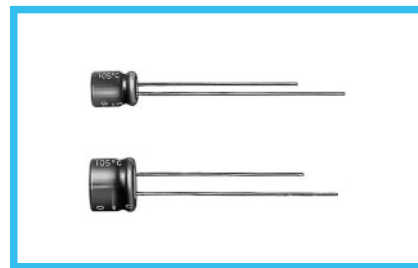
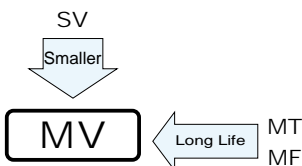


MV 5mmL, Long Life Assurance
series



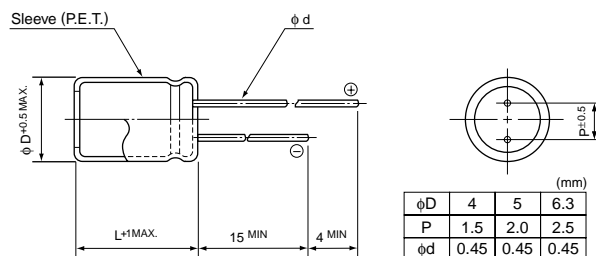
- Extended load life of 5000 hours at +105°C, with 5mm height.
- Compliant to the RoHS directive (2002/95/EC).



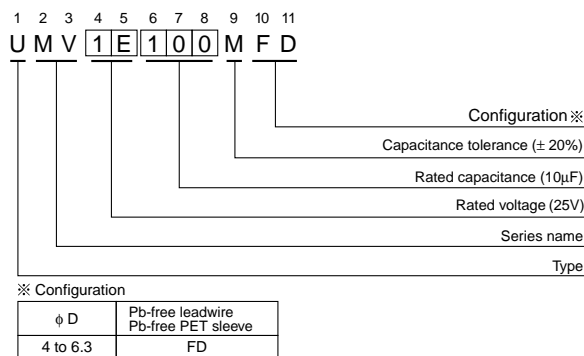
Specifications

Item	Performance Characteristics								
Category Temperature Range	-40 to +105°C								
Rated Voltage Range	4 to 50V								
Rated Capacitance Range	0.1 to 100μF								
Capacitance Tolerance	±20% at 120Hz, 20°C								
Leakage Current	After 2 minutes' application of rated voltage, leakage current is not more than 0.01CV or 3 (μA), whichever is greater.								
Tangent of loss angle (tan δ)	<table border="1"> <tr> <td colspan="2">Measurement frequency : 120Hz, Temperature : 20°C</td></tr> <tr> <td>Rated voltage (V)</td><td>4 6.3 10 16 25 35 50</td></tr> <tr> <td>tan δ (MAX.)</td><td>0.37 0.28 0.24 0.20 0.16 0.13 0.12</td></tr> </table>	Measurement frequency : 120Hz, Temperature : 20°C		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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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	<table border="1"> <tr> <td colspan="2">Measurement frequency : 120Hz</td></tr> <tr> <td>Rated voltage (V)</td><td>4 6.3 10 16 25 35 50</td></tr> <tr> <td>Impedance ratio Z-25°C / Z+20°C</td><td>8 4 3 2 2 2 2</td></tr> <tr> <td>ZT / Z20 (MAX.)</td><td>Z-40°C / Z+20°C 14 10 7 5 3 3 3</td></tr> </table>	Measurement frequency : 120Hz		Rated voltage (V)	4 6.3 10 16 25 35 50	Impedance ratio Z-25°C / Z+20°C	8 4 3 2 2 2 2	ZT / Z20 (MAX.)	Z-40°C / Z+20°C 14 10 7 5 3 3 3
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ZT / Z20 (MAX.)	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

V	4	6.3	10	16	25	35	50
Cap.(μF)	0G	0J	1A	1C	1E	1V	1H
0.1	0R1						4×5 1.0
0.22	R22						4×5 2.6
0.33	R33						4×5 3.2
0.47	R47						4×5 3.8
1	010						4×5 6.2
2.2	2R2						4×5 11
3.3	3R3						4×5 14
4.7	4R7				4×5 13	4×5 15	5×5 19
10	100			4×5 18	5×5 23	5×5 25	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 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.