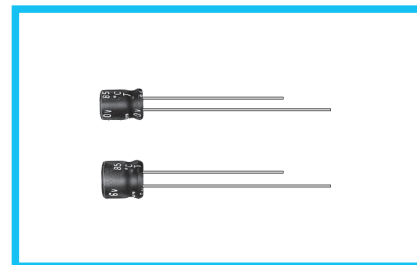
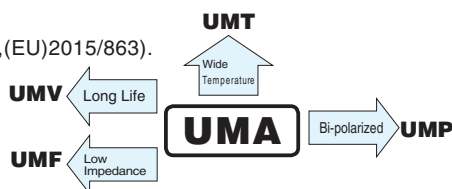


UMA

5mmL, Standard, For General Purposes

Anti-Solvent
Feature

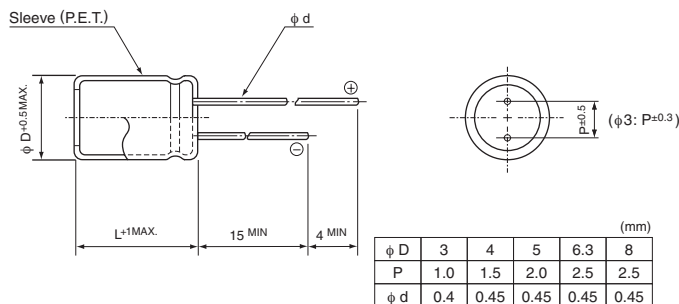
- Standard series with 5mm height.
- Compliant to the RoHS directive (2011/65/EU, (EU)2015/863).



■ Specifications

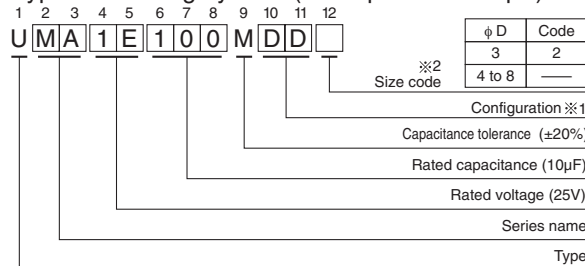
Item	Performance Characteristics															
Category Temperature Range	-40 to +85°C															
Rated Voltage Range	4 to 50V															
Rated Capacitance Range	1 to 470μF															
Rated Capacitance Tolerance	±20% at 120Hz, 20°C															
Leakage Current	After 2 minutes' application 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	Figures in () are for UMR.							
tan δ (MAX.)	0.35	0.24 (0.30)	0.20 (0.24)	0.16 (0.20)	0.14 (0.18)	0.12 (0.16)	0.10 (0.13)									
Stability at Low Temperature	Measurement frequency : 120Hz															
	Rated voltage (V)		4	6.3	10	16	25	35	50							
	Impedance ratio (MAX.)	Z-25°C / Z+20°C	7	4	3	2	2	2	2							
Z-40°C / Z+20°C		15	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.															
									Capacitance change		Within ±20% of the initial capacitance value (UMR & φ 3 product : Within ±25%)					
									tan δ		200% or less than 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.															
									Leakage current		Less than or equal to the initial specified value					
Marking	Printed with white color letter on black sleeve.															

■ Radial Lead Type



- Please refer to page 20 about the end seal configuration.

Type numbering system (Example : 25V 10μF)



※ 1 Configuration

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

※ 2 In case at φ 3 units, put [2] as size code.

■ Dimensions

V	4	6.3	10	16	25	35	50
Cap.(μF)	0G	0J	1A	1C	1E	1V	1H
1	010						4×5(3×5) 8.4(8.0)
2.2	2R2						● 4×5 13(10)
3.3	3R3						4×5 17
4.7	4R7						5×5 20
10	100	3×5 15			● 4×5 23(18)	5×5 27	5×5 29 6.3×5 33
22	220	3×5 19	● 4×5 28(21)	5×5 33	5×5 37	6.3×5 42	6.3×5 46 □ 8×5 52(48)
33	330	4×5 28	5×5 37	5×5 41	○ 6.3×5 49(43)	6.3×5 52	□ 8×5 62(52) 8×5 71
47	470	4×5 33	5×5 45	○ 6.3×5 52(43)	6.3×5 58	□ 8×5 70(62)	8×5 80
100	101	5×5 56	○ 6.3×5 70(68)	□ 8×5 80(76)	□ 8×5 92(86)	8×5 110	
220	221	6.3×5 96	□ 8×5 110(90)	8×5 135			
330	331	8×5 145	8×5 170				
470	471	8×5 185					
							Case size φD×L (mm)
							Rated ripple

Size φ3×5 is available for capacitors marked. "●"/ Size φ5×5 is available for capacitors marked. "○"
 Size φ6.3×5 is available for capacitors marked. "□" In such a case, [M][R] will be put at 2nd and 3rd digit of type numbering system.

Rated ripple current (mA rms) at 85°C 120Hz
 () = φ3 units and UMR.

● Frequency coefficient of rated ripple current

Frequency	50 Hz	120 Hz	300 Hz	1 kHz	10kHz 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.