

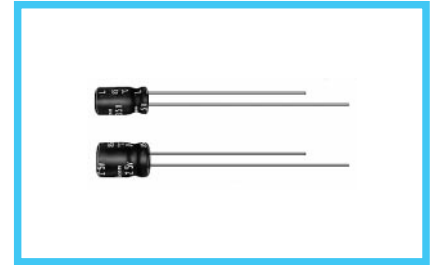
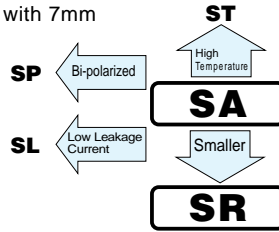
**SA** series  
7mmL, For General Purposes

**SR** series  
7mmL, High CV



● Standard miniature series with 7mm height.

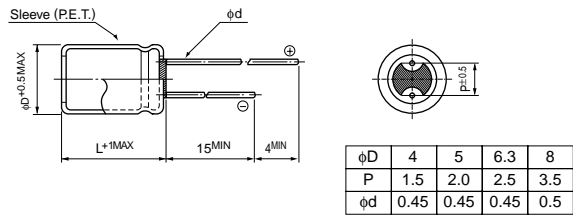
● Higher CV series with 7mm height.



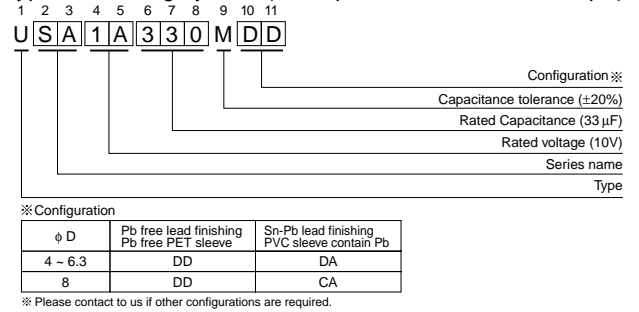
## Specifications

Item	SA series	SR series								
Category Temperature Range	-40 ~ +85°C	-40 ~ +85°C								
Rated Voltage Range	6.3 ~ 50V	4 ~ 50V								
Rated Capacitance Range	0.1 ~ 220μF	0.1 ~ 470μF								
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.									
tan δ	Measurement frequency : 120Hz, Temperature : 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	6	4	3	2	2	2	2		
Endurance	Z-40°C / Z+20°C		12	8	6	4	3	3		
	After 2000 hours' application of rated voltage at 85°C, capacitors meet the characteristic requirements listed at right.		Capacitance change		Within ±20% of initial value					
			tan δ		200% or less of initial specified value					
Shelf Life	After leaving capacitors under no load at 85°C for 1000 hours, they meet the specified value for endurance characteristics listed above.		Leakage current		Initial specified value or less					
	Marking		Printed with white color letter on black sleeve.							

## Radial Lead Type



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



## Dimensions

Cap.(μF)	V(Code) Series Code	D×L (mm)												
		4 (0G)		6.3 (0J)		10 (1A)		16 (1C)		25 (1E)		35 (1V)		50 (1H)
		SR	SA	SR	SA	SR	SA	SR	SA	SR	SA	SR	SA	SR
0.1	0R1												4×7	4×7
													1.0	1.0
0.22	R22												4×7	4×7
													2.3	2.3
0.33	R33												4×7	4×7
													3.5	3.5
0.47	R47												4×7	4×7
													5.0	5.0
1	010												4×7	4×7
													10	10
2.2	2R2												4×7	4×7
													19	19
3.3	3R3												4×7	4×7
													24	24
4.7	4R7												4×7	4×7
													24	24
10	100												4×7	4×7
													28	28
22	220												4×7	4×7
													34	34
33	330												4×7	4×7
													47	47
47	470												4×7	4×7
													59	59
100	101												4×7	4×7
													65	65
220	221												6.3×7	6.3×7
													110	110
330	331												8×7	8×7
													165	165
470	471												8×7	8×7
													240	240

## Frequency coefficient of rated ripple current

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

Rated Ripple (mA rms) at 85°C 120Hz  
Please refer to page 19, 20, 21 about the formed or taped product spec.  
Please refer to page 3 for the minimum order quantity.