

# ALUMINUM ELECTROLYTIC CAPACITORS

# UMW

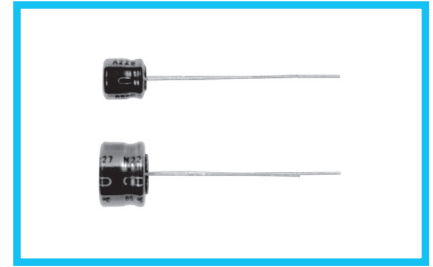
5mmL, For General Audio Equipment



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



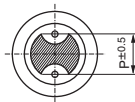
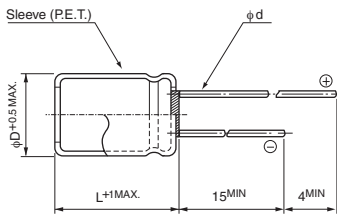
**UMW**



## Specifications

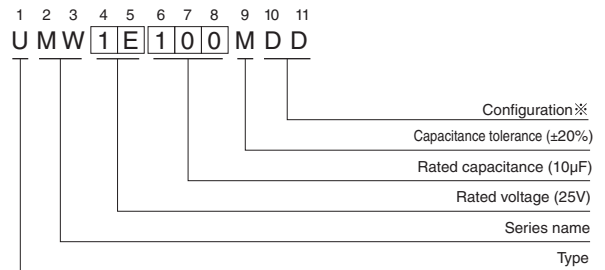
Item	Performance Characteristics							
Category Temperature Range	-40 to +85°C							
Rated Voltage Range	4 to 50V							
Rated Capacitance Range	1 to 470μF							
Capacitance Tolerance	±20% at 120Hz, 20°C							
Leakage Current	After 2 minutes' application of rated voltage at 20°C, leakage current 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	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			
			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)



※ Configuration

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

## Dimensions

Cap.(μF)	code	V		4		6.3		10		16		25		35		50		
				0G	0J	1A	1C	1E	1V	1H								
1	010																4 × 5	8.4
2.2	2R2																4 × 5	13
3.3	3R3													4 × 5	15		4 × 5	17
4.7	4R7											4 × 5	16	4 × 5	18		5 × 5	20
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		8 × 5	52	
33	330	4 × 5	28	5 × 5	37	5 × 5	41	6.3 × 5	49	6.3 × 5	52	8 × 5	62		8 × 5	71		
47	470	4 × 5	33	5 × 5	45	6.3 × 5	52	6.3 × 5	58	8 × 5	70	8 × 5	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.