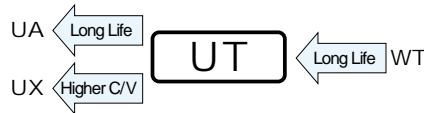


ALUMINUM ELECTROLYTIC CAPACITORS

UT series 6mmL Chip Type, Wide Temperature Range



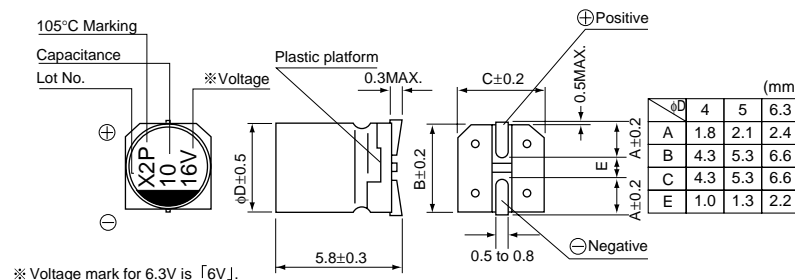
- Chip type with load life 2000 hours at +105°C.
- Designed for surface mounting on high density PC board.
- Applicable to automatic mounting machine fed with carrier tape.
- Compliant to the RoHS directive (2002/95/EC).



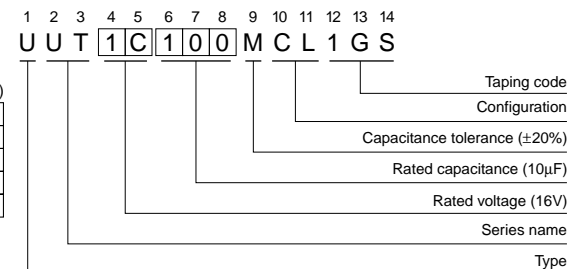
Specifications

Item	Performance Characteristics																										
Category Temperature Range	-55 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 0.01 CV or 3 (μA) , whichever is greater.																										
Tangent of loss angle (tan δ)	Measurement frequency :120Hz, Temperature : 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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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</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> <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> <td>3</td> </tr> </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	2	ZT / Z20 (MAX.)	Z-40°C / Z+20°C	12	8	5	4	3	3
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	ZT / Z20 (MAX.)	Z-40°C / Z+20°C	12	8	5	4	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 2000 hours at 105°C.																										
	Capacitance change	Within ±25% of the initial capacitance value (16V or less) Within ±20% of the initial capacitance value (25V or more)																									
	tan δ	200% 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.																										
Resistance to soldering heat	The capacitors are kept on a hot plate for 30 seconds, which is maintained at 250°C. The capacitors shall meet the characteristic requirements listed at right when they are removed from the plate and restored to 20°C.																										
	Capacitance change	Within ±10% of the initial capacitance value																									
	Leakage current	Less than or equal to the initial specified value																									
Marking	Black print on the case top.																										

Chip Type



Type numbering system (Example : 16V 10μF)



Dimensions

Cap. (μF)	Code	4		6.3		10		16		25		35		50	
		0G	0J	1A	1C	1E	1V	1H							
0.1	0R1													4	1.0
0.22	R22													4	2.6
0.33	R33													4	3.2
0.47	R47													4	3.8
1	010													4	6.2
2.2	2R2													4	11
3.3	3R3													4	14
4.7	4R7									4	13	4	15	5	19
10	100							4	18	5	23	5	25	6.3	30
22	220	4	22	4	22	5	27	5	30	6.3	38	6.3	42		
33	330	5	30	5	30	5	35	6.3	40	6.3	48				
47	470	5	36	5	36	6.3	46	6.3	50						
100	101	6.3	60	6.3	60	6.3	60								

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

- Taping specifications are given in page 23.
- Recommended land size, soldering by reflow are given in page 18, 19.
- Please select UX(p.98), UJ(p.102) series if high C/V products are required.
- Please refer to page 3 for the minimum order quantity.