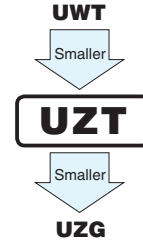


## UZZT 4.5mmL Chip Type, Wide Temperature Range

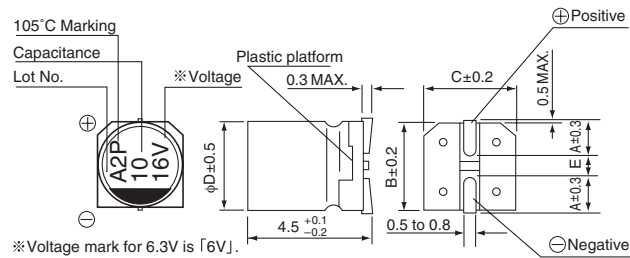


- Chip type with 4.5mm height, operating over wide temperature range of  $-40$  to  $+105^{\circ}\text{C}$ .
- Designed for surface mounting on high density PC board.
- Applicable to automatic mounting machine fed with carrier tape.
- Compliant to the RoHS directive (2011/65/EU, (EU)2015/863).
- AEC-Q200 compliant. Please contact us for details.

### Specifications

Item	Performance Characteristics						
Category Temperature Range	$-40$ to $+105^{\circ}\text{C}$						
Rated Voltage Range	6.3 to 50V						
Rated Capacitance Range	1 to $100\mu\text{F}$						
Capacitance Tolerance	$\pm 20\%$ at 120Hz, $20^{\circ}\text{C}$						
Leakage Current	After 2 minutes' application of rated voltage at $20^{\circ}\text{C}$ , leakage current is not more than $0.01\text{CV}$ or $3(\mu\text{A})$ , whichever is greater.						
Tangent of loss angle ( $\tan \delta$ )	Measurement frequency : 120Hz at $20^{\circ}\text{C}$						
	Rated voltage (V)	6.3	10	16	25	35	50
Stability at Low Temperature	Measurement frequency : 120Hz						
	Rated voltage (V)	6.3	10	16	25	35	50
	Impedance ratio ZT / Z20 (MAX.)	Z $-25^{\circ}\text{C}$ / Z $+20^{\circ}\text{C}$	6	5	3	3	3
Endurance	The specifications listed at right shall be met when the capacitors are restored to $20^{\circ}\text{C}$ after the rated voltage is applied for 1000 hours at $105^{\circ}\text{C}$ .						
	Capacitance change	Within $\pm 25\%$ of the initial capacitance value (16V or less) Within $\pm 20\%$ of the initial capacitance value (25V or more)					
	$\tan \delta$	300% or less than initial specified value					
Shelf Life	After storing the capacitors under no load at $105^{\circ}\text{C}$ for 1000 hours and then performing voltage treatment based on JIS C 5101-4 clause 4.1 at $20^{\circ}\text{C}$ , they shall meet the specified values for the endurance characteristics listed above.						
	Leakage current	Less than or equal to the initial specified value					
	Capacitance change	Less than or equal to the initial specified value					
Resistance to soldering heat	The capacitors are kept on a hot plate for 30 seconds, which is maintained at $250^{\circ}\text{C}$ . The capacitors shall meet the characteristic requirements listed at right when they are removed from the plate and restored to $20^{\circ}\text{C}$ .						
	Capacitance change	Within $\pm 10\%$ of the initial capacitance value					
	$\tan \delta$	Less than or equal to the initial specified value					
Marking	Black print on the case top.						
	Leakage current	Less than or equal to the initial specified value					

### Chip Type



	(mm)		
$\phi D$	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

### Type numbering system (Example : 16V $10\mu\text{F}$ )



### Dimensions

Cap. ( $\mu\text{F}$ )	Code	6.3		10		16		25		35		50	
		0J		1A		1C		1E		1V		1H	
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  $105^{\circ}\text{C}$  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 UUX(p.170), UUU(p.176) series if high C/V products are required.
- Please refer to page 3 for the minimum order quantity.