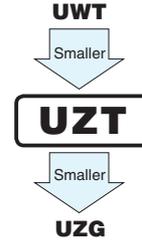


## UZZT 4.5mmL Chip Type, Wide Temperature Range



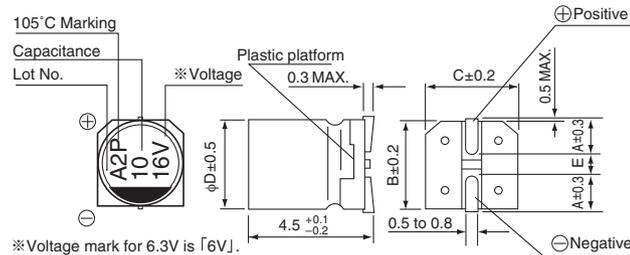
- Chip type with 4.5mm height, operating over wide temperature range of -40 to +105°C.
- Designed for surface mounting on high density PC board.
- Applicable to automatic mounting machine fed with carrier tape.
- Compliant to the RoHS directive (2011/65/EU).

Values marked with an ※ in the dimension table are scheduled to be discontinued and are not recommended for new designs.

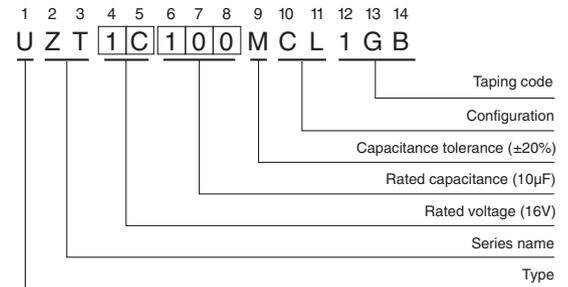
### Specifications

Item	Performance Characteristics					
Category Temperature Range	-40 to +105°C					
Rated Voltage Range	6.3 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 0.01CV or 3 (μA), whichever is greater.					
Tangent of loss angle (tan δ)	Measurement frequency : 120Hz at 20°C					
	Rated voltage (V)	6.3	10	16	25	35
Stability at Low Temperature	Measurement frequency : 120Hz					
	Impedance ratio Z <sub>-25°C</sub> / Z <sub>+20°C</sub>	6	5	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 1000 hours at 105°C.					
	Capacitance change	Within ±25% of the initial capacitance value (16V or less)				
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.					
	tan δ	300% or less than initial specified value				
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.					
	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)	V		6.3		10		16		25		35		50	
	Code		0J		1A		1C		1E		1V		1H	
0.1	0R1												※4	0.9
0.22	R22												※4	2.2
0.33	R33												※4	2.8
0.47	R47												※4	3.3
1	010												4	5.4
2.2	2R2												4	9.6
3.3	3R3												4	12
4.7	4R7								4	11	4	13	5	16
10	100					4	16	5	20	5	22	6.3	26	
22	220	4	19	5	24	5	26	6.3	33	6.3	36			
33	330	5	26	5	30	6.3	35	6.3	42					
47	470	5	32	6.3	40	6.3	44							
100	101	6.3	52											

Rated ripple current (mA rms) at 105°C 120Hz

- Taping specifications are given in page 23.
- Recommended land size, soldering by reflow are given in page 18, 19.
- Please select UUX(p.152), UUU(p.158) series if high C/V products are required.
- Please refer to page 3 for the minimum order quantity.

### 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