

MP 5mmL, Bi-Polarized
series



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

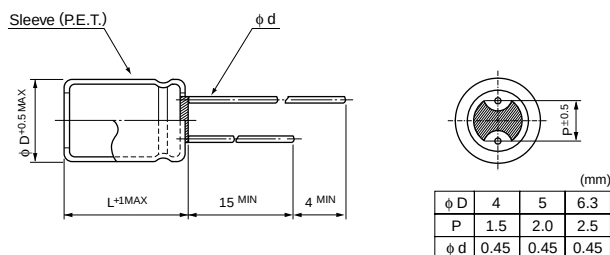
MP ← Bi-polarized **MA**



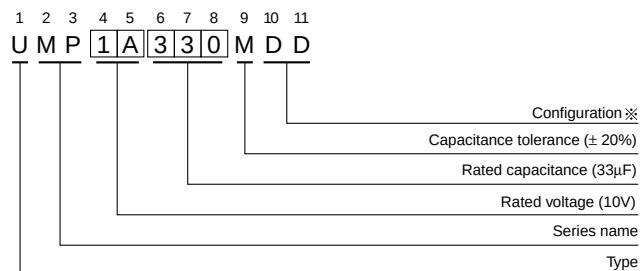
Specifications

Item	Performance Characteristics							
Category Temperature Range	-40 to +85°C							
Rated Voltage Range	6.3 to 50V							
Rated Capacitance Range	0.1 to 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.							
Tangent of loss angle (tan δ)	Measurement frequency : 120Hz at 20°C							
	Rated voltage (V)	6.3	10	16	25	35	50	
	tan δ (MAX.)	0.24	0.20	0.17	0.17	0.15	0.15	
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
	ZT / Z20 (MAX.)	Z-40°C / Z+20°C	8	6	4	4	3	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 2000 hours at 85°C with the polarity inverted every 250 hours.				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 white color letter on black sleeve.							

Radial Lead Type



Type numbering system (Example : 10V 33μF)



※ Configuration

φ D	Pb-free leadwire Pb-free PET sleeve
4 to 6.3	DD

Dimensions

V		6.3	10	16	25	35	50
Cap.(μF)	Code	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 φ D × L (mm)
							Rated ripple

Rated ripple current (mA rms) 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.