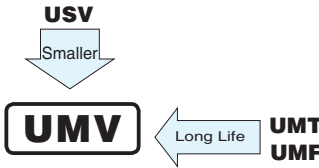


## UMV 5mmL, Long Life Assurance



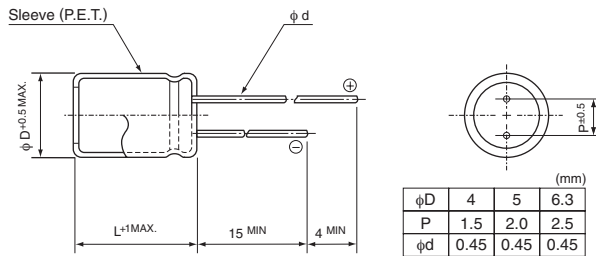
- Extended load life of 5000 hours at +105°C, with 5mm height.
- Compliant to the RoHS directive (2011/65/EU, (EU)2015/863).



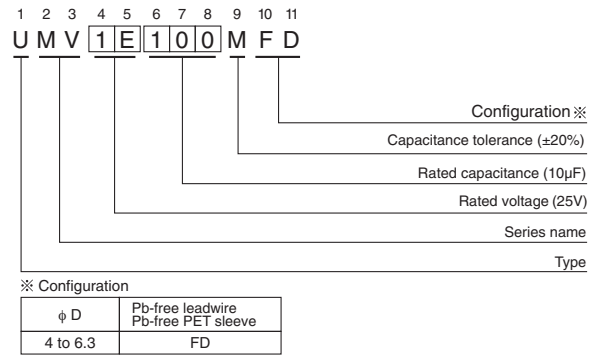
### Specifications

| 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 |   |   |                 |    |    |   |   |   |   |
| 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 |    |    |              |                        |                 |      |      |      |      |      |   |   |                 |    |    |   |   |   |   |
| 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 (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 (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 |
| Rated voltage (V)             |   | 4   | 6.3  | 10   | 16   | 25   | 35   | 50 |    |              |                        |                 |      |      |      |      |      |   |   |                 |    |    |   |   |   |   |
| Impedance ratio (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                     | 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.  |   |      |      |      |      |      |    |    |              |                        |                 |      |      |      |      |      |   |   |                 |    |    |   |   |   |   |
|                               | Capacitance change  | Within ±30% of the initial capacitance value      |      |      |      |      |      |    |    |              |                        |                 |      |      |      |      |      |   |   |                 |    |    |   |   |   |   |
|                               | tan δ   | 300% or less than 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.   |   |      |      |      |      |      |    |    |              |                        |                 |      |      |      |      |      |   |   |                 |    |    |   |   |   |   |
|                               | Leakage current   | Less than or equal to the initial specified value |      |      |      |      |      |    |    |              |                        |                 |      |      |      |      |      |   |   |                 |    |    |   |   |   |   |
| 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<br>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.



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

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- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
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- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

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- Подбор аналогов;
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- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.