

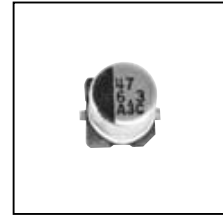
# CHIP TYPE

# CA Series

Surface-Mounted Device



- Height : 5.4mm.
- Load life : 85°C 2000 hours.
- Low leakage current (0.5  $\mu$ A to 2.0  $\mu$ A max.)

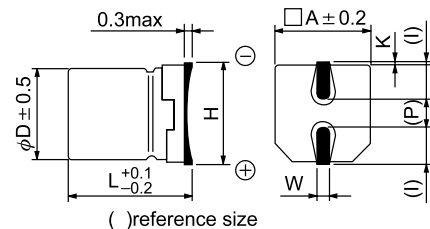


## SPECIFICATION

Item	Characteristic							
Operation Temperature Range	-40 ~ +85°C							
Rated Working Voltage	6.3 ~ 50VDC							
Capacitance Tolerance (120Hz 20°C)	$\pm 20\%$ (M)							
Leakage Current (20°C)	$I \leq 0.002CV$ or $0.5 (\mu A)$							I : Leakage Current ( $\mu A$ )
	*Whichever is greater after 2 minutes							C : Rated Capacitance ( $\mu F$ ) V : Working Voltage (V)
Surge Voltage (20°C)	W.V.	6.3	10	16	25	35	50	
	S.V.	8	13	20	32	44	63	
Dissipation Factor (tan $\delta$ ) (120Hz 20°C)	W.V.	6.3	10	16	25	35	50	
	tan $\delta\phi$	0.24	0.20	0.16	0.14	0.12	0.10	
Low Temperature Stability	Impedance ratio at 120Hz							
	Rated Voltage (V)	6.3	10	16	25	35	50	
	-25°C / +20°C	4	3	2	2	2	2	
	-40°C / +20°C	8	6	4	4	3	3	
Load Life	After 2000 hours application of W.V. and +85°C ripple current value, the capacitor shall meet the following limits. (DC + ripple peak voltage $\leq$ rate working voltage)							
	Capacitance Change	$\leq \pm 25\%$ of initial value						
	Dissipation Factor	$\leq 200\%$ of initial specified value						
	Leakage current	$\leq$ initial specified value						
Shelf Life	At +85°C, no voltage application after 1000 hours, the capacitor shall meet the limits for load life characteristics. (With voltage treatment)							
Resistance to Soldering Heat	Capacitors placed on a 250°C hot plate for 30 seconds with their electrode terminals facing downward will fulfill the following conditions after being cooled to room temperature.							
	Capacitance Change	$\leq \pm 10\%$ of initial value						
	Dissipation Factor	$\leq$ initial specified value						
	Leakage current	$\leq$ initial specified value						

## DIMENSIONS (mm)

D	L	A	H	I	W	P	K
4.0	5.4	4.3	5.5MAX	1.8	0.65 $\pm$ 0.1	1.0	0.35 <sup>+0.15</sup> <sub>-0.20</sub>
5.0	5.4	5.3	6.5MAX	2.2	0.65 $\pm$ 0.1	1.5	0.35 <sup>+0.15</sup> <sub>-0.20</sub>
6.3	5.4	6.6	7.8MAX	2.6	0.65 $\pm$ 0.1	2.1	0.35 <sup>+0.15</sup> <sub>-0.20</sub>



● CASE SIZE & MAX RIPPLE CURRENT

Case size : D x L (mm)  
 Max ripple current : mA(rms) 85°C 120Hz

μF	V(Code) Code Item	6.3 (0J)		10 (1A)		16 (1C)		25 (1E)		35 (1V)		50 (1H)	
		DxL	R.C.	DxL	R.C.	DxL	R.C.	DxL	R.C.	DxL	R.C.	DxL	R.C.
0.1	0R1											4x5.4	1.0
0.22	R22											4x5.4	2.3
0.33	R33											4x5.4	3.5
0.47	R47											4x5.4	5
1.0	010											4x5.4	10
2.2	2R2											4x5.4	15
3.3	3R3											4x5.4	18
4.7	4R7							4x5.4	19	4x5.4	20	5x5.4	23
10	100					4x5.4	25	5x5.4	28	5x5.4	30	6.3x5.4	34
22	220	4x5.4	31	5x5.4	35	5x5.4	39	6.3x5.4	52	6.3x5.4	54		
33	330	5x5.4	39	5x5.4	43	6.3x5.4	57	6.3x5.4	63				
47	470	5x5.4	47	6.3x5.4	59	6.3x5.4	68						
100	101	6.3x5.4	71	6.3x5.4	76								