



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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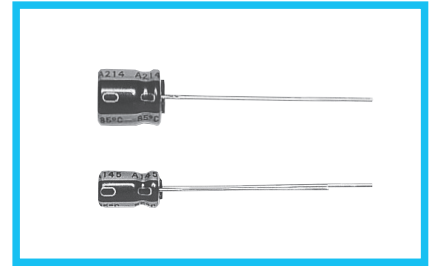
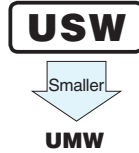
# ALUMINUM ELECTROLYTIC CAPACITORS

## USW 7mmL, For Audio Equipment



- Acoustic series, with 7mm height.
- Compliant to the RoHS directive (2011/65/EU).

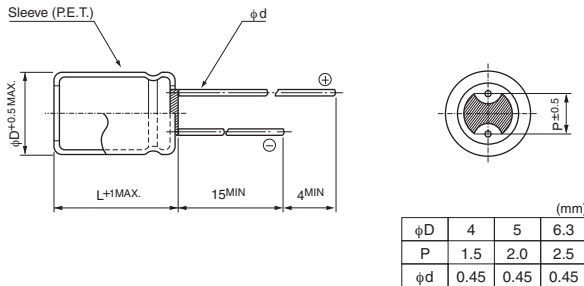
Values marked with an ※ in the dimension table are scheduled to be discontinued and are not recommended for new designs.



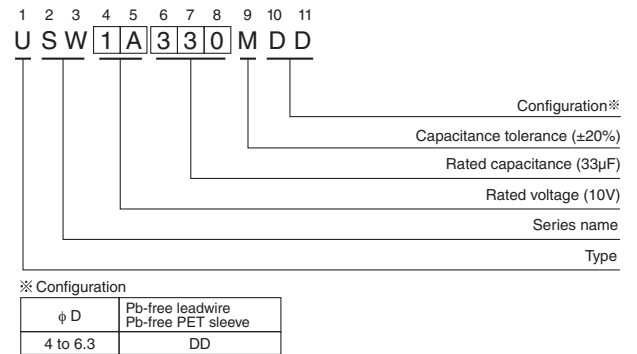
### Specifications

Item	Performance Characteristics							
Category Temperature Range	-40 to +85°C							
Rated Voltage Range	6.3 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 at 20°C, 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	50	
	tan δ (MAX.)	0.24	0.20	0.16	0.14	0.12	0.10	
Stability at Low Temperature	Measurement frequency : 120Hz							
	Rated voltage (V)	6.3	10	16	25	35	50	
	Impedance ratio ZT / Z20 (MAX.)	Z-25°C / Z+20°C	4	3	2	2	2	2
		Z-40°C / Z+20°C	8	6	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 1000 hours at 85°C.							
	Capacitance change	Within ±20% of the initial capacitance value						
	tan δ	200% or less than the initial specified value						
	Leakage current	Less than or equal to the initial specified value						
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.							
Marking	Printed with black color letter on gold sleeve.							

### Radial Lead Type



### Type numbering system (Example : 10V 33μF)



### Dimensions

Cap.(μF)	Code	V 6.3		10		16		25		35		50	
		0J		1A		1C		1E		1V		1H	
0.1	0R1											※ 4 × 7	1.0
0.22	R22											※ 4 × 7	2.3
0.33	R33											※ 4 × 7	3.5
0.47	R47											※ 4 × 7	5.0
1	010											4 × 7	10
2.2	2R2											4 × 7	19
3.3	3R3											4 × 7	24
4.7	4R7									4 × 7	24	4 × 7	28
10	100					4 × 7	28	4 × 7	28	4 × 7	31	5 × 7	38
22	220	4 × 7	34	4 × 7	35	4 × 7	39	5 × 7	48	5 × 7	52	6.3 × 7	58
33	330	4 × 7	40	4 × 7	43	5 × 7	55	5 × 7	58	6.3 × 7	65		
47	470	4 × 7	48	5 × 7	59	5 × 7	65	6.3 × 7	71				
100	101	5 × 7	78	6.3 × 7	87	6.3 × 7	98						
220	221	6.3 × 7	120									Case size φ D × L (mm)	Rated ripple

### Frequency coefficient of rated ripple current

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

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

Please refer to page 20, 21, 22 about the formed or taped product spec.  
Please refer to page 4 for the minimum order quantity.