



- Chip type, high temperature range, for +125°C use.
- Applicable to automatic mounting machine using carrier tape.

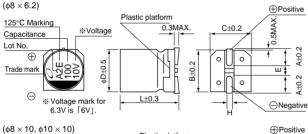


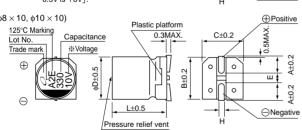


## Specifications

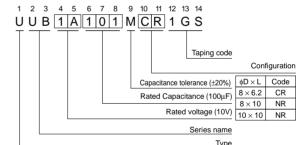
Specifications										
Item	Performance Characteristics									
Category Temperature Range	−40 ~ +125°C									
Rated Voltage Range	10 ~ 50V									
Rated Capacitance Range	10 ~ 330μF									
Capacitance Tolerance	±20% at 120Hz, 20°C									
Leakage Current	After 1 minute's application of rated voltage, leakage current is not more than 0.03CV or 4(µA), whichever is greater.									
	Measurement frequency: 120Hz, Temperature: 20°C									
tan $\delta$	Rated voltage (V) 10 16 25 35 50									
	tan δ (MAX.) 0.32 0.24 0.21 0.18 0.18									
Stability at Low Temperature	Measurement frequency : 120Hz									
	Rated voltage (V) 10 16 25 35 50									
	Impedance ratio   Z-40°C / Z+20°C   12   8   6   4   4									
Endurance	After 2000 hours' ( $\phi 8 \times 6.2:1000$ hours) application of rated voltage at 125°C, capacitors meet the characteristic requirements listed at right.  Capacitance change   Within ±30% of initial value   $\tan \delta$   300% or less of initial specified value   Leakage current   Initial specified value or less									
Shelf Life	After leaving capacitors under no load at 125°C for 1000 hours, they meet the specified value for endurance characteristics listed above.									
Resistance to soldering heat	The capacitors shall be kept on the hot plate maintained at 250°C for 30 seconds. After removing from the hot plate and restored at room temperature, they meet the characteristic requirements listed at right.  Capacitance change   Within ±10% of initial value   tan \( \delta \)   Initial specified value or less   Leakage current   Initial specified value or less									
Marking	Black print on the case top.									







## Type numbering system (Example : $10V\ 100\mu F$ )



The lead-free product is also available upon request.
 In this case, umle will be put at 11th digit of type numbering system.

## ■ Dimensions

 $\phi \; D \times L \; (mm)$ 

	V	1	0	1	6	2	5	3	5	50	)			
Cap.(µF)	Code	1A		1A		10	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		i			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				Rated			
330	331	10×10	112							Case size	ripple			

8×6.2

3.3

6.2

B 8.3

C 8.3

E 2.3

8×10 10×10

29 32

8.3 10.3

8.3 10.3

3.1 4.5

10

Rated Ripple (mA rms) at 125°C 120Hz

## Frequency coefficient of rated ripple current

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

- Taping specifications are given in page 22.
- Please refer to page 3 for the minimum order quantity.
- Recommended land size are given in page 23