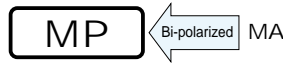


**MP** 5mmL, Bi-Polarized  
series



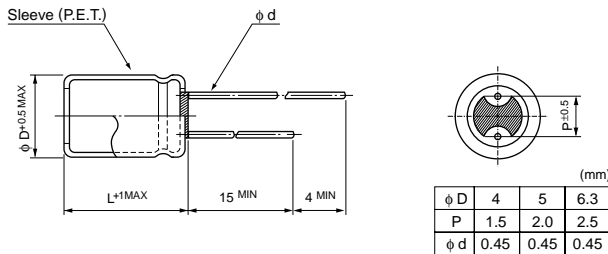
- Bi-polarized series with 5mm height.
- Adapted to the RoHS directive (2002/95/EC).



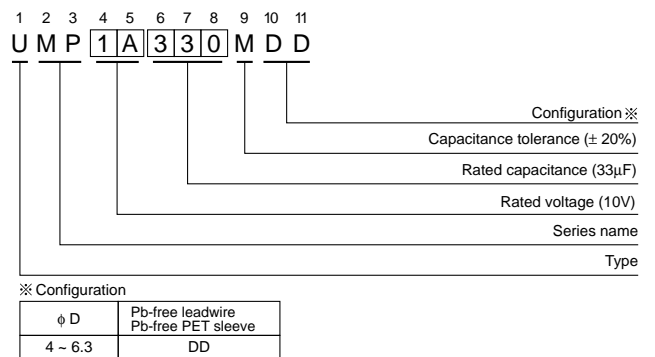
## Specifications

Item	Performance Characteristics								
Category Temperature Range	-40 ~ +85°C								
Rated Voltage Range	6.3 ~ 50V								
Rated Capacitance Range	0.1 ~ 47μF								
Rated Capacitance Tolerance	±20% at 120Hz, 20°C								
Leakage Current	After 2 minutes' application of rated voltage, leakage current is not more than 0.05CV or 10 (μA), whichever is greater.								
tan δ	Measurement frequency : 120Hz, Temperature : 20°C								
	Rated voltage (V)	6.3	10	16	25	35	50		
Stability at Low Temperature	Measurement frequency : 120Hz								
	Rated voltage (V)		6.3	10	16	25	35	50	
	Impedance ratio	Z-25°C / Z+20°C	4	3	2	2	2	2	
Endurance	ZT / Z20 (MAX.)		Z-40°C / Z+20°C	8	6	4	4	3	3
	After 2000 hours' application of rated voltage at 85°C with the polarity inverted every 250 hours, 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	6.3		10		16		25		35		50	
		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	8.4	5×5	13
3.3	3R3							5×5	12	5×5	16	5×5	17
4.7	4R7					4×5	12	5×5	16	5×5	18	6.3×5	20
10	100			4×5	17	5×5	23	6.3×5	27	6.3×5	29		
22	220	5×5	28	6.3×5	33	6.3×5	37						
33	330	6.3×5	37	6.3×5	41	6.3×5	49						
47	470	6.3×5	45									Case size φD×L (mm)	Rated ripple

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.