

**Alchip™-MVE Series**

- Endurance : 1,000 to 2,000 hours at 105°C
- Case size range : φ 4x5.2L to φ 18x21.5L
- Solvent resistant type except 100 to 450V<sub>dc</sub> (see PRECAUTIONS AND GUIDELINES)
- RoHS2 Compliant
- AEC-Q200 compliant : Please contact Chemi-Con for more details, test data, information.

**MVE** → Longer life  
MVL P4-33  
MVJ P4-35



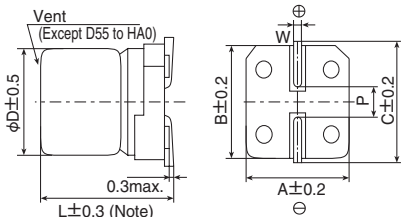
**◆ SPECIFICATIONS**

Items	Characteristics												
<b>Category Temperature Range</b>	-40 to +105°C												
<b>Rated Voltage Range</b>	6.3 to 450V <sub>dc</sub>												
<b>Capacitance Tolerance</b>	±20%(M) (at 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 (1 minute)					
Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20°C)													
<b>Dissipation Factor (tan δ)</b>	See STANDARD RATINGS (at 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	(at 120Hz)	
		Z(-25°C)/Z(+20°C)											
	D55 to JA0	Z(-40°C)/Z(+20°C)											
		Z(-25°C)/Z(+20°C)											
KE0 to MN0	Z(-40°C)/Z(+20°C)												
	10 8 6 4 3 3 3 3 4 6 10												
<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. (tan δ)	≤ 300% of the initial specified value					≤ 200% of the initial specified value						
	Leakage current	≤ The initial specified value					≤ The initial specified value						
	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.												
<b>Shelf Life</b>	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						
	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.												

**◆ DIMENSIONS [mm]**

● Terminal Code : A

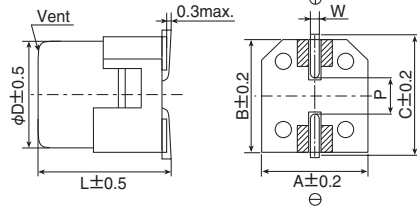
● Size code : D55 to MN0



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

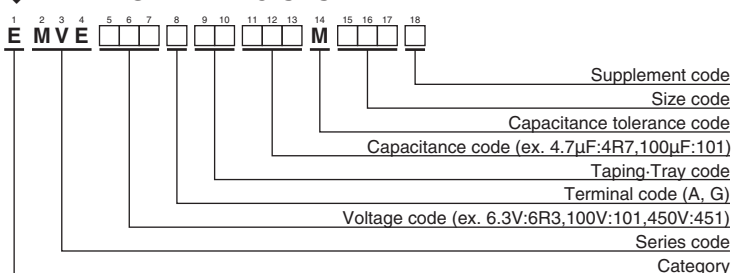


**KE0 to MN0**

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°C 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)"



# 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](#)  
[EMVE630ADA1R0MD55G](#) [EMVE6R3ADA101MF55G](#) [EMVE160ADA101MF55G](#) [EMVE630GDA221MLH0S](#)  
[EMVE101GDA331MMN0S](#) [EMVE6R3GDA682MLN0S](#) [EMVE6R3GDA682MMN0S](#) [EMVE6R3GDA472MMH0S](#)  
[EMVE101GDA101MLH0S](#) [EMVE101GDA221MMH0S](#) [EMVE101ARA470MKE0S](#) [EMVE101ARA101MKE0S](#)  
[EMVE100GDA472MMN0S](#) [EMVE6R3ADA470ME55G](#) [EMVE6R3ADA221MF80G](#) [EMVE350ADA220MF55G](#)  
[EMVE630GDA471MLN0S](#) [EMVE6R3GDA332MMH0S](#) [EMVE6R3GDA222MLH0S](#) [EMVE6R3ARA332MKG5S](#)  
[EMVE6R3ARA222MKE0S](#) [EMVE630ADAR47MD55G](#) [EMVE6R3ADA471MHA0G](#) [EMVE6R3ADA331MHA0G](#)  
[EMVE6R3ADA330ME55G](#) [EMVE6R3ADA220MD55G](#) [EMVE6R3ADA102MJA0G](#) [EMVE6R3ADA152MJA0G](#)  
[EMVE630GDA471MMH0S](#) [EMVE630GDA331MMH0S](#) [EMVE630GDA331MLH0S](#) [EMVE6R3ADA681MHA0G](#)  
[EMVE160ADA470MF55G](#) [EMVE101ADA470MJA0G](#) [EMVE250ADA330MF55G](#) [EMVE250ADA220MF55G](#)  
[EMVE250ADA151MHA0G](#) [EMVE160ADA100MD55G](#) [EMVE250ADA100ME55G](#) [EMVE160ADA681MJA0G](#)  
[EMVE160ADA221MF80G](#) [EMVE250ADA470MF55G](#) [EMVE160ADA331MHA0G](#) [EMVE250ADA101MF80G](#)  
[EMVE160ARA102MKE0S](#) [EMVE160ARA152MKE0S](#) [EMVE160GDA102MLH0S](#) [EMVE160GDA222MLH0S](#)  
[EMVE160GDA222MMH0S](#) [EMVE160GDA332MLN0S](#) [EMVE160GDA332MMH0S](#) [EMVE160ADA330MF55G](#)  
[EMVE100ADA221MF80G](#) [EMVE350GDA102MLH0S](#) [EMVE160ADA151MF80G](#) [EMVE100GDA472MLN0S](#)  
[EMVE100GDA332MMH0S](#) [EMVE100GDA332MLH0S](#) [EMVE100GDA222MLH0S](#) [EMVE100ARA222MKG5S](#)  
[EMVE100ADA471MHA0G](#) [EMVE100ADA470MF55G](#) [EMVE100ADA330ME55G](#) [EMVE100ADA220ME55G](#)  
[EMVE100ADA151MF80G](#) [EMVE350ADA100ME55G](#) [EMVE250GDA222MMN0S](#) [EMVE250GDA222MLN0S](#)