Alchip™-MVE Series

MVE → Longer life: MVL, MVJ

- Endurance : 1,000 to 2,000 hours at 105℃
- Case size range : φ4×5.2L to φ18×21.5L
- Solvent resistant type except 100 to 450Vdc (see PRECAUTIONS AND GUIDELINES)
- RoHS2 Compliant
- AEC-Q200 compliant : Please contact Chemi-Con for more details, test data, information.

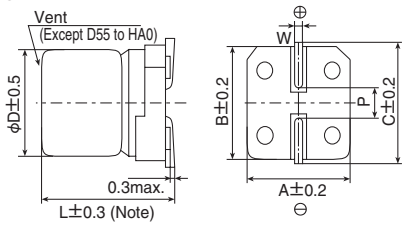
◆SPECIFICATIONS

Items	Characteristics											
Category Temperature Range	-40 to +105℃											
Rated Voltage Range	6.3 to 450Vdc											
Capacitance Tolerance	±20%(M) (at 20℃, 120Hz)											
Leakage Current	Rated voltage (Vdc)	6.3 to 100V							160 to 450V			
	D55 to JA0	I=0.01CV or 3μA, whichever is greater (2 minutes)							—			
	KE0 to MN0	I=0.03CV or 4μA, whichever is greater (1 minute)							I=0.04CV+100μA (1minute)			
	Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20℃)											
Dissipation Factor (tan δ)	See STANDARD RATINGS (at 20℃, 120Hz)											
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (Vdc)		6.3V	10V	16V	25V	35V	50V	63V	100V	160 to 250V	400 to 450V
	D55 to JA0	Z(-25℃)/Z(+20℃)	4	3	2	2	2	2	2	3	—	—
		Z(-40℃)/Z(+20℃)	12	8	6	4	3	3	3	4	—	—
	KE0 to MN0	Z(-25℃)/Z(+20℃)	5	4	3	2	2	2	2	2	3	6
		Z(-40℃)/Z(+20℃)	10	8	6	4	3	3	3	3	6	10 (at 120Hz)
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage is applied for the specified period of time at 105℃.											
	Size code	D55 to F80	HA0 to MN0									
	Time	1,000 hours	2,000 hours									
	Capacitance change	≦±30% of the initial value	≦±20% of the initial value									
	D.F. (tan δ)	≦300% of the initial specified value	≦200% of the initial specified value									
	Leakage current	≦The initial specified value	≦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 (500 hours for B55 to F80 size) 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.											
	Size code	D55 to F80	HA0 to MN0									
	Capacitance change	≦±25% of the initial value	≦±20% of the initial value									
	D.F. (tan δ)	≦200% of the initial specified value	≦200% of the initial specified value									
	Leakage current	≦The initial specified value	≦The initial specified value									

◆DIMENSIONS [mm]

●Terminal Code : A

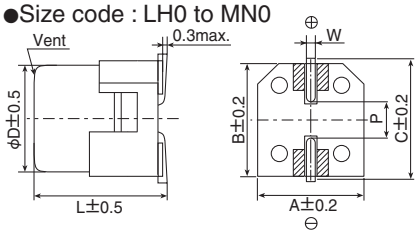
●Size code : D55 to MN0



Note : L±0.5 for HA0 to MN0

●Terminal Code : G (Vibration resistant structure)

●Size code : LH0 to MN0



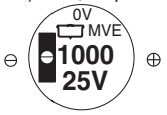
▨ : Dummy terminals

Size code	D	L	A	B	C	W	P
D55	4	5.2	4.3	4.3	5.1	0.5 to 0.8	1.0
E55	5	5.2	5.3	5.3	5.9	0.5 to 0.8	1.4
F55	6.3	5.2	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
KE0	12.5	13.5	13.0	13.0	13.7	1.0 to 1.3	4.2
KG5	12.5	16.0	13.0	13.0	13.7	1.0 to 1.3	4.2
LH0	16	16.5	17.0	17.0	18.0	1.0 to 1.3	6.5
LN0	16	21.5	17.0	17.0	18.0	1.0 to 1.3	6.5
MH0	18	16.5	19.0	19.0	20.0	1.0 to 1.3	6.5
MN0	18	21.5	19.0	19.0	20.0	1.0 to 1.3	6.5

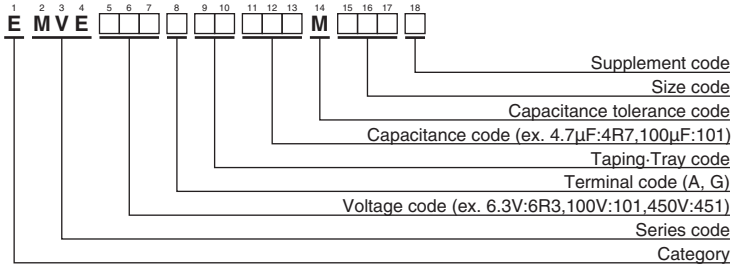
◆MARKING

D55 to JA0
Ex)16V22μF

KE0 to MN0
Ex)25V1,000μF



◆PART NUMBERING SYSTEM



◆RATED RIPPLE CURRENT MULTIPLIERS

●Frequency Multipliers

Size code	Capacitance(μF) \ Frequency(Hz)	120	1k	10k	100k
D55 to JA0	1.0	1.00	1.50	1.75	1.80
	2.2 to 10	1.00	1.30	1.40	1.50
	22 to 1,500	1.00	1.05	1.08	1.08
KE0 to MN0	3.3 to 4.7	1.00	1.75	2.30	2.50
	10 to 68	1.00	1.50	1.75	1.80
	100 to 1,000	1.00	1.30	1.40	1.50
	2,200 to 6,800	1.00	1.05	1.08	1.08

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.

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

Alchip™-MVE Series

◆STANDARD RATINGS

is not solvent resistant.

WV (V_{dc})	Cap (μF)	Size code	tan δ	Rated ripple current (mArms/ 105℃, 120Hz)	Part No.
6.3	22	D55	0.30	22	EMVE6R3ARA220MD55G
	33	E55	0.30	34	EMVE6R3ARA330ME55G
	47	E55	0.30	38	EMVE6R3ARA470ME55G
	100	F55	0.30	69	EMVE6R3ARA101MF55G
	220	F80	0.45	120	EMVE6R3ARA221MF80G
	330	HA0	0.40	290	EMVE6R3ARA331MHA0G
	470	HA0	0.45	320	EMVE6R3ARA471MHA0G
	680	HA0	0.45	340	EMVE6R3ARA681MHA0G
	1,000	JA0	0.40	410	EMVE6R3ARA102MJA0G
	1,500	JA0	0.45	550	EMVE6R3ARA152MJA0G
	2,200	KE0	0.40	680	EMVE6R3ARA222MKE0S
	2,200	LH0	0.40	840	EMVE6R3□RA222MLH0S
	3,300	KG5	0.42	850	EMVE6R3ARA332MKG5S
	3,300	MH0	0.42	1,000	EMVE6R3□RA332MMH0S
	4,700	LN0	0.44	1,200	EMVE6R3□RA472MLN0S
	4,700	MH0	0.44	1,200	EMVE6R3□RA472MMH0S
	6,800	LN0	0.48	1,200	EMVE6R3□RA682MLN0S
	6,800	MN0	0.48	1,350	EMVE6R3□RA682MMN0S
10	22	E55	0.24	30	EMVE100ARA220ME55G
	33	E55	0.24	34	EMVE100ARA330ME55G
	47	F55	0.24	48	EMVE100ARA470MF55G
	100	F55	0.30	69	EMVE100ARA101MF55G
	150	F80	0.35	100	EMVE100ARA151MF80G
	220	F80	0.35	120	EMVE100ARA221MF80G
	330	HA0	0.35	290	EMVE100ARA331MHA0G
	470	HA0	0.35	320	EMVE100ARA471MHA0G
	1,000	JA0	0.35	410	EMVE100ARA102MJA0G
	2,200	KG5	0.36	750	EMVE100ARA222MKG5S
	2,200	LH0	0.36	850	EMVE100□RA222MLH0S
	3,300	LH0	0.38	1,000	EMVE100□RA332MLH0S
	3,300	MH0	0.38	1,100	EMVE100□RA332MMH0S
	4,700	LN0	0.40	1,300	EMVE100□RA472MLN0S
	4,700	MN0	0.40	1,350	EMVE100□RA472MMN0S
16	10	D55	0.20	17	EMVE160ARA100MD55G
	22	E55	0.20	30	EMVE160ARA220ME55G
	33	F55	0.20	45	EMVE160ARA330MF55G
	47	F55	0.20	48	EMVE160ARA470MF55G
	100	F55	0.26	69	EMVE160ARA101MF55G
	150	F80	0.28	100	EMVE160ARA151MF80G
	220	F80	0.28	120	EMVE160ARA221MF80G
	330	HA0	0.28	290	EMVE160ARA331MHA0G
	470	HA0	0.28	320	EMVE160ARA471MHA0G
	680	JA0	0.28	470	EMVE160ARA681MJA0G
	1,000	KE0	0.30	550	EMVE160ARA102MKE0S
	1,000	LH0	0.30	650	EMVE160□RA102MLH0S
	2,200	LH0	0.32	950	EMVE160□RA222MLH0S
	2,200	MH0	0.32	1,000	EMVE160□RA222MMH0S
	3,300	LN0	0.34	1,200	EMVE160□RA332MLN0S
	3,300	MH0	0.34	1,200	EMVE160□RA332MMH0S
25	10	E55	0.16	27	EMVE250ARA100ME55G
	22	F55	0.16	44	EMVE250ARA220MF55G
	33	F55	0.16	50	EMVE250ARA330MF55G
	47	F55	0.16	60	EMVE250ARA470MF55G
	100	F80	0.18	100	EMVE250ARA101MF80G
	150	HA0	0.18	240	EMVE250ARA151MHA0G
	220	HA0	0.18	320	EMVE250ARA221MHA0G
	330	JA0	0.16	450	EMVE250ARA331MJA0G
	470	JA0	0.18	490	EMVE250ARA471MJA0G
	1,000	LH0	0.26	820	EMVE250□RA102MLH0S
	1,000	MH0	0.26	880	EMVE250□RA102MMH0S
	2,200	LN0	0.28	1,250	EMVE250□RA222MLN0S
	2,200	MN0	0.28	1,300	EMVE250□RA222MMN0S
35	4.7	D55	0.14	16	EMVE350ARA4R7MD55G
	10	E55	0.14	27	EMVE350ARA100ME55G
	22	F55	0.14	44	EMVE350ARA220MF55G
	47	F80	0.16	80	EMVE350ARA470MF80G
	100	F80	0.16	100	EMVE350ARA101MF80G
	150	HA0	0.16	260	EMVE350ARA151MHA0G
	220	JA0	0.16	375	EMVE350ARA221MJA0G

WV (V_{dc})	Cap (μF)	Size code	tan δ	Rated ripple current (mArms/ 105℃, 120Hz)	Part No.
35	330	JA0	0.16	450	EMVE350ARA331MJA0G
	470	KE0	0.22	520	EMVE350ARA471MKE0S
	470	LH0	0.22	650	EMVE350□RA471MLH0S
	1,000	LH0	0.22	750	EMVE350□RA102MLH0S
	1,000	MH0	0.22	1,000	EMVE350□RA102MMH0S
	2,200	MN0	0.24	1,450	EMVE350□RA222MMN0S
50	1.0	D55	0.12	8.0	EMVE500ARA1R0MD55G
	2.2	D55	0.12	12	EMVE500ARA2R2MD55G
	3.3	D55	0.12	15	EMVE500ARA3R3MD55G
	4.7	E55	0.12	20	EMVE500ARA4R7ME55G
	10	F55	0.12	32	EMVE500ARA100MF55G
	33	F80	0.14	65	EMVE500ARA330MF80G
	47	F80	0.14	80	EMVE500ARA470MF80G
	100	HA0	0.14	230	EMVE500ARA101MHA0G
	220	JA0	0.14	375	EMVE500ARA221MJA0G
	330	KE0	0.18	500	EMVE500ARA331MKE0S
	330	LH0	0.18	600	EMVE500□RA331MLH0S
	470	LH0	0.18	700	EMVE500□RA471MLH0S
	470	MH0	0.18	750	EMVE500□RA471MMH0S
	1,000	MN0	0.18	1,200	EMVE500□RA102MMN0S
63	1.0	D55	0.12	8.0	EMVE630ARA1R0MD55G
	2.2	D55	0.12	12	EMVE630ARA2R2MD55G
	3.3	E55	0.12	17	EMVE630ARA3R3ME55G
	4.7	F55	0.12	22	EMVE630ARA4R7MF55G
	10	F55	0.12	32	EMVE630ARA100MF55G
	22	F80	0.12	58	EMVE630ARA220MF80G
	33	HA0	0.12	140	EMVE630ARA330MHA0G
	47	HA0	0.12	170	EMVE630ARA470MHA0G
	100	JA0	0.12	310	EMVE630ARA101MJA0G
	220	KE0	0.14	470	EMVE630ARA221MKE0S
	220	LH0	0.14	560	EMVE630□RA221MLH0S
	330	LH0	0.14	700	EMVE630□RA331MLH0S
	330	MH0	0.14	750	EMVE630□RA331MMH0S
	470	LN0	0.14	900	EMVE630□RA471MLN0S
	470	MH0	0.14	900	EMVE630□RA471MMH0S
100	22	HA0	0.12	100	EMVE101ARA220MHA0G
	33	JA0	0.12	150	EMVE101ARA330MJA0G
	47	KE0	0.10	250	EMVE101ARA470MKE0S
	68	KE0	0.10	300	EMVE101ARA680MKE0S
	100	KE0	0.10	380	EMVE101ARA101MKE0S
	100	LH0	0.10	450	EMVE101□RA101MLH0S
	220	LN0	0.10	750	EMVE101□RA221MLN0S
	220	MH0	0.10	750	EMVE101□RA221MMH0S
	330	MN0	0.10	980	EMVE101□RA331MMN0S
160	33	KE0	0.15	95	EMVE161ARA330MKE0S
	47	LH0	0.15	260	EMVE161□RA470MLH0S
	68	LN0	0.15	320	EMVE161□RA680MLN0S
	68	MH0	0.15	320	EMVE161□RA680MMH0S
	100	LN0	0.15	380	EMVE161□RA101MLN0S
200	10	KE0	0.15	80	EMVE201ARA100MKE0S
	22	KG5	0.15	110	EMVE201ARA220MKG5S
	33	LH0	0.15	220	EMVE201□RA330MLH0S
	47	LN0	0.15	270	EMVE201□RA470MLN0S
	47	MH0	0.15	270	EMVE201□RA470MMH0S
	68	MN0	0.15	330	EMVE201□RA680MMN0S
250	4.7	KE0	0.15	65	EMVE251ARA4R7MKE0S
	10	KG5	0.15	105	EMVE251ARA100MKG5S
	22	LH0	0.15	180	EMVE251□RA220MLH0S
	33	LN0	0.15	230	EMVE251□RA330MLN0S
	33	MH0	0.15	230	EMVE251□RA330MMH0S
	47	MN0	0.15	280	EMVE251□RA470MMN0S
400	4.7	KG5	0.20	50	EMVE401ARA4R7MKG5S
	10	LH0	0.20	85	EMVE401□RA100MLH0S
	22	MN0	0.20	130	EMVE401□RA220MMN0S
450	3.3	KE0	0.20	40	EMVE451ARA3R3MKE0S
	4.7	KG5	0.20	50	EMVE451ARA4R7MKG5S
	10	LH0	0.20	85	EMVE451□RA100MLH0S
	22	MN0	0.20	130	EMVE451□RA220MMN0S

□ : Enter the appropriate terminal code.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

United Chemi-Con (UCC):

EMVE101ARA680MKE0S EMVE101ADA330MJA0G EMVE101ADA101MKE0S EMVE201ARA220MKG5S
EMVE350ARA471MKE0S EMVE500ADA470MF80G EMVE630ARA221MKE0S EMVE100ADA102MJA0G
EMVE101ADA220MHA0G EMVE101ARA680KEOS EMVE101ARA680MKD5G EMVE160ADA220ME55G
EMVE250ADA221MHA0G EMVE250ADA331MJA0G EMVE250ADA471MJA0G EMVE350ADA101MF80G
EMVE350ADA221MJA0G EMVE350ADA470MF80G EMVE500ADA100MF55G EMVE500ADA1R0MD55G
EMVE630ADA100MF55G EMVE630ADA101MJA0G EMVE500ADA101MHA0G EMVE160ADA471MHA0G
EMVE101GDA221MLN0S EMVE630ADA4R7MF55G EMVE630ADA470MHA0G EMVE630ADA3R3ME55G
EMVE6R3GDA472MLN0S EMVE630ADA330MHA0G EMVE630ADA2R2MD55G EMVE630ADA220MF80G
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EMVE101GDA331MMN0S EMVE6R3GDA682MLN0S EMVE6R3GDA682MMN0S EMVE6R3GDA472MMH0S
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EMVE630GDA471MLN0S EMVE6R3GDA332MMH0S EMVE6R3GDA222MLH0S EMVE6R3ARA332MKG5S
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EMVE630GDA471MMH0S EMVE630GDA331MMH0S EMVE630GDA331MLH0S EMVE6R3ADA681MHA0G
EMVE160ADA470MF55G EMVE101ADA470MJA0G EMVE250ADA330MF55G EMVE250ADA220MF55G
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EMVE100ADA151MF80G EMVE350ADA100ME55G EMVE250GDA222MMN0S EMVE250GDA222MLN0S

Общество с ограниченной ответственностью «МосЧип» ИНН 7719860671 / КПП 771901001
Адрес: 105318, г.Москва, ул.Щербаковская д.3, офис 1107

Данный компонент на территории Российской Федерации

Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

http://moschip.ru/get-element

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

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