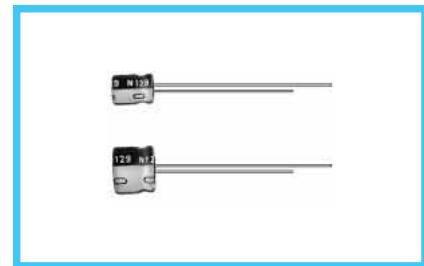
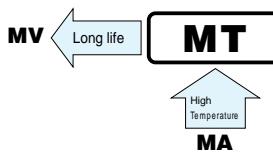


5mmL, Wide Temperature Range
series

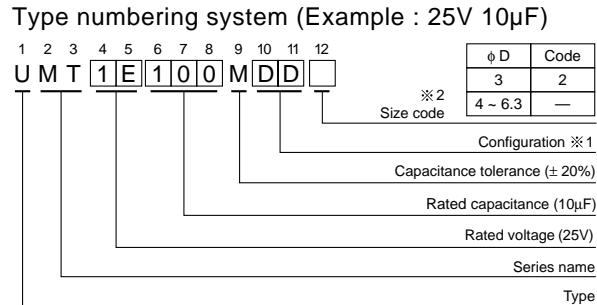
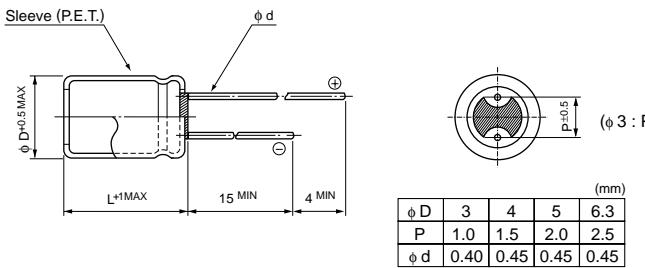
- Wide temperature range of $-55 \sim +105^{\circ}\text{C}$, with 5mm height.



■ Specifications

Item	Performance Characteristics																															
Category Temperature Range	$-55 \sim +105^{\circ}\text{C}$																															
Voltage Range	4 ~ 50V																															
Rated Capacitance Range	0.1 ~ 100 μF																															
Rated Capacitance Tolerance	$\pm 20\%$ 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.																															
tan δ	<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 (0.14)</td> <td>0.12 (0.14)</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 (0.14)	0.12 (0.14)								
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Stability at Low Temperature	<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</td> <td>Z-25°C / Z+20°C</td> <td>6</td> <td>3</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>ZT / Z20 (MAX.)</td> <td>Z-40°C / Z+20°C</td> <td>12</td> <td>8</td> <td>5</td> <td>4</td> <td>3</td> <td>3</td> </tr> </tbody> </table>								Rated voltage (V)	4	6.3	10	16	25	35	50	Impedance ratio	Z-25°C / Z+20°C	6	3	3	2	2	2	ZT / Z20 (MAX.)	Z-40°C / Z+20°C	12	8	5	4	3	3
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Endurance	<p>After 1000 hours' application of rated voltage at 105°C, capacitors meet the characteristic requirements listed at right.</p> <table border="1"> <thead> <tr> <th>Capacitance change</th> <th>Within $\pm 25\%$ of initial value ($\phi 3$ mm unit, and $\leq 16\text{V}$)</th> </tr> </thead> <tbody> <tr> <th>tan δ</th> <td>Within $\pm 20\%$ of initial value ($\geq 25\text{V}$)</td> </tr> <tr> <th>Leakage current</th> <td>200% or less of initial specified value</td> </tr> <tr> <td></td> <td>Initial specified value or less</td> </tr> </tbody> </table>								Capacitance change	Within $\pm 25\%$ of initial value ($\phi 3$ mm unit, and $\leq 16\text{V}$)	tan δ	Within $\pm 20\%$ of initial value ($\geq 25\text{V}$)	Leakage current	200% or less of initial specified value		Initial specified value or less																
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Shelf Life	After leaving capacitors under no load at 105°C for 1000 hours, they meet the specified value for endurance characteristics listed above.																															
Marking	Printed with white color letter on black sleeve.																															

■ Radial Lead Type



※1 Configuration

φ D	Pb-free leadwire Pb-free PET sleeve	Sn-Pb finished leadwire PVC sleeve (containing Pb)
3	CD	CH
4 ~ 6.3	DD	DH

※1 Please contact to us if other configurations are required.

※2 For $\phi 3$ mm unit, place size code of [] to 12th digit. $\phi D \times L$ (mm)

V	4	6.3	10	16	25	35	50
Cap. (μF)	Code	0G	0J	1A	1C	1E	1V
0.1	0R1						• 4x5 1.0
0.22	R22						• 4x5 2.6
0.33	R33						• 4x5 3.2
0.47	R47						• 4x5 3.8
1	010						• 4x5 6.2 (5.9)
2.2	2R2					3x5	7.5 • 4x5 11 (9)
3.3	3R3					• 4x5	11 (9) 4x5 14
4.7	4R7				• 4x5	13 (10)	4x5 15 5x5 19
10	100			• 4x5	18 (14)	5x5	23 5x5 25 6.3x5 30
22	220	4x5	22	4x5	22	5x5	30 6.3x5 38 6.3x5 48
33	330	5x5	30	5x5	30	5x5	35 6.3x5 40 6.3x5 48
47	470	5x5	36	5x5	36	6.3x5	46 6.3x5 50
100	101	6.3x5	60	6.3x5	60		

Size $\phi 3 \times 5$ is available for capacitors marked "•".Figures in () are for $\phi 3$ product.Rated Ripple (mA rms) at 105°C 120Hz

Frequency	50 Hz	120 Hz	300 Hz	1 kHz	10 kHz ~
Coefficient	0.70	1.00	1.17	1.36	1.50

Please refer to page 19, 20, 21 about the formed or taped product spec.
Please refer to page 3 for the minimum order quantity.