NIPPON CHEMI-CON

SURFACE MOUNT ALUMINUM ELECTROLYTIC CAPACITORS

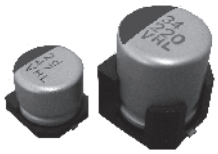
High heat resistance, 125℃

Alchip™-MHL Series

Upgrade!

- Downsized and Longer life from current MVH series
- Endurance : 2,000 to 4,000 hours at 125℃
- Rated voltage range : 10 to 35V. Nominal capacitance range : 47 to 680µF
- For automobile modules and other high temperature applications
- Solvent resistant type (see PRECAUTIONS AND GUIDELINES)
- Vibration resistant structure
- RoHS2 Compliant
- AEC-Q200 compliant : Please contact Chemi-Con for more details, test data, information.

MHL
↑ Downsized Longer life
MVH



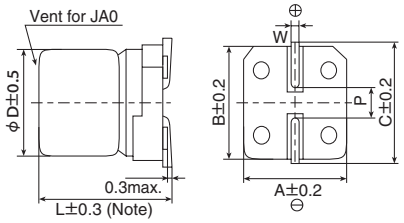
◆SPECIFICATIONS

Items	Characteristics					
Category Temperature Range	-40 to +125℃					
Rated Voltage Range	10 to 35Vdc					
Capacitance Tolerance	±20%(M)					(at 20℃, 120Hz)
Leakage Current	I=0.01CV Where, I : Max. leakage current (µA), C : Nominal capacitance (µF), V : Rated voltage (V)					(at 20℃ after 2 minutes)
Dissipation Factor (tan δ)	Rated voltage(Vdc)	10V	16V	25V	35V	
	tan δ (Max.)	0.24	0.20	0.16	0.14	(at 20℃, 120Hz)
Low Temperature Characteristics (Max. impedance Ratio)	Rated voltage(Vdc)	10V	16V	25V	35V	
	Z(-25℃)/Z(+20℃)	3	2	2	2	
	Z(-40℃)/Z(+20℃)	6	4	4	3	(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 125℃.					
	Time	F61 & F80 : 2,000 hours HA0 & JA0 : 4,000 hours				
	Capacitance change	≦±30% of the initial value				
	D.F. (tan δ)	≦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 125℃ 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. (tan δ)	≦300% of the initial specified value				
	Leakage current	≦The initial specified value				

◆DIMENSIONS [mm]

● Terminal Code : A

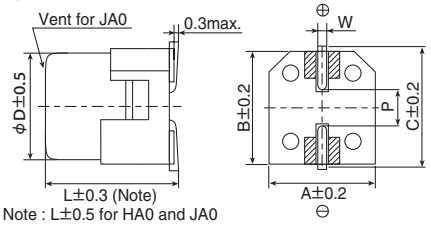
● Size code : F61 to JA0



Note : L±0.5 for HA0 and JA0

● Terminal Code : G(Vibration resistant structure)

● Size code : F61 to JA0



Note : L±0.5 for HA0 and JA0

: Dummy terminals

Size code	φD	L	A	B	C	W	P
F61	6.3	5.8	6.6	6.6	7.2	0.5 to 0.8	1.9
F80	6.3	7.7	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	H	L					R	A				M				G

- Supplement code
- Size code
- Capacitance tolerance code
- Capacitance code (ex. 47µF:470,100µF:101)
- Taping code
- Terminal code (A, G)
- Voltage code (ex. 35V:350)
- Series code
- Category

Please refer to "Product code guide (surface mount type)"

◆MARKING

EX) 35V47µF

●Rated voltage symbol

Rated voltage (Vdc)	Symbol
10	A
16	C
25	E
35	V

NIPPON CHEMI-CON

SURFACE MOUNT ALUMINUM ELECTROLYTIC CAPACITORS

High heat resistance, 125℃

Aichip™-MHL Upgrade! Series

◆STANDARD RATINGS

WV (V_{dc})	Cap (μF)	Size code	ESR (Ω max./100kHz)		Rated ripple current (mArms/125℃, 100kHz)	Part No.
			20℃	-40℃		
10	100	F61	1.2	22	110	EMHL100□RA101MF61G
	220	F80	0.60	12	220	EMHL100□RA221MF80G
	330	HA0	0.30	5.5	296	EMHL100□RA331MHA0G
	470	HA0	0.30	5.5	296	EMHL100□RA471MHA0G
	680	JA0	0.20	3.6	440	EMHL100□RA681MJA0G
16	47	F61	1.2	22	110	EMHL160□RA470MF61G
	100	F61	1.2	22	110	EMHL160□RA101MF61G
	220	F80	0.60	12	220	EMHL160□RA221MF80G
	330	HA0	0.30	5.5	296	EMHL160□RA331MHA0G
	470	JA0	0.20	3.6	440	EMHL160□RA471MJA0G
	680	JA0	0.20	3.6	440	EMHL160□RA681MJA0G
25	47	F61	1.2	22	110	EMHL250□RA470MF61G
	100	F80	0.60	12	220	EMHL250□RA101MF80G
	220	HA0	0.30	5.5	296	EMHL250□RA221MHA0G
	330	JA0	0.20	3.6	440	EMHL250□RA331MJA0G
35	47	F61	1.2	22	110	EMHL350□RA470MF61G
	100	F80	0.60	12	220	EMHL350□RA101MF80G
	220	HA0	0.30	5.5	296	EMHL350□RA221MHA0G
	330	JA0	0.20	3.6	440	EMHL350□RA331MJA0G

□ : Enter the appropriate terminal code.

◆RATED RIPPLE CURRENT MULTIPLIERS

◎Frequency Multipliers

Capacitance(μF) \ Frequency(Hz)	120	1k	10k	100k
47 to 680	0.93	0.97	1.00	1.00

The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5℃ rise.
When long life performance is required in actual use, the rms ripple current has to be reduced.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Aluminium Electrolytic Capacitors - SMD ***category:***

Click to view products by United Chemicon ***manufacturer:***

Other Similar products are found below :

EEV-FK1E332W ULV2H1R8MNL1GS MAL214099813E3 CA025M4R70REB-0405 HUB1800-S 34610 RYK-50V101MG5TT-FL 107AXZ016MQ5 RVJ-50V101MH10U-R EMVH101GRA221MMN0S MAL214097402E3 MAL215375471E3 MAL224699909E3 MAL224699813E3 MAL215099017E3 MAL215099818E3 AEH1010331M025R AEA1010102M016R AEH1012471M016R MAL213967339E3 ZSC00AF2211EARL VB1E100MB054000CE0 RVT1000UF10V34RV0081 XT100UF50V90RV0067 RVE100UF16V67RV0046 XT47UF50V90RV0082 XT22UF50V90RV0083 RST22UF50V026 RST10UF16V013 RST100UF25V004 RST100UF35V009 RST47UF25V035 RST47UF50V038 RST220UF25V019 RSL220UF25V021 XT10UF25V90RV0068 FZ100UF50V90RV0066 RST100UF16V003 XT100UF10V90RV0060 XT100UF16V90RV0061 RT100UF35V90RV0102 XT100UF35V90RV0065 FZ100UF35V90RV0064 XT100UF25V90RV0062 XT220UF10V90RV0073 XT220UF35V90RV0076 XT470UF6.3V90RV0128 LZ47UF35V90RV0123 XT330UF25V90RV0127 XT47UF35V90RV0081