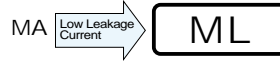
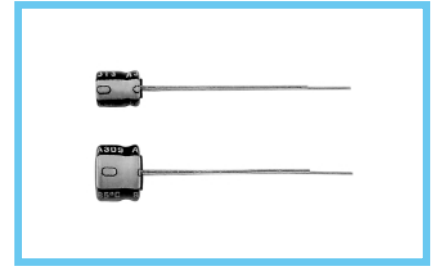


ML series 5mmL, Low Leakage Current



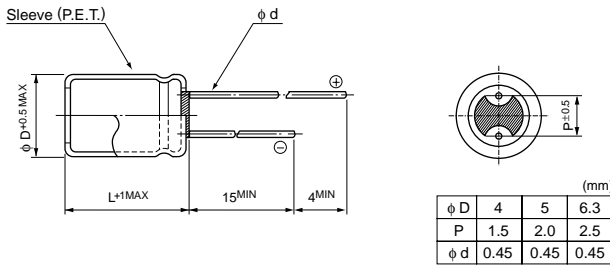
- Low leakage current series with 5mm height.
- Adapted to the RoHS directive (2002/95/EC).



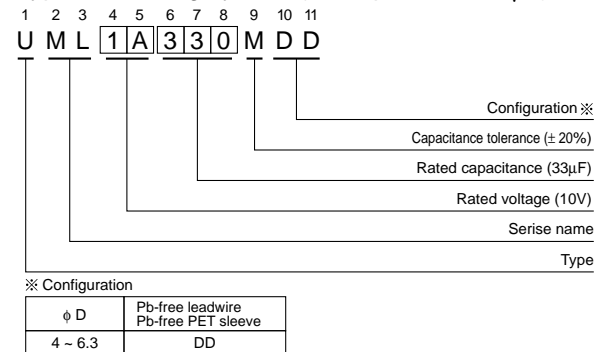
Specifications

Item	Performance Characteristics									
Category Temperature Range	-40 ~ +85°C									
Rated Voltage Range	4 ~ 50V									
Rated Capacitance Range	0.1 ~ 100μF									
Rated Capacitance Tolerance	±20% at 120Hz, 20°C									
Leakage Current	After 2 minutes' application of rated voltage, leakage current is not more than 0.002CV or 0.4 (μA), whichever is greater.									
tan δ	Measurement frequency : 120Hz, Temperature : 20°C									
	Rated voltage (V)	4	6.3	10	16	25	35	50		
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	
Endurance	ZT / Z20 (MAX.)		15	10	8	6	4	3	3	
	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					
Shelf Life	Leakage current		Initial specified value or less							
	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	Printed with white color letter on black sleeve.									

Radial Lead Type



Type numbering system (Example : 10V 33μF)



Dimensions

Cap. (μF)	Code	V		4		6.3		10		16		25		35		50			
		0G	0J	1A	1C	1E	1V	1H											
0.1	0R1																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																5×5	17	
4.7	4R7																5×5	20	
10	100								4×5	23		4×5	16	4×5	18	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		5×5	28	5×5	37	5×5	41	6.3×5	49	6.3×5	52							
47	470		5×5	33	5×5	45	6.3×5	52	6.3×5	58									
100	101		6.3×5	56	6.3×5	70													

Rated Ripple (mArms) at 85°C 120Hz

Frequency coefficient of rated ripple current

Frequency	50 Hz	120 Hz	300 Hz	1 kHz	10 kHz ~
Coefficient	0.70	1.00	1.17	1.36	1.50

Please refer to page 21, 22, 23 about the formed or taped product spec.
Please refer to page 3 for the minimum order quantity.