NIPPON CHEMI-CON

SURFACE MOUNT ALUMINUM ELECTROLYTIC CAPACITORS

7000 to 8000-hours-life, 105℃

Alchip™-MLE Series

- Endurance : 7,000 to 8,000 hours at 105℃
- Rated voltage range : 6.3 to 50V
- Nominal capacitance range : 0.1 to 1,000μF
- Suitable for high reliability products
- **RoHS Compliant**

MVL → (Longer life) MLD → (Longer life) **MLE**

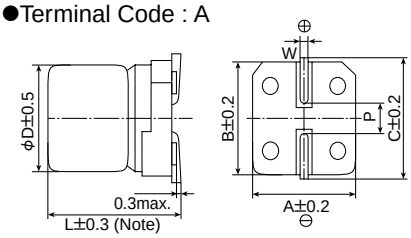


◆SPECIFICATIONS

Items	Characteristics							
Category Temperature Range	-25 to +105℃							
Rated Voltage Range	6.3 to 50Vdc							
Capacitance Tolerance	±20%(M)							(at 20℃,120Hz)
Leakage Current	I=0.03CV or 4μA, whichever is greater Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V)							(at 20℃, after 2 minutes)
Dissipation Factor (tanδ)	Rated voltage (Vdc)	6.3V	10V	16V	25V	35V	50V	
	tanδ (Max.)	0.32	0.28	0.26	0.16	0.14	0.14	(at 20℃,120Hz)
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage(Vdc)	6.3V	10V	16V	25V	35V	50V	
	Z(-10℃)/Z(+20℃)	4	3	2	2	2	2	(at 120Hz)
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage is applied for specified time at 105℃.							
	Time	D73 to F73 : 7,000 hours F90 to JA0 : 8,000 hours						
	Capacitance change	≦±30% of the initial value						
	D.F. (tanδ)	≦300% of the initial specified value						
	Leakage current	≦The initial specified value						
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20℃ after exposing them for 1,000 hours at 105℃ without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to Item 4.1 of JIS C 5101-4.							
	Capacitance change	≦±30% of the initial value						
	D.F. (tanδ)	≦300% of the initial specified value						
	Leakage current	≦The initial specified value						

◆DIMENSIONS [mm]

●Terminal Code : A



Note : L±0.5 for HA0 and JA0

Size code	D	L	A	B	C	W	P
D73	4	7.0	4.3	4.3	5.1	0.5 to 0.8	1.0
E73	5	7.0	5.3	5.3	5.9	0.5 to 0.8	1.4
F73	6.3	7.0	6.6	6.6	7.2	0.5 to 0.8	1.9
F90	6.3	8.7	6.6	6.6	7.2	0.5 to 0.8	1.9
HA0	8	10.0	8.3	8.3	9.0	0.7 to 1.1	3.1
JA0	10	10.0	10.3	10.3	11.0	0.7 to 1.1	4.5

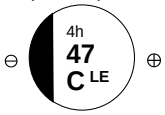
◆PART NUMBERING SYSTEM

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
E	M	L	E				A	D	A				M				G

- 18 : Supplement code
- 15–17 : Size code
- 14 : Capacitance tolerance code
- 11–13 : Capacitance code (ex. 47μF:470,100μF:101)
- 10 : Taping code
- 9 : Terminal code
- 8 : Voltage code (ex. 6.3V:6R3,10V:100,25V:250)
- 5–7 : Series code
- 1–4 : Category

◆MARKING

EX) 16V47μF



●Rated voltage symbol

Rated voltage (Vdc)	6.3	10	16	25	35	50
Symbol	j	A	C	E	V	H

◆STANDARD RATINGS

WV (Vdc)	Cap (μF)	Size code	Rated ripple current (mArms/105℃, 120Hz)	Part No.
6.3	22	D73	22	EMLE6R3ADA220MD73G
	47	E73	36	EMLE6R3ADA470ME73G
	100	F73	60	EMLE6R3ADA101MF73G
	220	F90	101	EMLE6R3ADA221MF90G
	330	HA0	160	EMLE6R3ADA331MHA0G
	1,000	JA0	313	EMLE6R3ADA102MJA0G
10	33	E73	35	EMLE100ADA330ME73G
	220	HA0	141	EMLE100ADA221MHA0G
16	10	D73	18	EMLE160ADA100MD73G
	22	E73	30	EMLE160ADA220ME73G
	47	F73	50	EMLE160ADA470MF73G
	100	F90	81	EMLE160ADA101MF90G
	470	JA0	254	EMLE160ADA471MJA0G
25	33	F73	48	EMLE250ADA330MF73G
	47	F90	63	EMLE250ADA470MF90G
	100	HA0	116	EMLE250ADA101MHA0G
35	0.10	D73	1.0	EMLE350ADAR10MD73G

WV (Vdc)	Cap (μF)	Size code	Rated ripple current (mArms/105℃, 120Hz)	Part No.
35	0.22	D73	2.6	EMLE350ADAR22MD73G
	0.33	D73	3.2	EMLE350ADAR33MD73G
	0.47	D73	3.8	EMLE350ADAR47MD73G
	1.0	D73	6.2	EMLE350ADA1R0MD73G
	2.2	D73	11	EMLE350ADA2R2MD73G
	3.3	D73	14	EMLE350ADA3R3MD73G
	4.7	D73	15	EMLE350ADA4R7MD73G
	4.7	E73	19	EMLE350ADA4R7ME73G
	10	E73	25	EMLE350ADA100ME73G
	10	F73	30	EMLE350ADA100MF73G
	22	F73	42	EMLE350ADA220MF73G
	22	F90	49	EMLE350ADA220MF90G
	33	F90	57	EMLE350ADA330MF90G
	220	JA0	216	EMLE350ADA221MJA0G
50	33	HA0	77	EMLE500ADA330MHA0G
	47	HA0	92	EMLE500ADA470MHA0G
	100	JA0	151	EMLE500ADA101MJA0G

CAT. No. E1001I