16	247.5	305	UUR1E331MNL1GS
	330	8×10	0.16	247.5	284	UUR1E331MNL6GS
	470	10×10	0.16	352.5	393	UUR1E471MNL1GS
35 (1V)	33	6.3×5.8	0.14	34.65	55	UUR1V330MCL1GS
	47	8×6.2	0.14	49.35	105	UUR1V470MCL1GS
	47	6.3×5.8	0.14	49.35	94	UUR1V470MCL6GS
	100	8×10	0.14	105	175	UUR1V101MNL1GS
	100	6.3×7.7	0.14	105	132	UUR1V101MCL6GS
	150	8×10	0.14	157.5	214	UUR1V151MNL1GS
	220	10×10	0.14	231	265	UUR1V221MNL1GS
	220	8×10	0.14	231	246	UUR1V221MNL6GS
	330	10×10	0.14	346.5	324	UUR1V331MNL1GS

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■ Dimensions

Rated Voltage (V) (code)	Rated Capacitance (μ F)	Case Size ϕ D \times L (mm)	$\tan \delta$	Leakage Current (μ A) (at 20°C after 1 minute)	Rated Ripple (mA _{rms}) (85°C/120Hz)	Part Number
50 (1H)	22	6.3 \times 5.8	0.12	33	45	UUR1H220MCL1GS
	33	8 \times 6.2	0.12	49.5	95	UUR1H330MCL1GS
	33	6.3 \times 7.7	0.12	49.5	94	UUR1H330MCL6GS
	47	8 \times 10	0.12	70.5	140	UUR1H470MNL1GS
	47	6.3 \times 7.7	0.12	70.5	105	UUR1H470MCL6GS
	100	10 \times 10	0.12	150	195	UUR1H101MNL1GS
	100	8 \times 10	0.12	150	181	UUR1H101MNL6GS
	150	10 \times 10	0.12	225	238	UUR1H151MNL1GS
	220	10 \times 10	0.12	330	289	UUR1H221MNL1GS
63 (1J)	4.7	6.3 \times 5.8	0.12	8.883	31	UUR1J4R7MCL1GS
	10	8 \times 6.2	0.12	18.9	46	UUR1J100MCL1GS
	22	8 \times 10	0.12	41.58	96	UUR1J220MNL1GS
	33	8 \times 10	0.12	62.37	117	UUR1J330MNL1GS
	47	8 \times 10	0.12	88.83	140	UUR1J470MNL1GS
	100	10 \times 10	0.12	189	232	UUR1J101MNL1GS
100 (2A)	3.3	6.3 \times 5.8	0.12	9.9	29	UUR2A3R3MCL1GS
	4.7	8 \times 6.2	0.12	14.1	40	UUR2A4R7MCL1GS
	4.7	6.3 \times 5.8	0.12	14.1	35	UUR2A4R7MCL6GS
	10	8 \times 10	0.12	30	77	UUR2A100MNL1GS
	22	8 \times 10	0.12	66	100	UUR2A220MNL1GS
	33	10 \times 10	0.12	99	130	UUR2A330MNL1GS
	47	10 \times 10	0.12	141	155	UUR2A470MNL1GS

- For taping specifications, recommended land size/soldering by reflow and minimum order quantity, please refer to the Guidelines for Aluminum Electrolytic Capacitors.
- Please select UUG if high C/V products are required.

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