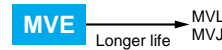


Alchip™-**MVE** Series

- Rated voltage range : 6.3 to 450V, capacitance range : 1.0 to 6,800μF
- Endurance : 1,000 to 2,000 hours at 105°C
- Case size range : φ4×5.2L to φ18×21.5L
- Solvent resistant type except 100 to 450V<sub>dc</sub> (see PRECAUTIONS AND GUIDELINES)
- RoHS Compliant



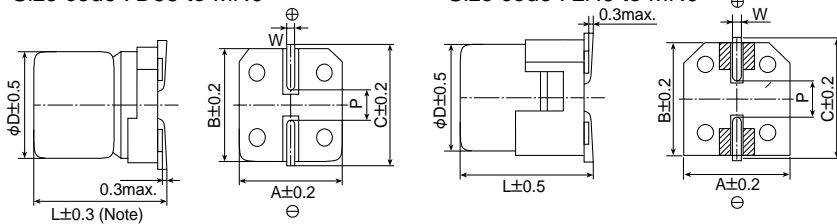
◆ **SPECIFICATIONS**

Items	Characteristics		
<b>Category</b> Temperature Range	-40 to +105°C		
<b>Rated Voltage Range</b>	6.3 to 450V <sub>dc</sub>		
<b>Capacitance Tolerance</b>	±20%(M) (20°C, 120Hz)		
<b>Leakage Current</b>	Rated voltage(V <sub>dc</sub> )	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°C)		
<b>Dissipation Factor (tanδ)</b>	See STANDARD RATINGS (20°C, 120Hz)		
<b>Low Temperature Characteristics (Max. Impedance Ratio)</b>	Rated voltage (V <sub>dc</sub> )	6.3V   10V   16V   25V   35V   50V   63V   100V   160 to 250V   400 to 450V	
	D55 to JA0	Z(-25°C)/Z(+20°C)	4   3   2   2   2   2   2   3   —   —
		Z(-40°C)/Z(+20°C)	12   8   6   4   3   3   3   4   —   —
	KE0 to MN0	Z(-25°C)/Z(+20°C)	5   4   3   2   2   2   2   2   3   6
Z(-40°C)/Z(+20°C)		10   8   6   4   3   3   3   3   6   10	
	(120Hz)		
<b>Endurance</b>	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for the specified period of time at 105°C.		
	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	
<b>Shelf Life</b>	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours (500 hours for B55 to F80 size) at 105°C 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

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

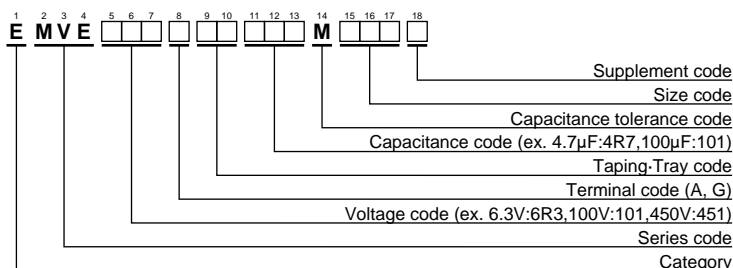


Note : L±0.5 for HA0 to MN0

▨ : 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

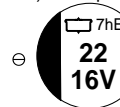
◆ **PART NUMBERING SYSTEM**



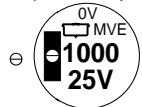
Please refer to "Product code guide (surface mount type)"

◆ **MARKING**

D55 to JA0  
Ex)16V22μF



KE0 to MN0  
Ex)25V1,000μF



◆STANDARD RATINGS

□ is not solvent resistant.

WV (Vdc)	Cap (μF)	Size code	tanδ	Rated ripple current (mAmps/105°C,120Hz)	Part No.	WV (Vdc)	Cap (μF)	Size code	tanδ	Rated ripple current (mAmps/105°C,120Hz)	Part No.			
6.3	22	D55	0.30	22	EMVE6R3ADA220MD55G	35	330	JA0	0.16	450	EMVE350ADA331MJA0G			
	33	E55	0.30	34	EMVE6R3ADA330ME55G		470	KE0	0.22	520	EMVE350ARA471MKE0S			
	47	E55	0.30	38	EMVE6R3ADA470ME55G		470	LH0	0.22	650	EMVE350□DA471MLH0S			
	100	F55	0.30	69	EMVE6R3ADA101MF55G		1,000	LH0	0.22	750	EMVE350□DA102MLH0S			
	220	F80	0.45	120	EMVE6R3ADA221MF80G		1,000	MH0	0.22	1,000	EMVE350□DA102MMH0S			
	330	HA0	0.40	290	EMVE6R3ADA331MHA0G		2,200	MN0	0.24	1,450	EMVE350□DA222MMN0S			
	470	HA0	0.45	320	EMVE6R3ADA471MHA0G		50	1.0	D55	0.12	8.0	EMVE500ADA1R0MD55G		
	680	HA0	0.45	340	EMVE6R3ADA681MHA0G			2.2	D55	0.12	12	EMVE500ADA2R2MD55G		
	1,000	JA0	0.40	410	EMVE6R3ADA102MJA0G			3.3	D55	0.12	15	EMVE500ADA3R3MD55G		
	1,500	JA0	0.45	550	EMVE6R3ADA152MJA0G			4.7	E55	0.12	20	EMVE500ADA4R7ME55G		
	2,200	KE0	0.40	680	EMVE6R3ARA222MKE0S			10	F55	0.12	32	EMVE500ADA100MF55G		
	2,200	LH0	0.40	840	EMVE6R3□DA222MLH0S			33	F80	0.14	65	EMVE500ADA330MF80G		
	3,300	KG5	0.42	850	EMVE6R3ARA332MKG5S			47	F80	0.14	80	EMVE500ADA470MF80G		
	3,300	MH0	0.42	1,000	EMVE6R3□DA332MMH0S			100	HA0	0.14	230	EMVE500ADA101MHA0G		
	4,700	LNO	0.44	1,200	EMVE6R3□DA472MLN0S			220	JA0	0.14	375	EMVE500ADA221MJA0G		
	4,700	MH0	0.44	1,200	EMVE6R3□DA472MMH0S			330	KE0	0.18	500	EMVE500ARA331MKE0S		
6,800	LNO	0.48	1,200	EMVE6R3□DA682MLN0S	330	LH0		0.18	600	EMVE500□DA331MLH0S				
6,800	MN0	0.48	1,350	EMVE6R3□DA682MMN0S	470	LH0		0.18	700	EMVE500□DA471MLH0S				
					470	MH0		0.18	750	EMVE500□DA471MMH0S				
					1,000	MN0		0.18	1,200	EMVE500□DA102MMN0S				
10	22	E55	0.24	30	EMVE100ADA220ME55G	63		1.0	D55	0.12	8.0	EMVE630ADA1R0MD55G		
	33	E55	0.24	34	EMVE100ADA330ME55G			2.2	D55	0.12	12	EMVE630ADA2R2MD55G		
	47	F55	0.24	48	EMVE100ADA470MF55G		3.3	E55	0.12	17	EMVE630ADA3R3ME55G			
	100	F55	0.30	69	EMVE100ADA101MF55G		4.7	F55	0.12	22	EMVE630ADA4R7MF55G			
	150	F80	0.35	100	EMVE100ADA151MF80G		10	F55	0.12	32	EMVE630ADA100MF55G			
	220	F80	0.35	120	EMVE100ADA221MF80G		22	F80	0.12	58	EMVE630ADA220MF80G			
	330	HA0	0.35	290	EMVE100ADA331MHA0G		33	HA0	0.12	140	EMVE630ADA330MHA0G			
	470	HA0	0.35	320	EMVE100ADA471MHA0G		47	HA0	0.12	170	EMVE630ADA470MHA0G			
	1,000	JA0	0.35	410	EMVE100ADA102MJA0G		100	JA0	0.12	310	EMVE630ADA101MJA0G			
	2,200	KG5	0.36	750	EMVE100ARA222MKG5S		220	KE0	0.14	470	EMVE630ARA221MKE0S			
	2,200	LH0	0.36	850	EMVE100□DA222MLH0S		220	LH0	0.14	560	EMVE630□DA221MLH0S			
	3,300	LH0	0.38	1,000	EMVE100□DA332MLH0S		330	LH0	0.14	700	EMVE630□DA331MLH0S			
	3,300	MH0	0.38	1,100	EMVE100□DA332MMH0S		330	MH0	0.14	750	EMVE630□DA331MMH0S			
	4,700	LNO	0.40	1,300	EMVE100□DA472MLN0S		470	LNO	0.14	900	EMVE630□DA471MLN0S			
	4,700	MN0	0.40	1,350	EMVE100□DA472MMN0S		470	MH0	0.14	900	EMVE630□DA471MMH0S			
	16	10	D55	0.20	17		EMVE160ADA100MD55G	100	22	HA0	0.12	100	EMVE101ADA220MHA0G	
22		E55	0.20	30	EMVE160ADA220ME55G	33	JA0		0.12	150	EMVE101ADA330MJA0G			
33		F55	0.20	45	EMVE160ADA330MF55G	47	KE0		0.10	250	EMVE101ARA470MKE0S			
47		F55	0.20	48	EMVE160ADA470MF55G	68	KE0		0.10	300	EMVE101ARA680MKE0S			
100		F55	0.26	69	EMVE160ADA101MF55G	100	KE0		0.10	380	EMVE101ARA101MKE0S			
150		F80	0.28	100	EMVE160ADA151MF80G	100	LH0		0.10	450	EMVE101□DA101MLH0S			
220		F80	0.28	120	EMVE160ADA221MF80G	220	LNO		0.10	750	EMVE101□DA221MLN0S			
330		HA0	0.28	290	EMVE160ADA331MHA0G	220	MH0		0.10	750	EMVE101□DA221MMH0S			
470		HA0	0.28	320	EMVE160ADA471MHA0G	330	MN0		0.10	980	EMVE101□DA331MMN0S			
680		JA0	0.28	470	EMVE160ADA681MJA0G	160	33		KE0	0.15	95	EMVE161ARA330MKE0S		
1,000		KE0	0.30	550	EMVE160ARA102MKE0S		47		LH0	0.15	260	EMVE161□DA470MLH0S		
1,000		LH0	0.30	650	EMVE160□DA102MLH0S		68		LNO	0.15	320	EMVE161□DA680MLN0S		
2,200		LH0	0.32	950	EMVE160□DA222MLH0S		68		MH0	0.15	320	EMVE161□DA680MMH0S		
2,200		MH0	0.32	1,000	EMVE160□DA222MMH0S		100		LNO	0.15	380	EMVE161□DA101MLN0S		
3,300		LNO	0.34	1,200	EMVE160□DA332MLN0S		200		10	KE0	0.15	80	EMVE201ARA100MKE0S	
3,300		MH0	0.34	1,200	EMVE160□DA332MMH0S				22	KG5	0.15	110	EMVE201ARA220MKG5S	
25	10	E55	0.16	27	EMVE250ADA100ME55G			33	LH0	0.15	220	EMVE201□DA330MLH0S		
	22	F55	0.16	44	EMVE250ADA220MF55G			47	LNO	0.15	270	EMVE201□DA470MLN0S		
	33	F55	0.16	50	EMVE250ADA330MF55G			47	MH0	0.15	270	EMVE201□DA470MMH0S		
	47	F55	0.16	60	EMVE250ADA470MF55G			68	MN0	0.15	330	EMVE201□DA680MMN0S		
	100	F80	0.18	100	EMVE250ADA101MF80G			250	4.7	KE0	0.15	65	EMVE251ARA4R7MKE0S	
	150	HA0	0.18	240	EMVE250ADA151MHA0G				10	KG5	0.15	105	EMVE251ARA100MKG5S	
	220	HA0	0.18	320	EMVE250ADA221MHA0G				22	LH0	0.15	180	EMVE251□DA220MLH0S	
	330	JA0	0.16	450	EMVE250ADA331MJA0G				33	LNO	0.15	230	EMVE251□DA330MLN0S	
	470	JA0	0.18	490	EMVE250ADA471MJA0G				33	MH0	0.15	230	EMVE251□DA330MMH0S	
	1,000	LH0	0.26	820	EMVE250□DA102MLH0S	47			MN0	0.15	280	EMVE251□DA470MMN0S		
	1,000	MH0	0.26	880	EMVE250□DA102MMH0S	400			4.7	KG5	0.20	50	EMVE401ARA4R7MKG5S	
	2,200	LNO	0.28	1,250	EMVE250□DA222MLN0S				10	LH0	0.20	85	EMVE401□DA100MLH0S	
	2,200	MN0	0.28	1,300	EMVE250□DA222MMN0S				22	MN0	0.20	130	EMVE401□DA220MMN0S	
	35	4.7	D55	0.14	16				EMVE350ADA4R7MD55G	450	3.3	KE0	0.20	40
		10	E55	0.14	27		EMVE350ADA100ME55G		4.7		KG5	0.20	50	EMVE451ARA4R7MKG5S
		22	F55	0.14	44		EMVE350ADA220MF55G		10		LH0	0.20	85	EMVE451□DA100MLH0S
47		F80	0.16	80	EMVE350ADA470MF80G		22		MN0		0.20	130	EMVE451□DA220MMN0S	
100		F80	0.16	100	EMVE350ADA101MF80G									
150		HA0	0.16	260	EMVE350ADA151MHA0G									
220	JA0	0.16	375	EMVE350ADA221MJA0G										

□ : Enter the appropriate terminal code.