Alchip™-MVE Series

- Rated voltage range : 6.3 to 450V, capacitance range : 1.0 to 6,800μF
- 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)
- **RoHS Compliant**

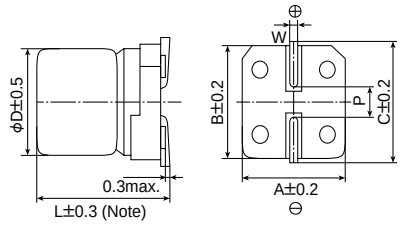
MVE → MVL, MVJ : Longer life

◆SPECIFICATIONS

Items	Characteristics											
Category Temperature Range	-40 to +105℃											
Rated Voltage Range	6.3 to 450Vdc											
Capacitance Tolerance	±20%(M)											(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)											(20℃)
Dissipation Factor (tanδ)	See STANDARD RATINGS											(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 (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. (tanδ)	≦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. (tanδ)	≦200% of the initial specified value								≦200% of the initial specified value		
	Leakage current	≦The initial specified value								≦The initial specified value		

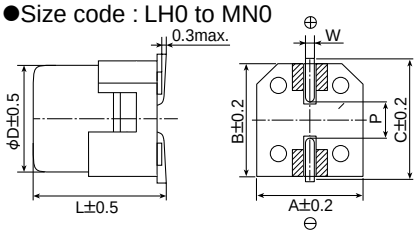
◆DIMENSIONS [mm]

- Terminal Code : A
- Size code : D55 to MN0



Note : L±0.5 for HA0 to MN0

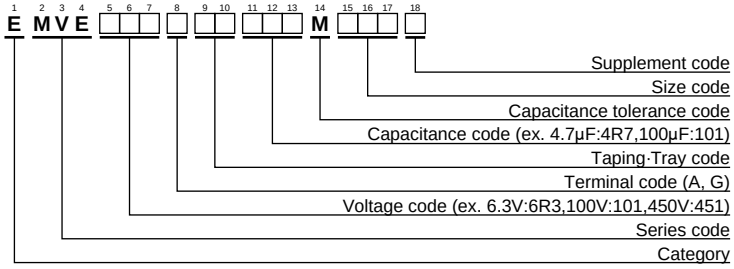
- Terminal Code : G
- Size code : LH0 to MN0



▨ : 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

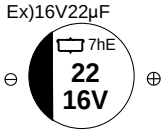
◆PART NUMBERING SYSTEM



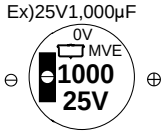
Please refer to "Product code guide (surface mount type)"

◆MARKING

D55 to JA0
Ex)16V22μF



KE0 to MN0
Ex)25V1,000μF



Alchip™-MVE Series

◆STANDARD RATINGS

is not solvent resistant.

WV (Vdc)	Cap (μF)	Size code	tanδ	Rated ripple current (mArms/ 105℃,120Hz)	Part No.
6.3	22	D55	0.30	22	EMVE6R3ADA220MD55G
	33	E55	0.30	34	EMVE6R3ADA330ME55G
	47	E55	0.30	38	EMVE6R3ADA470ME55G
	100	F55	0.30	69	EMVE6R3ADA101MF55G
	220	F80	0.45	120	EMVE6R3ADA221MF80G
	330	HA0	0.40	290	EMVE6R3ADA331MHA0G
	470	HA0	0.45	320	EMVE6R3ADA471MHA0G
	680	HA0	0.45	340	EMVE6R3ADA681MHA0G
	1,000	JA0	0.40	410	EMVE6R3ADA102MJA0G
	1,500	JA0	0.45	550	EMVE6R3ADA152MJA0G
	2,200	KE0	0.40	680	EMVE6R3ARA222MKE0S
	2,200	LH0	0.40	840	EMVE6R3□DA222MLH0S
	3,300	KG5	0.42	850	EMVE6R3ARA332MKG5S
	3,300	MH0	0.42	1,000	EMVE6R3□DA332MMH0S
	4,700	LN0	0.44	1,200	EMVE6R3□DA472MLN0S
	4,700	MH0	0.44	1,200	EMVE6R3□DA472MMH0S
	6,800	LN0	0.48	1,200	EMVE6R3□DA682MLN0S
	6,800	MN0	0.48	1,350	EMVE6R3□DA682MMN0S
10	22	E55	0.24	30	EMVE100ADA220ME55G
	33	E55	0.24	34	EMVE100ADA330ME55G
	47	F55	0.24	48	EMVE100ADA470MF55G
	100	F55	0.30	69	EMVE100ADA101MF55G
	150	F80	0.35	100	EMVE100ADA151MF80G
	220	F80	0.35	120	EMVE100ADA221MF80G
	330	HA0	0.35	290	EMVE100ADA331MHA0G
	470	HA0	0.35	320	EMVE100ADA471MHA0G
	1,000	JA0	0.35	410	EMVE100ADA102MJA0G
	2,200	KG5	0.36	750	EMVE100ARA222MKG5S
	2,200	LH0	0.36	850	EMVE100□DA222MLH0S
	3,300	LH0	0.38	1,000	EMVE100□DA332MLH0S
	3,300	MH0	0.38	1,100	EMVE100□DA332MMH0S
	4,700	LN0	0.40	1,300	EMVE100□DA472MLN0S
	4,700	MN0	0.40	1,350	EMVE100□DA472MMN0S
16	10	D55	0.20	17	EMVE160ADA100MD55G
	22	E55	0.20	30	EMVE160ADA220ME55G
	33	F55	0.20	45	EMVE160ADA330MF55G
	47	F55	0.20	48	EMVE160ADA470MF55G
	100	F55	0.26	69	EMVE160ADA101MF55G
	150	F80	0.28	100	EMVE160ADA151MF80G
	220	F80	0.28	120	EMVE160ADA221MF80G
	330	HA0	0.28	290	EMVE160ADA331MHA0G
	470	HA0	0.28	320	EMVE160ADA471MHA0G
	680	JA0	0.28	470	EMVE160ADA681MJA0G
	1,000	KE0	0.30	550	EMVE160ARA102MKE0S
	1,000	LH0	0.30	650	EMVE160□DA102MLH0S
	2,200	LH0	0.32	950	EMVE160□DA222MLH0S
	2,200	MH0	0.32	1,000	EMVE160□DA222MMH0S
	3,300	LN0	0.34	1,200	EMVE160□DA332MLN0S
	3,300	MH0	0.34	1,200	EMVE160□DA332MMH0S
25	10	E55	0.16	27	EMVE250ADA100ME55G
	22	F55	0.16	44	EMVE250ADA220MF55G
	33	F55	0.16	50	EMVE250ADA330MF55G
	47	F55	0.16	60	EMVE250ADA470MF55G
	100	F80	0.18	100	EMVE250ADA101MF80G
	150	HA0	0.18	240	EMVE250ADA151MHA0G
	220	HA0	0.18	320	EMVE250ADA221MHA0G
	330	JA0	0.16	450	EMVE250ADA331MJA0G
	470	JA0	0.18	490	EMVE250ADA471MJA0G
	1,000	LH0	0.26	820	EMVE250□DA102MLH0S
	1,000	MH0	0.26	880	EMVE250□DA102MMH0S
	2,200	LN0	0.28	1,250	EMVE250□DA222MLN0S
	2,200	MN0	0.28	1,300	EMVE250□DA222MMN0S
35	4.7	D55	0.14	16	EMVE350ADA4R7MD55G
	10	E55	0.14	27	EMVE350ADA100ME55G
	22	F55	0.14	44	EMVE350ADA220MF55G
	47	F80	0.16	80	EMVE350ADA470MF80G
	100	F80	0.16	100	EMVE350ADA101MF80G
	150	HA0	0.16	260	EMVE350ADA151MHA0G
	220	JA0	0.16	375	EMVE350ADA221MJA0G

WV (Vdc)	Cap (μF)	Size code	tanδ	Rated ripple current (mArms/ 105℃,120Hz)	Part No.
35	330	JA0	0.16	450	EMVE350ADA331MJA0G
	470	KE0	0.22	520	EMVE350ARA471MKE0S
	470	LH0	0.22	650	EMVE350□DA471MLH0S
	1,000	LH0	0.22	750	EMVE350□DA102MLH0S
	1,000	MH0	0.22	1,000	EMVE350□DA102MMH0S
	2,200	MN0	0.24	1,450	EMVE350□DA222MMN0S
50	1.0	D55	0.12	8.0	EMVE500ADA1R0MD55G
	2.2	D55	0.12	12	EMVE500ADA2R2MD55G
	3.3	D55	0.12	15	EMVE500ADA3R3MD55G
	4.7	E55	0.12	20	EMVE500ADA4R7ME55G
	10	F55	0.12	32	EMVE500ADA100MF55G
	33	F80	0.14	65	EMVE500ADA330MF80G
	47	F80	0.14	80	EMVE500ADA470MF80G
	100	HA0	0.14	230	EMVE500ADA101MHA0G
	220	JA0	0.14	375	EMVE500ADA221MJA0G
	330	KE0	0.18	500	EMVE500ARA331MKE0S
	330	LH0	0.18	600	EMVE500□DA331MLH0S
	470	LH0	0.18	700	EMVE500□DA471MLH0S
	470	MH0	0.18	750	EMVE500□DA471MMH0S
	1,000	MN0	0.18	1,200	EMVE500□DA102MMN0S
63	1.0	D55	0.12	8.0	EMVE630ADA1R0MD55G
	2.2	D55	0.12	12	EMVE630ADA2R2MD55G
	3.3	E55	0.12	17	EMVE630ADA3R3ME55G
	4.7	F55	0.12	22	EMVE630ADA4R7MF55G
	10	F55	0.12	32	EMVE630ADA100MF55G
	22	F80	0.12	58	EMVE630ADA220MF80G
	33	HA0	0.12	140	EMVE630ADA330MHA0G
	47	HA0	0.12	170	EMVE630ADA470MHA0G
	100	JA0	0.12	310	EMVE630ADA101MJA0G
	220	KE0	0.14	470	EMVE630ARA221MKE0S
	220	LH0	0.14	560	EMVE630□DA221MLH0S
	330	LH0	0.14	700	EMVE630□DA331MLH0S
	330	MH0	0.14	750	EMVE630□DA331MMH0S
	470	LN0	0.14	900	EMVE630□DA471MLN0S
	470	MH0	0.14	900	EMVE630□DA471MMH0S
100	22	HA0	0.12	100	EMVE101ADA220MHA0G
	33	JA0	0.12	150	EMVE101ADA330MJA0G
	47	KE0	0.10	250	EMVE101ARA470MKE0S
	68	KE0	0.10	300	EMVE101ARA680MKE0S
	100	KE0	0.10	380	EMVE101ARA101MKE0S
	100	LH0	0.10	450	EMVE101□DA101MLH0S
	220	LN0	0.10	750	EMVE101□DA221MLN0S
	220	MH0	0.10	750	EMVE101□DA221MMH0S
	330	MN0	0.10	980	EMVE101□DA331MMN0S
160	33	KE0	0.15	95	EMVE161ARA330MKE0S
	47	LH0	0.15	260	EMVE161□DA470MLH0S
	68	LN0	0.15	320	EMVE161□DA680MLN0S
	68	MH0	0.15	320	EMVE161□DA680MMH0S
	100	LN0	0.15	380	EMVE161□DA101MLN0S
200	10	KE0	0.15	80	EMVE201ARA100MKE0S
	22	KG5	0.15	110	EMVE201ARA220MKG5S
	33	LH0	0.15	220	EMVE201□DA330MLH0S
	47	LN0	0.15	270	EMVE201□DA470MLN0S
	47	MH0	0.15	270	EMVE201□DA470MMH0S
	68	MN0	0.15	330	EMVE201□DA680MMN0S
250	4.7	KE0	0.15	65	EMVE251ARA4R7MKE0S
	10	KG5	0.15	105	EMVE251ARA100MKG5S
	22	LH0	0.15	180	EMVE251□DA220MLH0S
	33	LN0	0.15	230	EMVE251□DA330MLN0S
	33	MH0	0.15	230	EMVE251□DA330MMH0S
	47	MN0	0.15	280	EMVE251□DA470MMN0S
400	4.7	KG5	0.20	50	EMVE401ARA4R7MKG5S
	10	LH0	0.20	85	EMVE401□DA100MLH0S
	22	MN0	0.20	130	EMVE401□DA220MMN0S
450	3.3	KE0	0.20	40	EMVE451ARA3R3MKE0S
	4.7	KG5	0.20	50	EMVE451ARA4R7MKG5S
	10	LH0	0.20	85	EMVE451□DA100MLH0S
	22	MN0	0.20	130	EMVE451□DA220MMN0S

□ : Enter the appropriate terminal code.