

CM Chip type, Extremely Low Impedance Long Life 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

CD → **CM**
Long life

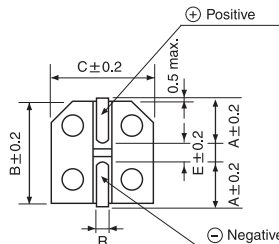
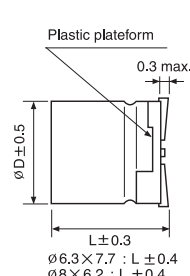
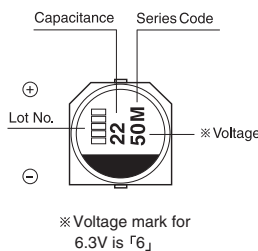
Item	Characteristics							
Operating temperature range	-55 ~ +105°C							
Leakage current max.	$I = 0.01CV$ or $3\mu A$ whichever is greater (after 2 minutes)							
Capacitance tolerance	$\pm 20\%$ at 120Hz, 20°C							
Dissipation factor max. (at 120Hz, 20°C)	WV	6.3	10	16	25	35	50	63 ~ 100
	tan δ	0.26	0.19	0.16	0.14	0.13	0.12	0.10
Low temperature characteristics (Impedance ratio at 120Hz)	WV	6.3	10	16	25	35	50 ~ 100	
	Z-25°C/Z+20°C	2	2	2	2	2	2	
	Z-55°C/Z+20°C	4	4	4	3	3	3	
Load life (after application of the rated voltage for 5000 hours at 105°C)	Leakage current	Less than specified value						
	Capacitance change	Within $\pm 30\%$ of initial value						
	tan δ	Less than 250% of specified value						
		$\varnothing D$	$\varnothing D \leq 6.3, \varnothing 8 \times 6.2\text{mmL}$				$\varnothing D \geq 8$	
Shelf life (at 105°C)	After 1000 hours no load test, leakage current, capacitance and tan δ are same as load life value. The measurement shall be performed at 20°C by the KS C IEC 60384 - 4							
Resistance to soldering heat	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 δ	Less than specified value						

● DRAWING

Unit : mm

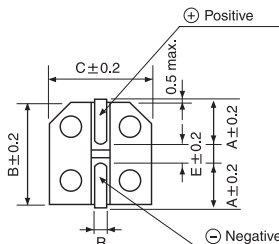
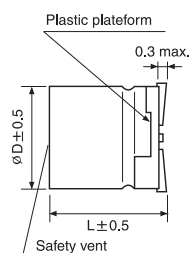
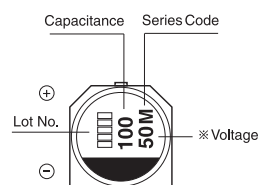
-Series code of CM is "M"

($\varnothing 6.3, \varnothing 8 \times 6.2$)

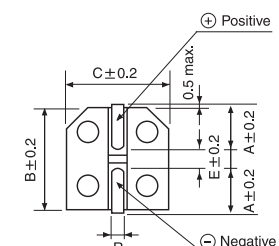
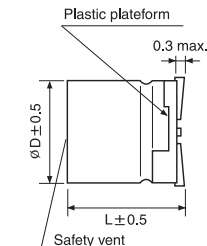
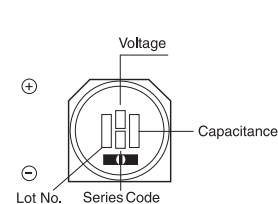


$\varnothing D \times L$	A	B	C	E	R
6.3 × 5.8	2.4	6.6	6.6	2.2	0.5-0.8
6.3 × 7.7	2.4	6.6	6.6	2.2	0.5-0.8
8 × 6.2	3.3	8.3	8.3	2.3	0.5-0.8
8 × 10	2.9	8.3	8.3	3.1	0.8-1.1
10 × 10	3.2	10.3	10.3	4.5	0.8-1.1
12.5 × 13.5	4.6	12.8	12.8	4.5	1.1-1.4

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



($\varnothing 12.5$)



SURFACE MOUNT ALUMINUM ELECTROLYTIC CAPACITORS

CM series

● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

μF \diagdown 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	0.43	240	6.3×5.8	0.43	240	6.3×5.8	0.50	240	6.3×7.7	0.66	280
																8×6.2	0.63	300
47				6.3×5.8	0.43	240	6.3×5.8	0.43	240	6.3×5.8	0.43	240	6.3×5.8	0.50	240	6.3×7.7	0.66	280
																8×6.2	0.63	300
68	6.3×5.8	0.43	240	6.3×5.8	0.39	240	6.3×5.8	0.39	240	6.3×5.8	0.39	240	6.3×7.7	0.32	290	8×10	0.32	350
100	6.3×5.8	0.43	240	6.3×5.8	0.39	240	6.3×5.8	0.39	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	0.43	240	6.3×5.8	0.39	240	6.3×7.7	0.32	290	8×10	0.16	600	8×10	0.16	600			
220	6.3×5.8	0.43	240	6.3×7.7	0.36	290	6.3×7.7	0.32	290	8×10	0.16	600	10×10	0.08	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	0.1	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)								

μF \diagdown WV	63			80			100		
10	6.3×7.7	2.1	80	6.3×7.7	2.4	60	8×10	2	100
22	6.3×7.7	2.1	120	8×10	1.3	130	8×10	2	140
33	8×10	1.0	250	8×10	1.3	130	10×10	1.5	330
47	8×10	1.0	250	10×10	1.0	200	12.5×13.5	1.0	500
68	10×10	0.8	400	12.5×13.5	0.8	500	12.5×13.5	1.0	500
100	10×10	0.8	400	12.5×13.5	0.8	500			
150	12.5×13.5	0.6	800	12.5×13.5	0.8	500			
220	12.5×13.5	0.6	800						

● FREQUENCY COEFFICIENT OF PERMISSIBLE RIPPLE CURRENT

Frequency	50Hz	120Hz	300Hz	1kHz	10kHz ≤
Coefficient	0.35	0.5	0.64	0.83	1.00