

**Alchip® MVE Series**

- Rated voltage range : 6.3 to 450V, capacitance range : 0.47 to 6800μF
- Endurance : 1000 to 2000 hours at 105°C
- Case size range : φ4×5.2L to φ18×21.5L
- Solvent-proof type except 100 to 450V<sub>dc</sub> (see PRECAUTIONS AND GUIDELINES)
- Pb-free design

MVE

↑  
downsized  
size extended  
MVK



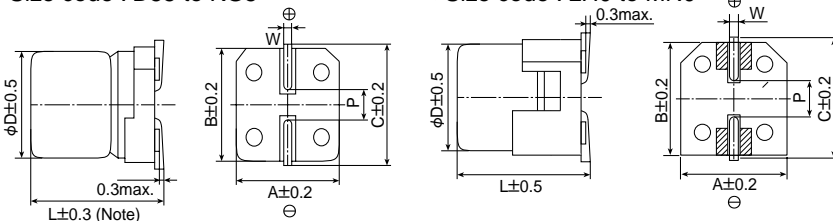
◆ **SPECIFICATIONS**

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	1000 hours      2000 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 1000 hours (500 hours for B55 to F80 size) at 105°C without voltage applied.		
	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 KG5

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

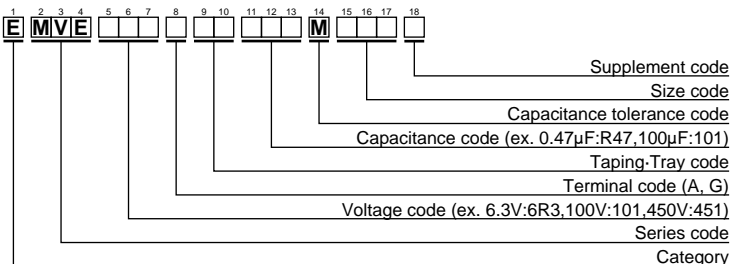


Note : L±0.5 for HA0 to KG5

▨ : Dummy terminals

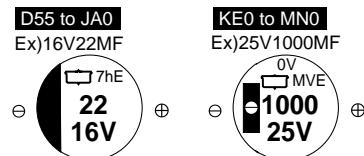
Size code	D	L	A	B	C	W	P
D55	4	5.2	4.3	4.3	5.1	0.5 to 0.8	1.0
E55	5	5.2	5.3	5.3	5.9	0.5 to 0.8	1.4
F55	6.3	5.2	6.6	6.6	7.2	0.5 to 0.8	1.9
F60	6.3	5.7	6.6	6.6	7.2	0.5 to 0.8	1.9
F80	6.3	7.7	6.6	6.6	7.2	0.5 to 0.8	1.9
HA0	8	10.0	8.3	8.3	9.0	0.7 to 1.1	3.1
JA0	10	10.0	10.3	10.3	11.0	0.7 to 1.1	4.5
KE0	12.5	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 "A guide to global code (surface mount type)"

◆ **MARKING**



◆ **STANDARD RATINGS**

□ is non solvent-proof.

WV (Vdc)	Cap (μF)	Size code	tanδ	Rated ripple current (mA rms/105°C, 120Hz)	Part No.	WV (Vdc)	Cap (μF)	Size code	tanδ	Rated ripple current (mA rms/105°C, 120Hz)	Part No.			
6.3	22	D55	0.30	22	EMVE6R3ADA220MD55G	35	470	KE0	0.22	520	EMVE350A□□471MKE0S			
	33	E55	0.30	34	EMVE6R3ADA330ME55G		470	LH0	0.22	650	EMVE350GTR471MLH0S			
	47	E55	0.30	38	EMVE6R3ADA470ME55G		1000	LH0	0.22	750	EMVE350GTR102MLH0S			
	100	F55	0.30	69	EMVE6R3ADA101MF55G		1000	MH0	0.22	1000	EMVE350GTR102MMH0S			
	220	F80	0.45	120	EMVE6R3ADA221MF80G		2200	MN0	0.24	1450	EMVE350GTR222MMN0S			
	330	HA0	0.40	290	EMVE6R3ADA331MHA0G		50	0.47	D55	0.12	5.0	EMVE500ADAR47MD55G		
	470	HA0	0.45	320	EMVE6R3ADA471MHA0G			1.0	D55	0.12	8.0	EMVE500ADA1R0MD55G		
	680	HA0	0.45	340	EMVE6R3ADA681MHA0G			2.2	D55	0.12	12	EMVE500ADA2R2MD55G		
	1000	JA0	0.40	410	EMVE6R3ADA102MJA0G			3.3	D55	0.12	15	EMVE500ADA3R3MD55G		
	1500	JA0	0.45	550	EMVE6R3ADA152MJA0G			4.7	E55	0.12	20	EMVE500ADA4R7ME55G		
	2200	KE0	0.40	680	EMVE6R3A□□222MKE0S			10	F55	0.12	32	EMVE500ADA100MF55G		
	2200	LH0	0.40	840	EMVE6R3GTR222MLH0S			22	F60	0.12	47	EMVE500ADA220MF60G		
	3300	KG5	0.42	850	EMVE6R3A□□332MKG5S			33	F80	0.14	65	EMVE500ADA330MF80G		
	3300	MH0	0.42	1000	EMVE6R3GTR332MMH0S			47	F80	0.14	80	EMVE500ADA470MF80G		
	4700	LN0	0.44	1200	EMVE6R3GTR472MLN0S			100	HA0	0.14	230	EMVE500ADA101MHA0G		
	4700	MH0	0.44	1200	EMVE6R3GTR472MMH0S			220	JA0	0.14	375	EMVE500ADA221MJA0G		
	6800	LN0	0.48	1200	EMVE6R3GTR682MLN0S			330	KE0	0.18	500	EMVE500A□□331MKE0S		
6800	MN0	0.48	1350	EMVE6R3GTR682MMN0S	330	LH0		0.18	600	EMVE500GTR331MLH0S				
					470	LH0		0.18	700	EMVE500GTR471MLH0S				
					470	MH0		0.18	750	EMVE500GTR471MMH0S				
					1000	MN0		0.18	1200	EMVE500GTR102MMN0S				
10	22	E55	0.24	30	EMVE100ADA220ME55G	63		0.47	D55	0.12	5.0	EMVE630ADAR47MD55G		
	33	E55	0.24	34	EMVE100ADA330ME55G		1.0	D55	0.12	8.0	EMVE630ADA1R0MD55G			
	47	F55	0.24	48	EMVE100ADA470MF55G		2.2	D55	0.12	12	EMVE630ADA2R2MD55G			
	100	F55	0.30	69	EMVE100ADA101MF55G		3.3	E55	0.12	17	EMVE630ADA3R3ME55G			
	150	F80	0.35	100	EMVE100ADA151MF80G		4.7	F55	0.12	22	EMVE630ADA4R7MF55G			
	220	F80	0.35	120	EMVE100ADA221MF80G		10	F55	0.12	32	EMVE630ADA100MF55G			
	330	HA0	0.35	290	EMVE100ADA331MHA0G		22	F80	0.12	58	EMVE630ADA220MF80G			
	470	HA0	0.35	320	EMVE100ADA471MHA0G		33	HA0	0.12	140	EMVE630ADA330MHA0G			
	1000	JA0	0.35	410	EMVE100ADA102MJA0G		47	HA0	0.12	170	EMVE630ADA470MHA0G			
	2200	KG5	0.36	750	EMVE100A□□222MKG5S		100	JA0	0.12	310	EMVE630ADA101MJA0G			
	2200	LH0	0.36	850	EMVE100GTR222MLH0S		220	KE0	0.14	470	EMVE630A□□221MKE0S			
	3300	LH0	0.38	1000	EMVE100GTR332MLH0S		220	LH0	0.14	560	EMVE630GTR221MLH0S			
	3300	MH0	0.38	1100	EMVE100GTR332MMH0S		330	LH0	0.14	700	EMVE630GTR331MLH0S			
	4700	LN0	0.40	1300	EMVE100GTR472MLN0S		330	MH0	0.14	750	EMVE630GTR331MMH0S			
	4700	MN0	0.40	1350	EMVE100GTR472MMN0S		470	LN0	0.14	900	EMVE630GTR471MLN0S			
							470	MH0	0.14	900	EMVE630GTR471MMH0S			
	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	EMVE101A□□470MKE0S			
47		F55	0.20	48	EMVE160ADA470MF55G	68	KE0		0.10	300	EMVE101A□□680MKE0S			
100		F55	0.26	69	EMVE160ADA101MF55G	100	KE0		0.10	380	EMVE101A□□101MKE0S			
150		F80	0.28	100	EMVE160ADA151MF80G	100	LH0		0.10	450	EMVE101GTR101MLH0S			
220		F80	0.28	120	EMVE160ADA221MF80G	220	LN0		0.10	750	EMVE101GTR221MLN0S			
330		HA0	0.28	290	EMVE160ADA331MHA0G	220	MH0		0.10	750	EMVE101GTR221MMH0S			
470		HA0	0.28	320	EMVE160ADA471MHA0G	330	MN0		0.10	980	EMVE101GTR331MMN0S			
680		JA0	0.28	470	EMVE160ADA681MJA0G	160	33		KE0	0.15	95	EMVE161A□□330MKE0S		
1000		KE0	0.30	550	EMVE160A□□102MKE0S		47		LH0	0.15	260	EMVE161GTR470MLH0S		
1000		LH0	0.30	650	EMVE160GTR102MLH0S		68		LN0	0.15	320	EMVE161GTR680MLN0S		
2200		LH0	0.32	950	EMVE160GTR222MLH0S		68		MH0	0.15	320	EMVE161GTR680MMH0S		
2200		MH0	0.32	1000	EMVE160GTR222MMH0S		100		LN0	0.15	380	EMVE161GTR101MLN0S		
3300		LN0	0.34	1200	EMVE160GTR332MLN0S		200		10	KE0	0.15	80	EMVE201A□□100MKE0S	
3300		MH0	0.34	1200	EMVE160GTR332MMH0S				22	KG5	0.15	110	EMVE201A□□220MKG5S	
									33	LH0	0.15	220	EMVE201GTR330MLH0S	
					47			LN0	0.15	270	EMVE201GTR470MLN0S			
					47			MH0	0.15	270	EMVE201GTR470MMH0S			
					68			MN0	0.15	330	EMVE201GTR680MMN0S			
					250			4.7	KE0	0.15	65	EMVE251A□□47R7MKE0S		
								10	KG5	0.15	105	EMVE251A□□100MKG5S		
								22	LH0	0.15	180	EMVE251GTR220MLH0S		
								33	LN0	0.15	230	EMVE251GTR330MLN0S		
								33	MH0	0.15	230	EMVE251GTR330MMH0S		
								47	MN0	0.15	280	EMVE251GTR470MMN0S		
						400		4.7	KG5	0.20	50	EMVE401A□□47R7MKG5S		
								10	LH0	0.20	85	EMVE401GTR100MLH0S		
								22	MN0	0.20	130	EMVE401GTR220MMN0S		
								450	3.3	KE0	0.20	40	EMVE451A□□3R3MKE0S	
									4.7	KG5	0.20	50	EMVE451A□□47R7MKG5S	
							10		LH0	0.20	85	EMVE451GTR100MLH0S		
							22		MN0	0.20	130	EMVE451GTR220MMN0S		
35	4.7	D55	0.14	16			EMVE350ADA4R7MD55G							
	10	E55	0.14	27			EMVE350ADA100ME55G							
	22	F55	0.14	44			EMVE350ADA220MF55G							
	33	F60	0.14	54	EMVE350ADA330MF60G									
	47	F80	0.16	80	EMVE350ADA470MF80G									
	100	F80	0.16	100	EMVE350ADA101MF80G									
	150	HA0	0.16	260	EMVE350ADA151MHA0G									
	220	JA0	0.16	375	EMVE350ADA221MJA0G									
	330	JA0	0.16	450	EMVE350ADA331MJA0G									

□ : Taping / Tray code