



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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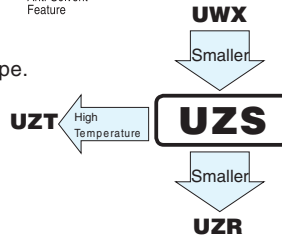


UZS 4.5mmL Chip Type



- Chip type with 4.5mm height.
- 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).

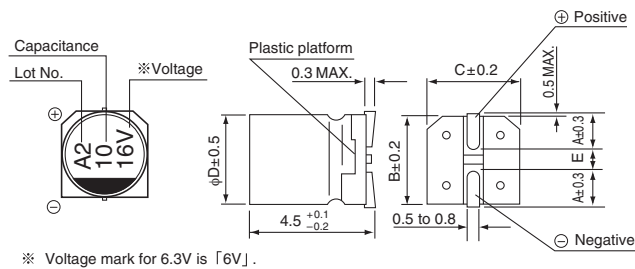
Values marked with an ※ in the dimension table are scheduled to be discontinued and are not recommended for new designs.



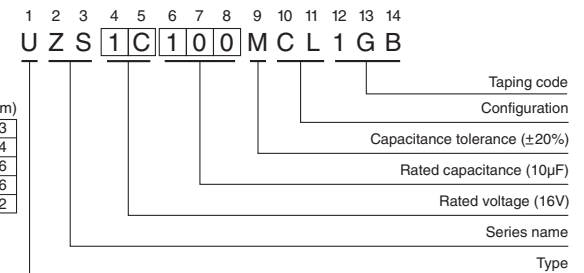
Specifications

Item	Performance Characteristics							
Category Temperature Range	-40 to +85°C							
Rated Voltage Range	4 to 50V							
Rated Capacitance Range	0.1 to 220μF							
Capacitance Tolerance	+20% at 120Hz, 20°C							
Leakage Current	After 2 minutes' application of rated voltage, leakage current is not more than 0.01 CV or 3 (μA), whichever is greater.							
Tangent of loss angle (tan δ)	Measurement frequency : 120Hz at 20°C							
	Rated voltage (V)	4	6.3	10	16	25	35	50
Stability at Low Temperature	Measurement frequency : 120Hz							
	Rated voltage (V)	4	6.3	10	16	25	35	50
	Impedance ratio Z _{-25°C} / Z _{+20°C}	7	4	3	2	2	2	2
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 at 85°C.							
	Capacitance change	Within ±20% of the initial capacitance value						
	tan δ	200% or less than the initial specified value						
Shelf Life	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.							
	Capacitance change	Within ±10% of the initial capacitance value						
	tan δ	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°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						
	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)	Code	4		6.3		10		16		25		35		50	
		OG		OJ		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	46		
33	330	4	28	5	37	5	41	6.3	49	6.3	52				
47	470	4	33	5	45	6.3	52	6.3	58						
100	101	5	56	6.3	70										
220	221	6.3	96												

Rated ripple current (mArms) at 85°C 120Hz

- Taping specifications are given in page 23.
- Recommended land size, soldering by reflow are given in page 18, 19.
- Please select UUR(p.150), UUG(p.156) 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