

# ALUMINUM ELECTROLYTIC CAPACITOR (CDK MK)

## MK FEATURES

- Micro miniature, 5mm height, used in high density circuits.

## SPECIFICATIONS

Item	Performance Characteristics							
Rated Voltage Range	4V.DC~50V.DC							
Operating Temperature Range	-40°C+105°C							
Nominal Capacitance Range	0.22μF~220μF							
Capacitance Tolerance	±20%(M,+25°C,120Hz)							
Leakage Current	After application of rated voltage for 2 minutes: $I \leq 0.01CV$ or $3\mu A$ (Whichever is greater) 25°C C: Nominal Capacitance in μF; V: Rated Working Voltage in V							
Dissipation Factor (tanδ)	Rated Working Voltage(V)	4	6.3	10	16	25	35	50
	tanδ(MAX) (25°C,120HZ)	0.35	0.26	0.20	0.16	0.14	0.12	0.12
Temperature Stability	Rated Working Voltage(V)	4	6.3	10	16	25	35	50
	Impedance Ratio(120Hz) Z-40°C/Z+20°C	15	8	8	4	4	4	4
Load Life	After applying rated voltage for 1000 hours at +85°C, Capacitors meet the characteristics requirements measured at +25°C listed below: Capacitance change: ±20% Initial measured value Leakage current: ≤ Initial specified value Dissipation factor: ≤ 2 Initial specified value							
Shelf Life	After leaving capacitor under no load at +105°C for 500 hours, Capacitors meet the characteristics listed above.							

## MULTIPLIER FOR RIPPLE CURRENT

Frequency coefficient

Cap(μF) \ Freq(Hz)	50(60)	100(120)	500	1K	10K
0.22-47	0.8	1.0	1.20	1.30	1.50
100-220	0.8	1.0	1.10	1.15	1.20

Temperature coefficient

Ambient Temperature(°C)	105	85	65
Factor	1.0	1.6	2.1

## DIMENSIONS, RATED VOLTAGE RANGE AND CAPACITANCE

Cap(μF) \ WV(V)	4		6.3		10		16		25		35		50	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
0.22													4x5	1
0.33													4x5	2.5
0.47													4x5	4
1													4x5	6
2.2													4x5	8.6
3.3													4x5	9.1
4.7							4x5	11	4x5	13	4x5	12	4x5	13
10			4x5	14	4x5	16	4x5	18	5x5	27	4x5	14	5x5	20
22			4x5	22	5x5	32	5x5	35	6.3x5	46	5x5	27	6.3x5	31
33	4x5	27	5x5	34	5x5	45	6.3x5	51	6.3x5	59	6.3x5	35	6.3x5	39
47	4x5	37	5x5	37	6.3x5	50	6.3x5	65	6.3x5	65	6.3x5	46		
100	5x5	62	6.3x5	62	6.3x5	80								
200	6.3x5	74												

(1) Case Size DxL(mm)

(2) Max allowable ripple current (mA rms +105°C 120Hz)