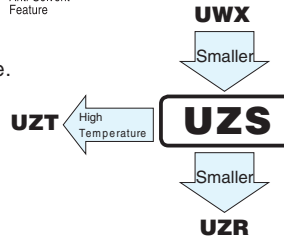


UZS 4.5mmL Chip Type



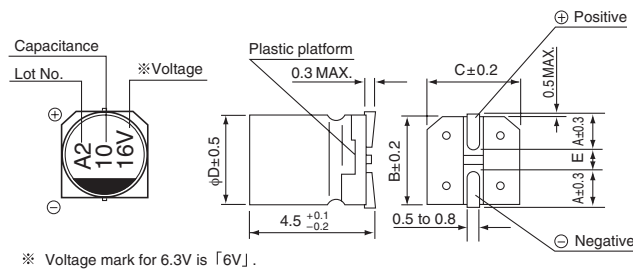
- Chip type with 4.5mm height.
- Designed for surface mounting on high density PC board.
- Applicable to automatic mounting machine fed with carrier tape.
- Compliant to the RoHS directive (2011/65/EU, (EU)2015/863).
- AEC-Q200 compliant. Please contact us for details.



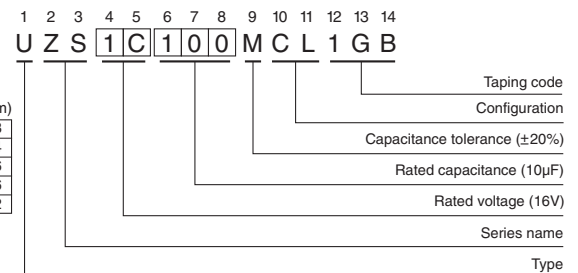
Specifications

Item	Performance Characteristics							
Category Temperature Range	-40 to +85°C							
Rated Voltage Range	4 to 50V							
Rated Capacitance Range	1 to 220μF							
Capacitance Tolerance	+20% at 120Hz, 20°C							
Leakage Current	After 2 minutes' application of rated voltage at 20°C, 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
	tan δ (MAX.)	0.50	0.30	0.24	0.19	0.16	0.14	0.14
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
	ZT / Z20 (MAX.)	15	8	8	4	4	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 2000 hours at 85°C.							
Shelf Life	After storing the capacitors under no load at 85°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.							
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
		0G	0J	1A	1C	1E	1V	1H
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 (mA Arms) at 85°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 UUR(p.168), UUG(p.174) if high C/V products are required.
- Please refer to page 3 for the minimum order quantity.