

# SURFACE MOUNT ALUMINUM ELECTROLYTIC CAPACITORS



## CD Chip type, Extremely Low Impedance Series

**IZI** Low Impedance **S** Solvent Proof



- Chip type, low impedance temperature range up to 105°C
- Designed for surface mounting on high density PC board
- Applicable to automatic insertion machine using carrier tape
- Complied to the RoHS directive

CK → **CD**  
Low Imp.

Item	Characteristics						
<b>Operating temperature range</b>	-55 ~ +105°C						
<b>Leakage current max.</b>	$I = 0.01CV$ or $3\mu A$ whichever is greater (after 2 minutes)						
<b>Capacitance tolerance</b>	$\pm 20\%$ at 120Hz, 20°C						
<b>Dissipation factor max. (at 120Hz, 20°C)</b>	WV	6.3	10	16	25	35	50
	tan $\delta$	0.24	0.19	0.16	0.14	0.12	0.12
<b>Low temperature characteristics (Impedance ratio at 120Hz)</b>	WV	6.3	10	16	25	35	50
	Z-25°C/Z+20°C	2	2	2	2	2	2
	Z-55°C/Z+20°C	3	3	3	3	3	3
<b>Load life (after application of the rated voltage for 2000 hours at 105°C)</b>	Leakage current	Less than specified value					
	Capacitance change	Within $\pm 25\%$ of initial value					
	tan $\delta$	Less than 200% of specified value					
<b>Shelf life (at 105°C)</b>	After 1000 hours no load test, leakage current, capacitance and tan $\delta$ are same as load life value. The measurement shall be performed at 20°C by the KS C IEC 60384 - 4						
<b>Resistance to soldering heat</b>	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them at 250°C for 10 seconds.						
	Leakage current	Less than specified value					
	Capacitance change	Within $\pm 10\%$ of initial value					
	tan $\delta$	Less than specified value					

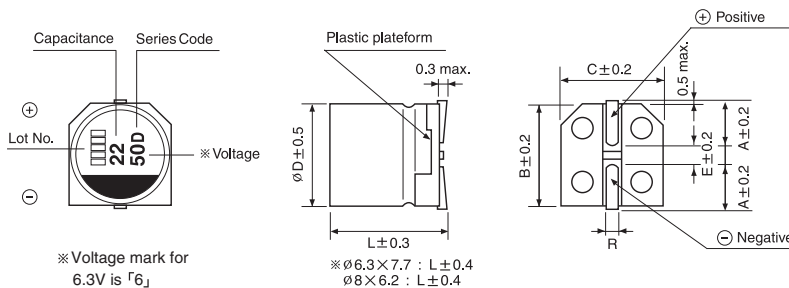
CHIP TYPES

### DRAWING

Unit : mm

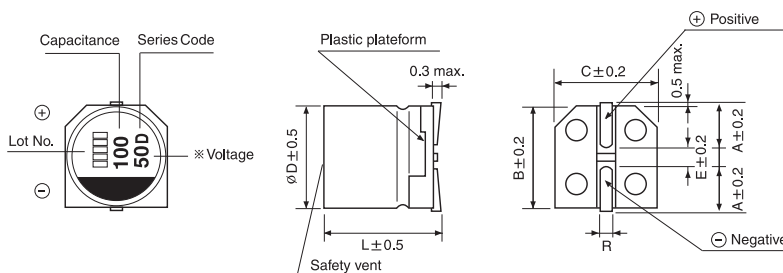
-Series code of CD is "D"

( $\phi 6.3 \times 5.8$ , 7.7,  $\phi 8 \times 6.2$ )



$\phi D$	A	B	C	E	R
<b>6.3 × 5.8</b>	2.4	6.6	6.6	2.2	0.5~0.8
<b>6.3 × 7.7</b>	2.4	6.6	6.6	2.2	0.5~0.8
<b>8 × 6.2</b>	3.3	8.3	8.3	2.3	0.5~0.8
<b>8 × 10</b>	2.9	8.3	8.3	3.1	0.8~1.1
<b>10 × 10</b>	3.2	10.3	10.3	4.5	0.8~1.1

( $\phi 8 \times 10$ ,  $\phi 10 \times 10$ )



# SURFACE MOUNT ALUMINUM ELECTROLYTIC CAPACITORS

**CD** series

## ● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

$\mu F$ \ WV	6.3			10			16			25			35			50		
10																6.3×5.8	1.00	170
15																6.3×5.8	0.86	170
22																6.3×5.8	0.86	170
33							6.3×5.8	0.39	240	6.3×5.8	0.39	240	6.3×5.8	0.43	240	6.3×7.7	0.66	280
																8×6.2	0.63	300
47				6.3×5.8	0.39	240	6.3×5.8	0.39	240	6.3×5.8	0.39	240	6.3×5.8	0.43	240	6.3×7.7	0.66	280
																8×6.2	0.63	300
68	6.3×5.8	0.36	240	6.3×5.8	0.36	240	6.3×5.8	0.36	240	6.3×5.8	0.36	240	6.3×7.7	0.32	290	8×10	0.32	350
100	6.3×5.8	0.36	240	6.3×5.8	0.36	240	6.3×5.8	0.36	240	6.3×7.7	0.32	290	8×10	0.16	600	10×10	0.2	700
										8×6.2	0.26	300						
150	6.3×5.8	0.36	240	6.3×5.8	0.36	240	6.3×7.7	0.32	290	8×10	0.16	600	8×10	0.16	600			
220	6.3×5.8	0.36	240	6.3×7.7	0.32	290	6.3×7.7	0.32	290	8×10	0.16	600	10×10	0.10	850			
				8×6.2	0.26	300	8×6.2	0.26	300									
330	6.3×7.7	0.32	290	8×10	0.16	600	8×10	0.16	600	10×10	0.10	850						
	8×6.2	0.26	300															
470	8×10	0.16	600	8×10	0.16	600	10×10	0.08	850	← Ripple current (mA rms) at 105°C, 100kHz								
680	8×10	0.16	600	10×10	0.08	850				↑ Impedance (Ω) at 20°C, 100kHz								
1000	10×10	0.08	850							↑ Case size ØD x L (mm)								
1500	10×10	0.08	850															

## ● FREQUENCY COEFFICIENT OF PERMISSIBLE RIPPLE CURRENT

Frequency	50Hz	120Hz	300Hz	1kHz	10kHz <sub>≤</sub>
Coefficient	0.35	0.5	0.64	0.83	1.00