

UUB

Chip Type, High Reliability



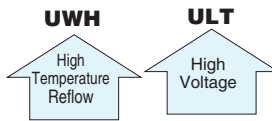
For SMD



Long Life

Anti-Solvent
Feature
(Through 50V only)

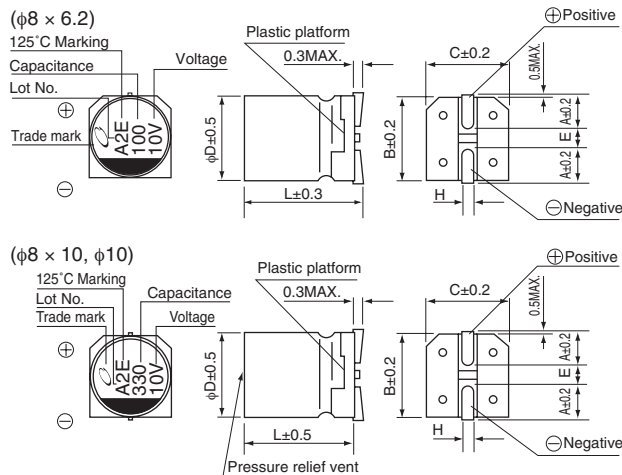
- Chip type, high temperature range, for +125°C use.
- Applicable to automatic mounting machine fed with carrier tape.
- Compliant to the RoHS directive (2011/65/EU, (EU)2015/863).
- AEC-Q200 compliant. Please contact us for details.



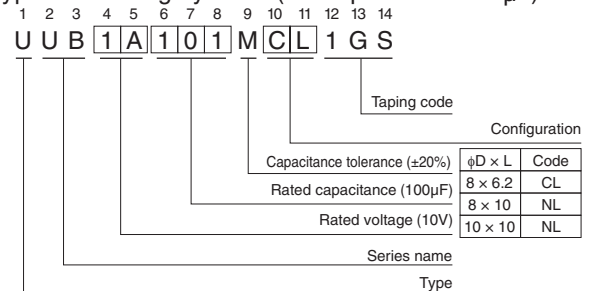
■ Specifications

Item	Performance Characteristics										
Category Temperature Range	-40 to +125°C										
Rated Voltage Range	10 to 400V										
Rated Capacitance Range	1 to 330μF										
Capacitance Tolerance	±20% at 120Hz, 20°C										
Leakage Current	Rated voltage (V)		10 to 50					160 to 400			
	Leakage Current		After 1 minute's application of rated voltage at 20°C, leakage current is not more than 0.03CV (μA).					I = 0.04CV+100 (μA) max.(1 minute's at 20°C)			
Tangent of loss angle (tan δ)	Measurement frequency : 120Hz at 20°C										
	Rated voltage (V)	10	16	25	35	50	160	200	250	400	
	tan δ (MAX.)	0.32	0.24	0.21	0.18	0.18	0.30	0.30	0.30	0.30	
Stability at Low Temperature	Measurement frequency : 120Hz										
	Rated voltage (V)		10	16	25	35	50	160	200	250	400
	Impedance ratio ZT / Z20 (MAX.)	Z-40°C / Z+20°C	12	8	6	4	4	8	8	8	12
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 (1000 hours for φ8 × 6.2) at 125°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 125°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		
							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 : 10V 100μF)



φD × L	8 × 6.2	8 × 10	10 × 10
A	3.3	2.9	3.2
B	8.3	8.3	10.3
C	8.3	8.3	10.3
E	2.3	3.1	4.5
L	6.2	10	10
H	0.5 to 0.8	0.8 to 1.1	0.8 to 1.1

■ Dimensions

V		10		16		25		35		50	
Cap.(μF)	Code	1A		1C		1E		1V		1H	
10	100									8 × 6.2	24
22	220									8 × 6.2	38
33	330							8 × 6.2	44	8 × 10	46
47	470					8 × 6.2	48	8 × 10	52	10 × 10	58
100	101	8 × 6.2	58	8 × 10	66	8 × 10	74	10 × 10	80		
220	221	8 × 10	90	10 × 10	102	10 × 10	116				
330	331	10 × 10	112							Case size φ D × L (mm)	Rated ripple

Cap.(μF)	V Code	160		200		250		400	
		2C		2D		2E		2G	
1	010							8×10	26
1.8	1R8							8×10	27
2.2	2R2							10×10	36
3.3	3R3					8×10	28	10×10	38
4.7	4R7			8×10	36	10×10	59		
6.8	6R8	8×10	42	10×10	59			Case size φD×L (mm)	Rated ripple
10	100	10×10	59	10×10	59				

Rated ripple current (mA rms) at 125°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.