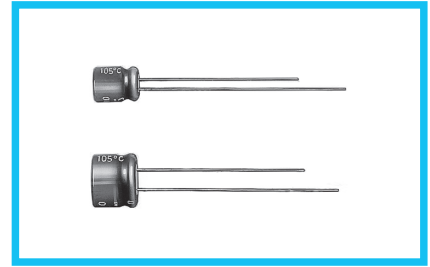
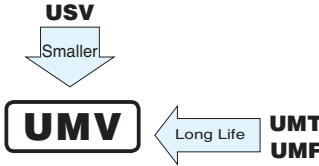


## UMV 5mmL, Long Life Assurance



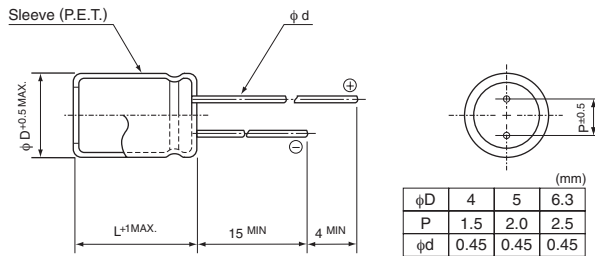
- Extended load life of 5000 hours at +105°C, with 5mm height.
- Compliant to the RoHS directive (2011/65/EU).



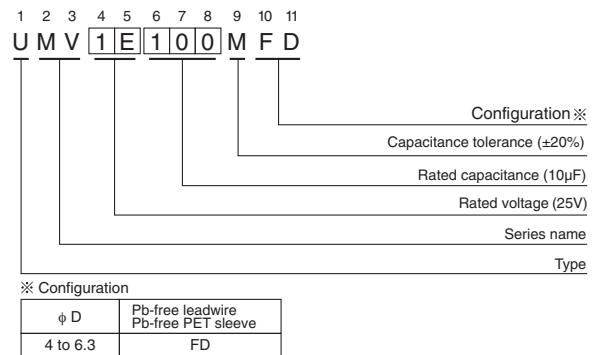
### Specifications

Item	Performance Characteristics																									
Category Temperature Range	-40 to +105°C																									
Rated Voltage Range	4 to 50V																									
Rated Capacitance Range	1 to 100µF																									
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																									
	<table border="1"> <tr> <td>Rated voltage (V)</td> <td>4</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> </tr> <tr> <td>tan δ (MAX.)</td> <td>0.37</td> <td>0.28</td> <td>0.24</td> <td>0.20</td> <td>0.16</td> <td>0.13</td> <td>0.12</td> </tr> </table>	Rated voltage (V)	4	6.3	10	16	25	35	50	tan δ (MAX.)	0.37	0.28	0.24	0.20	0.16	0.13	0.12									
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Stability at Low Temperature	Measurement frequency : 120Hz																									
	<table border="1"> <tr> <td colspan="2">Rated voltage (V)</td> <td>4</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> </tr> <tr> <td rowspan="2">Impedance ratio ZT / Z20 (MAX.)</td> <td>Z-25°C / Z+20°C</td> <td>8</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z-40°C / Z+20°C</td> <td>14</td> <td>10</td> <td>7</td> <td>5</td> <td>3</td> <td>3</td> <td>3</td> </tr> </table>	Rated voltage (V)		4	6.3	10	16	25	35	50	Impedance ratio ZT / Z20 (MAX.)	Z-25°C / Z+20°C	8	4	3	2	2	2	2	Z-40°C / Z+20°C	14	10	7	5	3	3
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Impedance ratio ZT / Z20 (MAX.)	Z-25°C / Z+20°C	8	4	3	2	2	2	2																		
	Z-40°C / Z+20°C	14	10	7	5	3	3	3																		
Endurance	<p>The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 5000 hours at 105°C.</p> <table border="1"> <tr> <td>Capacitance change</td> <td>Within ±30% of the initial capacitance value</td> </tr> <tr> <td>tan δ</td> <td>300% or less than the initial specified value</td> </tr> <tr> <td>Leakage current</td> <td>Less than or equal to the initial specified value</td> </tr> </table>	Capacitance change	Within ±30% of the initial capacitance value	tan δ	300% or less than the initial specified value	Leakage current	Less than or equal to the initial specified value																			
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tan δ	300% 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 105°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 silver color letter on dark brown sleeve.																									

### Radial Lead Type



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



### Dimensions

Cap.(µF)	Code	V		4		6.3		10		16		25		35		50		
		4	6.3	4	6.3	4	6.3	4	6.3	4	6.3	4	6.3	4	6.3	4	6.3	
1	010																4 × 5	6.2
2.2	2R2																4 × 5	11
3.3	3R3																4 × 5	14
4.7	4R7																5 × 5	19
10	100									4 × 5	18	4 × 5	13	4 × 5	15	6.3 × 5	30	
22	220	4 × 5	22	4 × 5	22	5 × 5	27	5 × 5	30	6.3 × 5	38	6.3 × 5	42					
33	330	5 × 5	30	5 × 5	30	5 × 5	35	6.3 × 5	40	6.3 × 5	48							
47	470	5 × 5	36	5 × 5	36	6.3 × 5	46	6.3 × 5	50									
100	101	6.3 × 5	60	6.3 × 5	60											Case size φD × L (mm)	Rated ripple	

Rated ripple current (mArms) at 105°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.