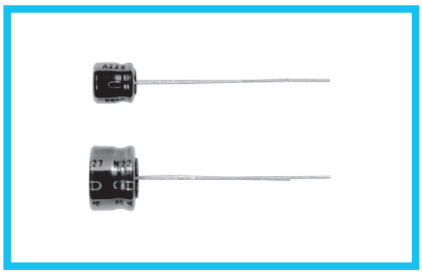
ALUMINUM ELECTROLYTIC CAPACITORS

nichicon

UMW

5mmL, For General Audio Equipment

For Audio Use　Anti-Solvent Feature



- Acoustic series, with 5mm height.
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).

USW
Smaller
UMW

■Specifications

Item	Performance Characteristics
Category Temperature Range	−40 to +85°C
Rated Voltage Range	4 to 50V
Rated Capacitance Range	1 to 470μF
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	0.24	0.20	0.16	0.14	0.12	0.10

Stability at Low Temperature — Measurement frequency : 120Hz

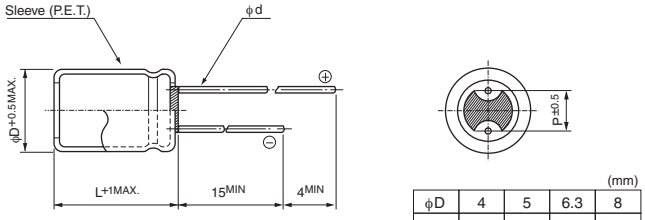
Rated voltage (V)		4	6.3	10	16	25	35	50
Impedance ratio (MAX.)	Z−25°C / Z+20°C	7	4	3	2	2	2	2
	Z−40°C / Z+20°C	15	8	6	4	4	3	3

Endurance — The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 1000 hours at 85°C.

Capacitance change	Within ±20% of the initial capacitance value
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.
Marking	Printed with black color letter on gold sleeve.

■Radial Lead Type



(mm)

φD	4	5	6.3	8
P	1.5	2.0	2.5	2.5
φd	0.45	0.45	0.45	0.45

Type numbering system (Example : 25V 10μF)

1	2	3	4	5	6	7	8	9	10	11
U	M	W	1	E	1	0	0	M	D	D

- 11: Configuration※
- 9–10: Capacitance tolerance (±20%)
- 6–8: Rated capacitance (10μF)
- 4–5: Rated voltage (25V)
- 3: Series name
- 1–2: Type

※Configuration

φ D	Pb-free leadwire Pb-free PET sleeve
4 to 8	DD

●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.

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■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	0.35	3	28	UMW0G330MDD
	47	4×5	0.35	3	33	UMW0G470MDD
	100	5×5	0.35	4	56	UMW0G101MDD
	220	6.3×5	0.35	8.8	96	UMW0G221MDD
	330	8×5	0.35	13.2	145	UMW0G331MDD
	470	8×5	0.35	18.8	185	UMW0G471MDD
6.3 (0J)	22	4×5	0.24	3	28	UMW0J220MDD
	33	5×5	0.24	3	37	UMW0J330MDD
	47	5×5	0.24	3	45	UMW0J470MDD
	100	6.3×5	0.24	6.3	70	UMW0J101MDD
	220	8×5	0.24	13.86	110	UMW0J221MDD
	330	8×5	0.24	20.79	170	UMW0J331MDD
10 (1A)	22	5×5	0.20	3	33	UMW1A220MDD
	33	5×5	0.20	3.3	41	UMW1A330MDD
	47	6.3×5	0.20	4.7	52	UMW1A470MDD
	100	8×5	0.20	10	80	UMW1A101MDD
	220	8×5	0.20	22	135	UMW1A221MDD
16 (1C)	10	4×5	0.16	3	23	UMW1C100MDD
	22	5×5	0.16	3.52	37	UMW1C220MDD
	33	6.3×5	0.16	5.28	49	UMW1C330MDD
	47	6.3×5	0.16	7.52	58	UMW1C470MDD
	100	8×5	0.16	16	92	UMW1C101MDD
25 (1E)	4.7	4×5	0.14	3	16	UMW1E4R7MDD
	10	5×5	0.14	3	27	UMW1E100MDD
	22	6.3×5	0.14	5.5	42	UMW1E220MDD
	33	6.3×5	0.14	8.25	52	UMW1E330MDD
	47	8×5	0.14	11.75	70	UMW1E470MDD
	100	8×5	0.14	25	110	UMW1E101MDD
35 (1V)	3.3	4×5	0.12	3	15	UMW1V3R3MDD
	4.7	4×5	0.12	3	18	UMW1V4R7MDD
	10	5×5	0.12	3.5	29	UMW1V100MDD
	22	6.3×5	0.12	7.7	46	UMW1V220MDD
	33	8×5	0.12	11.55	62	UMW1V330MDD
	47	8×5	0.12	16.45	80	UMW1V470MDD
50 (1H)	1	4×5	0.10	3	8.4	UMW1H010MDD
	2.2	4×5	0.10	3	13	UMW1H2R2MDD
	3.3	4×5	0.10	3	17	UMW1H3R3MDD
	4.7	5×5	0.10	3	20	UMW1H4R7MDD
	10	6.3×5	0.10	5	33	UMW1H100MDD
	22	8×5	0.10	11	52	UMW1H220MDD
	33	8×5	0.10	16.5	71	UMW1H330MDD

For cut leads, formed leads or taped parts, please add the appropriate code after the size code (12th digit).
If there is no size code in the part number, please add size code “1” and then add the appropriate code.

Please refer to page 18, 19 about the formed or taped product spec.
Please refer to page 4 for the minimum order quantity.