ALUMINUM ELECTROLYTIC CAPACITORS

nichicon

UWH

Chip Type, High Reliability
High Temperature (260°C) Reflow

For SMD | Long Life | Anti-Solvent Feature

- Corresponding with 260°C peak reflow soldering
  Recomended reflow condition : 260°C peak 5 sec. 230°C over 60 sec. 2 times
  (φ8 × 6.2, φ10 × 10 : 1 time)
- Chip type high temperature range, for +125°C use.
- 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.

UWH
High Temperature Reflow
UUB

■Specifications

Item	Performance Characteristics
Category Temperature Range	−40 to +125°C
Rated Voltage Range	10 to 50V
Rated Capacitance Range	10 to 330μF
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 or 4(μA) , whichever is greater.
Tangent of loss angle (tan δ)	Measurement frequency : 120Hz at 20°C

Rated voltage (V)	10	16	25	35	50
tan δ (MAX.)	0.32	0.24	0.21	0.18	0.18

Stability at Low Temperature — Measurement frequency : 120Hz

Rated voltage (V)		10	16	25	35	50
Impedance ratio ZT / Z20 (MAX.)	Z−40°C / Z+20°C	12	8	6	4	4

Endurance

The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 1000 hours at 125°C.

Capacitance change	Within ±30% of the initial capacitance value
tan δ	300% or less than the intial specified value
Leakage current	Less than or equal to the initial specified value

Shelf Life

After storing the capacitors under no load at 125°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.

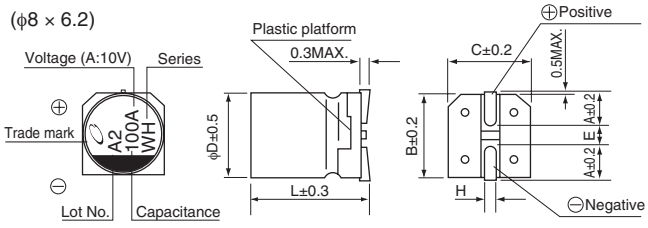
Capacitance change	Within ±10% of the initial capacitance value
tan δ	Less than or equal to the initial specified value
Leakage current	Less than or equal to the initial specified value

Marking

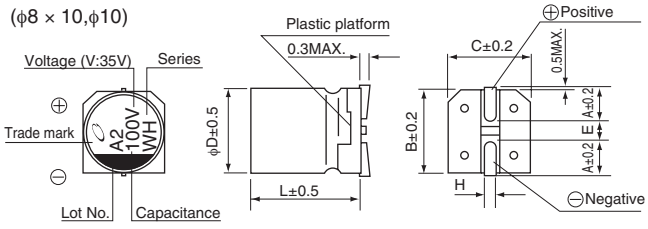
Black print on the case top.

■Chip Type

(φ8 × 6.2)



(φ8 × 10,φ10)



Voltage

V	10	16	25	35	50
Code	A	C	E	V	H

Type numbering system (Example : 10V 100μF)

1	2	3	4	5	6	7	8	9	10	11	12	13	14
U	W	H	1	A	1	0	1	M	C	L	1	G	S

- 1–3: Type
- 4–5: Series name
- 6–8: Rated voltage (10V)
- 9–11: Rated capacitance (100μF)
- 12: Capacitance tolerance (±20%)
- 13: Configuration
- 14: Taping code

(mm)

φD×L	8×6.2	8×10	10×10
A	3.3	2.9	3.2
B	8.3	8.3	10.3
C	8.3	8.3	10.3
E	2.3	3.1	4.5
L	6.2	10	10
H	0.5 to 0.8	0.8 to 1.1	0.8 to 1.1

● 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.

UWH

■Dimensions

Rated Voltage (V) (code)	Rated Capacitance (μF)	Case Size φD×L (mm)	tan δ	Leakage Current (μA) (at 20℃ after 1 minute)	Rated Ripple (mArms) (125℃/120Hz)	Part Number
10 (1A)	100	8×6.2	0.32	30	58	UWH1A101MCL1GS
	220	8×10	0.32	66	90	UWH1A221MCL1GS
	330	10×10	0.32	99	112	UWH1A331MCL1GS
16 (1C)	100	8×10	0.24	48	66	UWH1C101MCL1GS
	220	10×10	0.24	105.6	102	UWH1C221MCL1GS
25 (1E)	47	8×6.2	0.21	35.25	48	UWH1E470MCL1GS
	100	8×10	0.21	75	74	UWH1E101MCL1GS
	220	10×10	0.21	165	116	UWH1E221MCL1GS
35 (1V)	33	8×6.2	0.18	34.65	44	UWH1V330MCL1GS
	47	8×10	0.18	49.35	52	UWH1V470MCL1GS
	100	10×10	0.18	105	80	UWH1V101MCL1GS
50 (1H)	10	8×6.2	0.18	15	24	UWH1H100MCL1GS
	22	8×6.2	0.18	33	38	UWH1H220MCL1GS
	33	8×10	0.18	49.5	46	UWH1H330MCL1GS
	47	10×10	0.18	70.5	58	UWH1H470MCL1GS

- Taping specifications are given in page 20.
- Recommended land size, soldering by reflow are given in page 16, 17.
- Please refer to page 3 for the minimum order quantity.