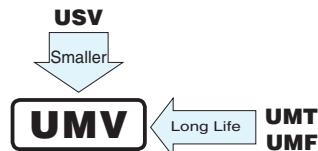


**UMV**

5mmL, Long Life Assurance



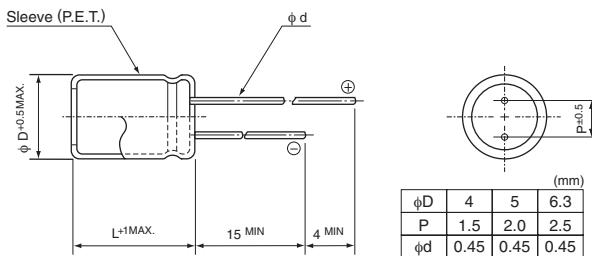
- Extended load life of 5000 hours at +105°C, with 5mm height.
- Compliant to the RoHS directive (2011/65/EU), (EU)2015/863).



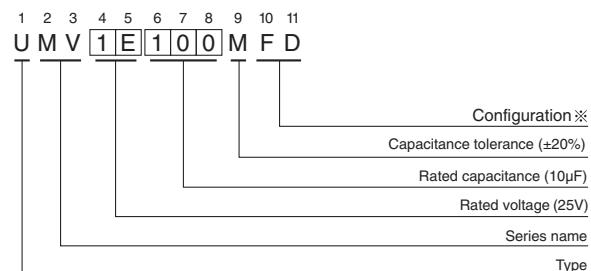
### ■ Specifications

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"> <thead> <tr> <th>Rated voltage (V)</th> <th>4</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> </tr> </thead> <tbody> <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> </tbody> </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"> <thead> <tr> <th>Rated voltage (V)</th> <th>4</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> </tr> </thead> <tbody> <tr> <td>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> </tr> <tr> <td></td> <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> </tr> </tbody> </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		Z-40°C / Z+20°C	14	10	7	5	3	3
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	Z-40°C / Z+20°C	14	10	7	5	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																										
					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)



※ Configuration

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

### ● 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

● Dimension table in next page.

## UMV

## ■ Dimensions

Rated Voltage (V) (code)	Rated Capacitance ( $\mu$ F)	Case Size $\phi$ D×L(mm)	$\tan \delta$	Leakage Current ( $\mu$ A) (at 20°C after 2 minutes)	Rated Ripple (mArms) (105°C/120Hz)	Part Number
4 (0G)	22	4×5	0.37	3	22	UMV0G220MFD
	33	5×5	0.37	3	30	UMV0G330MFD
	47	5×5	0.37	3	36	UMV0G470MFD
	100	6.3×5	0.37	4	60	UMV0G101MFD
6.3 (0J)	22	4×5	0.28	3	22	UMV0J220MFD
	33	5×5	0.28	3	30	UMV0J330MFD
	47	5×5	0.28	3	36	UMV0J470MFD
	100	6.3×5	0.28	6.3	60	UMV0J101MFD
10 (1A)	22	5×5	0.24	3	27	UMV1A220MFD
	33	5×5	0.24	3.3	35	UMV1A330MFD
	47	6.3×5	0.24	4.7	46	UMV1A470MFD
16 (1C)	10	4×5	0.20	3	18	UMV1C100MFD
	22	5×5	0.20	3.52	30	UMV1C220MFD
	33	6.3×5	0.20	5.28	40	UMV1C330MFD
	47	6.3×5	0.20	7.52	50	UMV1C470MFD
25 (1E)	4.7	4×5	0.16	3	13	UMV1E4R7MFD
	10	5×5	0.16	3	23	UMV1E100MFD
	22	6.3×5	0.16	5.5	38	UMV1E220MFD
	33	6.3×5	0.16	8.25	48	UMV1E330MFD
35 (1V)	4.7	4×5	0.13	3	15	UMV1V4R7MFD
	10	5×5	0.13	3.5	25	UMV1V100MFD
	22	6.3×5	0.13	7.7	42	UMV1V220MFD
50 (1H)	1	4×5	0.12	3	6.2	UMV1H010MFD
	2.2	4×5	0.12	3	11	UMV1H2R2MFD
	3.3	4×5	0.12	3	14	UMV1H3R3MFD
	4.7	5×5	0.12	3	19	UMV1H4R7MFD
	10	6.3×5	0.12	5	30	UMV1H100MFD

For cut leads, formed leads or taped parts, please add the appropriate code after the size code (12th digit).  
 If there is no size code in the part number, please add size code "1" and then add the appropriate code.

Please refer to page 18, 19 about the formed or taped product spec.  
 Please refer to page 4 for the minimum order quantity.

# Mouser Electronics

Authorized Distributor

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