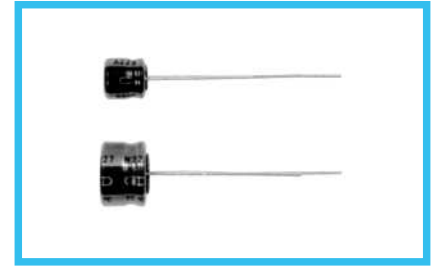
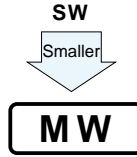


ALUMINUM ELECTROLYTIC CAPACITORS

MW series 5mmL, For General Audio Equipment



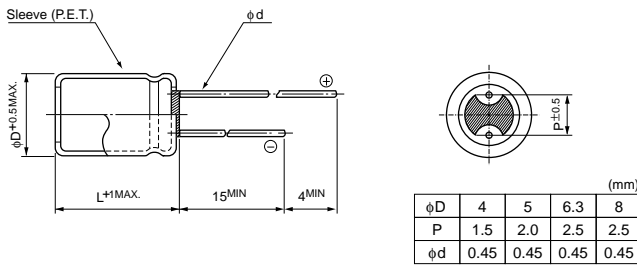
- Acoustic series, with 5mm height.
- Compliant to the RoHS directive (2002/95/EC).



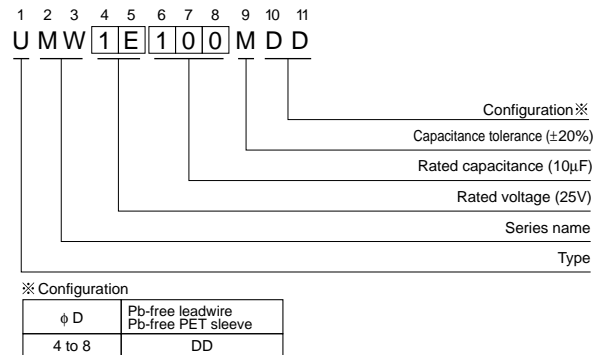
Specifications

Item	Performance Characteristics							
Category Temperature Range	-40 to +85°C							
Rated Voltage Range	4 to 50V							
Rated Capacitance Range	0.1 to 470μF							
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.							
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	Z-25°C / Z+20°C	7	4	3	2	2	2
	ZT / Z20 (MAX.)	Z-40°C / Z+20°C	15	8	6	4	4	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						
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.							
	Leakage current	Less than or equal to the initial specified value						
Marking	Printed with black color letter on gold sleeve.							

Radial Lead Type



Type numbering system (Example : 25V 10μF)



Dimensions

Cap. (μF)	code	V								Case size φD×L (mm)	Rated ripple (mArms)	
		4	6.3	10	16	25	35	50				
0.1	0R1	0G									4×5	1.0
0.22	R22										4×5	2.0
0.33	R33										4×5	2.8
0.47	R47										4×5	4.0
1	010										4×5	8.4
2.2	2R2										4×5	13
3.3	3R3										4×5	17
4.7	4R7										4×5	15
10	100										4×5	18
10	100				4×5	23	5×5	27	5×5	29	6.3×5	33
22	220		4×5	28	5×5	33	5×5	37	6.3×5	42	6.3×5	46
33	330	4×5	28	5×5	37	5×5	41	6.3×5	49	6.3×5	52	8×5
47	470	4×5	33	5×5	45	6.3×5	52	6.3×5	58	8×5	70	80
100	101	5×5	56	6.3×5	70	8×5	80	8×5	92	8×5	110	
220	221	6.3×5	96	8×5	110	8×5	135					
330	331	8×5	145	8×5	170							
470	471	8×5	185									

Rated ripple current(mArms) at 85°C 120Hz

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

Please refer to page 20, 21, 22 about the formed or taped product spec.
Please refer to page 4 for the minimum order quantity.