

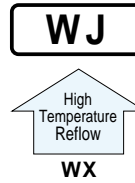
ALUMINUM ELECTROLYTIC CAPACITORS



5.5mmL Chip Type
High Temperature (260° C) Reflow
series



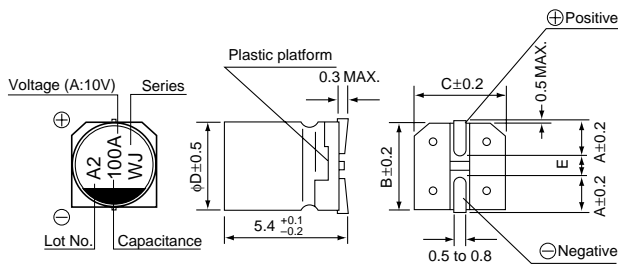
- Corresponding with 260° C peak reflow soldering
Recommended reflow condition : 260° C peak 5 sec. 230° C over 60 sec. 2 times
- Chip type with 5.5mm height.
- Designed for surface mounting on high density PC board.
- Applicable to automatic mounting machine fed with carrier tape.
- Load life of 2000 hours at 85°C
- Compliant to the RoHS directive (2002/95/EC).



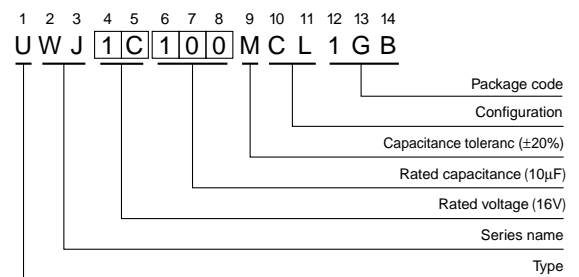
Specifications

Item	Performance Characteristics																							
Category Temperature Range	-40 to +85°C																							
Rated Voltage Range	6.3 to 50V																							
Rated Capacitance Range	0.1 to 150μF																							
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)	Measurement frequency : 120Hz at 20°C																							
	<table border="1"> <thead> <tr> <th>Rated voltage (V)</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>0.26</td> <td>0.20</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.12</td> </tr> </tbody> </table>	Rated voltage (V)	6.3	10	16	25	35	50	tan δ (MAX.)	0.26	0.20	0.16	0.14	0.12	0.12									
Rated voltage (V)	6.3	10	16	25	35	50																		
tan δ (MAX.)	0.26	0.20	0.16	0.14	0.12	0.12																		
Stability at Low Temperature	Measurement frequency : 120Hz																							
	<table border="1"> <thead> <tr> <th colspan="2">Rated voltage (V)</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>4</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>8</td> <td>8</td> <td>4</td> <td>4</td> <td>3</td> <td>3</td> </tr> </tbody> </table>	Rated voltage (V)		6.3	10	16	25	35	50	Impedance ratio	Z-25° C / Z+20°C	4	3	2	2	2	2	ZT / Z20 (MAX.)	Z-40° C / Z+20°C	8	8	4	4	3
Rated voltage (V)		6.3	10	16	25	35	50																	
Impedance ratio	Z-25° C / Z+20°C	4	3	2	2	2	2																	
ZT / Z20 (MAX.)	Z-40° C / Z+20°C	8	8	4	4	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 2000 hours at 85° C.</p> <table border="1"> <tbody> <tr> <td>Capacitance change</td> <td>Within ±20% of the initial capacitance value</td> </tr> <tr> <td>tan δ</td> <td>200% 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> </tbody> </table>	Capacitance change	Within ±20% of the initial capacitance value	tan δ	200% or less than the initial specified value	Leakage Current	Less than or equal to the initial specified value																	
Capacitance change	Within ±20% of the initial capacitance value																							
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 85° 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	<p>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.</p> <table border="1"> <tbody> <tr> <td>Capacitance change</td> <td>Within ±10% of the initial capacitance value</td> </tr> <tr> <td>tan δ</td> <td>Less than or equal to the initial specified value</td> </tr> <tr> <td>Leakage current</td> <td>Less than or equal to the initial specified value</td> </tr> </tbody> </table>	Capacitance change	Within ±10% of the initial capacitance value	tan δ	Less than or equal to the initial specified value	Leakage current	Less than or equal to the initial specified value																	
Capacitance change	Within ±10% of the initial capacitance value																							
tan δ	Less than or equal to the initial specified 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)



Voltage

V	6.3	10	16	25	35	50
Code	j	A	C	E	V	H

	(mm)		
φD	4	5	6.3
A	1.8	2.1	2.4
B	4.3	5.3	6.6
C	4.3	5.3	6.6
E	1.0	1.3	2.2

●Dimension table in next page.

■ Dimensions

Cap. (μF)	Code	6.3		10		16		25		35		50	
		0J		1A		1C		1E		1V		1H	
0.1	0R1											4	1.0
0.22	R22											4	2.0
0.33	R33											4	2.8
0.47	R47											4	4.0
1	010											4	8.4
2.2	2R2											4	13
3.3	3R3											4	17
4.7	4R7							4	16	4	18	5	20
10	100					4	23	5	27	5	29	6.3	33
22	220	4	28	5	33	5	37	6.3	42	6.3	45		
33	330	5	37	5	41	6.3	49	6.3	52				
47	470	5	45	6.3	52	6.3	58						
100	101	6.3	70	6.3	76	6.3	86						
150	151	6.3	71									Case size φ D (mm)	Rated ripple

Rated ripple current (mArms) at 85° 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 refer to page 3 for the minimum order quantity.