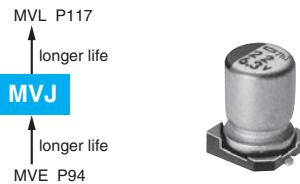


**Alchip™-MVJ Series**

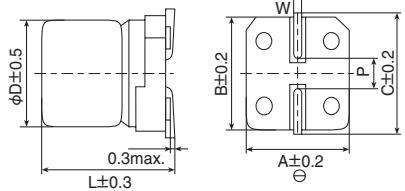
- Endurance : 2,000 hours at 105°C
- Solvent resistant type (see PRECAUTIONS AND GUIDELINES)
- RoHS Compliant

**◆SPECIFICATIONS**

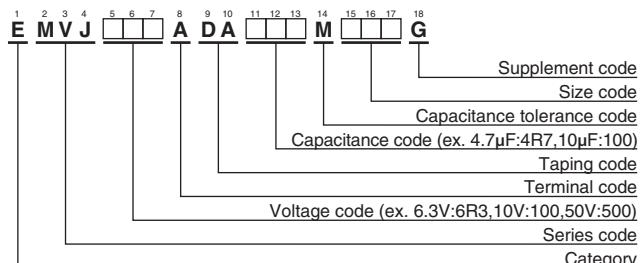
Items	Characteristics							
Category	-40 to +105°C							
Temperature Range								
Rated Voltage Range	6.3 to 50V <sub>dc</sub>							
Capacitance Tolerance	±20% (M)							
Leakage Current	I=0.01CV or 3μA, whichever is greater. Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V)							
Dissipation Factor (tan δ)	Rated voltage (V <sub>dc</sub> )	6.3V	10V	16V	25V	35V	50V	
	tan δ (Max.)	0.30	0.24	0.20	0.16	0.14	0.12	(at 20°C, 120Hz)
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (V <sub>dc</sub> )	6.3V	10V	16V	25V	35V	50V	
	Z(-25°C)/Z(+20°C)	4	3	2	2	2	2	(at 20°C, 120Hz)
	Z(-40°C)/Z(+20°C)	12	8	6	4	3	3	
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for 2,000 hours at 105°C.							
	Rated voltage	6.3V <sub>dc</sub>		10 & 16V <sub>dc</sub>		25 to 50V <sub>dc</sub>		
	Capacitance change	≤±30% of the initial value		≤±25% of the initial value		≤±20% of the initial value		
	D.F. (tan δ)	≤300% of the initial specified value		≤300% of the initial specified value		≤200% of the initial specified value		
	Leakage current	≤The initial specified value		≤The initial specified value		≤The initial specified value		
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours 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.							
	Rated voltage	6.3V <sub>dc</sub>		10 & 16V <sub>dc</sub>		25 to 50V <sub>dc</sub>		
	Capacitance change	≤±30% of the initial value		≤±25% of the initial value		≤±20% of the initial value		
	D.F. (tan δ)	≤300% of the initial specified value		≤300% of the initial specified value		≤200% of the initial specified value		
	Leakage current	≤The initial specified value		≤The initial specified value		≤The initial specified value		

**◆DIMENSIONS [mm]**

## ● Terminal Code : A



Size code	D	L	A	B	C	W	P
D60	4	5.7	4.3	4.3	5.1	0.5 to 0.8	1.0
E60	5	5.7	5.3	5.3	5.9	0.5 to 0.8	1.4
F60	6.3	5.7	6.6	6.6	7.2	0.5 to 0.8	1.9

**◆PART NUMBERING SYSTEM**

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

**◆MARKING**

EX) 6.3V100μF

**◆STANDARD RATINGS**

WV (V <sub>dc</sub> )	Cap (μF)	Size code	tan δ	Rated ripple current (mA rms/ 105°C, 120Hz)	Part No.
6.3	22	D60	0.30	21	EMVJ6R3ADA220MD60G
	47	E60	0.30	36	EMVJ6R3ADA470ME60G
	100	F60	0.30	56	EMVJ6R3ADA101MF60G
10	33	E60	0.24	34	EMVJ100ADA330ME60G
16	10	D60	0.20	16	EMVJ160ADA100MD60G
	22	E60	0.20	30	EMVJ160ADA220ME60G
	47	F60	0.20	48	EMVJ160ADA470MF60G
25	33	F60	0.16	45	EMVJ250ADA330MF60G

WV (V <sub>dc</sub> )	Cap (μF)	Size code	tan δ	Rated ripple current (mA rms/ 105°C, 120Hz)	Part No.
35	4.7	D60	0.14	15	EMVJ350ADA4R7MD60G
	10	E60	0.14	25	EMVJ350ADA100ME60G
	22	F60	0.14	40	EMVJ350ADA220MF60G
50	1.0	D60	0.12	5.6	EMVJ500ADA1R0MD60G
	2.2	D60	0.12	10	EMVJ500ADA2R2MD60G
	3.3	D60	0.12	14	EMVJ500ADA3R3MD60G
	4.7	E60	0.12	19	EMVJ500ADA4R7ME60G
	10	F60	0.12	29	EMVJ500ADA100MF60G

**◆RATED RIPPLE CURRENT MULTIPLIERS**

## ● Frequency Multipliers

Capacitance(μF)	Frequency(Hz)	120	1k	10k	100k
1.0		1.00	1.50	1.75	1.80
2.2 to 10		1.00	1.30	1.40	1.50
22 to 100		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.