

**MJ** 5.2mmL MAX.  
series



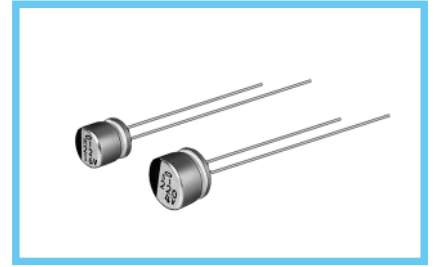
- 5.2mmL MAX. height.
- Adapted to the RoHS directive (2002/95/EC).

Products which are scheduled to discontinue.  
Not recommended for new designs

MA  
SA・SR

Smaller

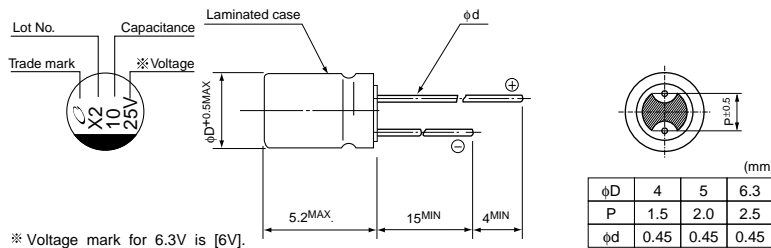
**MJ**



## Specifications

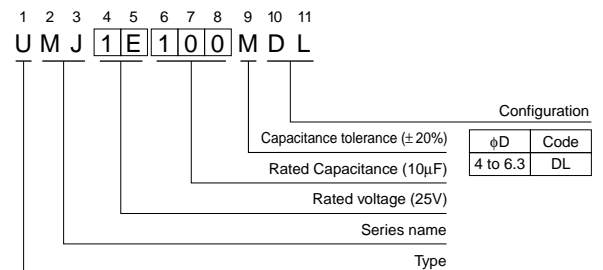
Item	Performance Characteristics								
Category Temperature Range	-40 to +85°C								
Rated Voltage Range	4 to 50V								
Rated Capacitance Range	0.1 to 220μF								
Capacitance Tolerance	±20% at 120Hz, 20°C								
Leakage Current	After 2 minutes' application of rated voltage, leakage current is not more than 0.01CV or 3 (μA), whichever is greater.								
tan δ	Measurement frequency : 120Hz, Temperature : 20°C								
	Rated voltage (V)	4	6.3	10	16	25	35	50	
	tan δ (MAX.)	0.35	0.26	0.20	0.16	0.14	0.12	0.12	
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	2
	ZT / Z20 (MAX.)	Z~-40°C / Z+20°C	15	8	8	4	4	3	3
Endurance	After 1000 hours' application of rated voltage at 85°C, capacitors meet the characteristic requirements listed at right.				Capacitance change		Within ±20% of initial value		
					tan δ		200% or less of initial specified value		
					Leakage current		Initial specified value or less		
Shelf Life	After storing the capacitors under no load at 85°C for 1000 hours, and after performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they will meet the specified value for endurance characteristics listed above.								
Marking	Black print on the case top.								

## Radial Lead Type



\* Voltage mark for 6.3V is [6V].

## Type numbering system (Example : 25V 10μF)



## Dimensions

V	4	6.3	10	16	25	35	50
Cap.(μF)	0G	0J	1A	1C	1E	1V	1H
0.1	0R1						4 1.0
0.22	R22						4 2.0
0.33	R33						4 2.8
0.47	R47						4 4.0
1	010						4 8.4
2.2	2R2						4 13
3.3	3R3						4 17
4.7	4R7				4 16	4 18	5 20
10	100			4 23	5 27	5 29	6.3 33
22	220	4 28	5 33	5 37	6.3 42	6.3 46	
33	330	4 28	5 37	5 41	6.3 49	6.3 52	
47	470	4 33	5 45	6.3 52	6.3 58		
100	101	5 56	6.3 70				
220	221	6.3 96					

Rated Ripple (mA) 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.

**CAT.8100W**