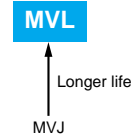


**Alchip™-MVL Series**

- Endurance : 3,000 to 5,000 hours at 105°C
- Suitable for applications requiring long life such as continuously operating equipment, industrial applications, etc
- Solvent resistant type (see PRECAUTIONS AND GUIDELINES)
- RoHS Compliant

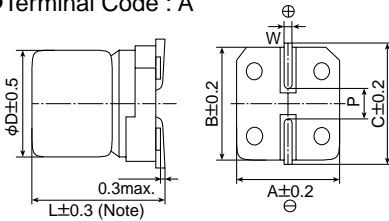


**◆SPECIFICATIONS**

Items	Characteristics	
Category	-40 to +105°C	
Temperature Range		
Rated Voltage Range	6.3 to 50V <sub>dc</sub>	
Capacitance Tolerance	±20%(M) (at 20°C, 120Hz)	
Leakage Current	I=0.03CV or 4μA, whichever is greater Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20°C, after 2 minutes)	
Dissipation Factor (tanδ)	Rated voltage (V <sub>dc</sub> )	6.3V 10V 16V 25V 35V 50V
	Max. tanδ	0.28 0.24 0.20 0.16 0.13 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
	Z(-40°C)/Z(+20°C)	10 7 5 3 3 3 (120Hz)
Endurance	After the capacitors are subjected to the rated DC voltage for 3,000 hours (HA0 & JA0 sizes 5,000 hours) at 105°C, the following specifications shall be satisfied when the capacitors are restored to 20°C.	
	Capacitance change	≤±30% of the initial value
	D.F. (tanδ)	≤300% of the initial specified value
	Leakage current	≤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.	
	Capacitance change	≤±30% of the initial value
	D.F. (tanδ)	≤300% of the initial specified value
	Leakage current	≤The initial specified value

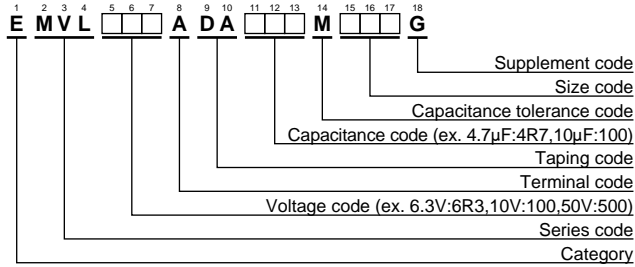
**◆DIMENSIONS [mm]**

●Terminal Code : A



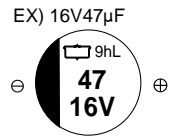
Size code	D	L	A	B	C	W	P
D60	4	5.7	4.3	4.3	5.1	0.5 to 0.8	1.0
E60	5	5.7	5.3	5.3	5.9	0.5 to 0.8	1.4
F60	6.3	5.7	6.6	6.6	7.2	0.5 to 0.8	1.9
F80	6.3	7.7	6.6	6.6	7.2	0.5 to 0.8	1.9
HA0	8	10.0	8.3	8.3	9.0	0.7 to 1.1	3.1
JA0	10	10.0	10.3	10.3	11.0	0.7 to 1.1	4.5

**◆PART NUMBERING SYSTEM**



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

**◆MARKING**



**◆STANDARD RATINGS**

WV (V <sub>dc</sub> )	Cap (μF)	Size code	tanδ	Rated ripple current (mA <sub>rms</sub> /105°C, 120Hz)	Part No.
6.3	22	D60	0.28	22	EMVL6R3ADA220MD60G
	47	E60	0.28	36	EMVL6R3ADA470ME60G
	100	F60	0.28	60	EMVL6R3ADA101MF60G
	220	F80	0.28	101	EMVL6R3ADA221MF80G
	330	HA0	0.28	160	EMVL6R3ADA331MHA0G
	1,000	JA0	0.28	313	EMVL6R3ADA102MJA0G
10	33	E60	0.24	35	EMVL100ADA330ME60G
	220	HA0	0.24	141	EMVL100ADA221MHA0G
16	10	D60	0.20	18	EMVL160ADA100MD60G
	22	E60	0.20	30	EMVL160ADA220ME60G
	47	F60	0.20	50	EMVL160ADA470MF60G
	100	F80	0.20	81	EMVL160ADA101MF80G
	470	JA0	0.20	254	EMVL160ADA471MJA0G
25	33	F60	0.16	48	EMVL250ADA330MF60G
	47	F80	0.16	63	EMVL250ADA470MF80G
	100	HA0	0.16	116	EMVL250ADA101MHA0G
	330	JA0	0.16	238	EMVL250ADA331MJA0G
35	4.7	D60	0.13	15	EMVL350ADA4R7MD60G
	10	E60	0.13	25	EMVL350ADA100ME60G
	22	F60	0.13	42	EMVL350ADA220MF60G
	33	F80	0.13	57	EMVL350ADA330MF80G
	220	JA0	0.13	216	EMVL350ADA221MJA0G
	50	1.0	D60	0.12	6.2
2.2		D60	0.12	11	EMVL500ADA2R2MD60G
3.3		D60	0.12	14	EMVL500ADA3R3MD60G
4.7		E60	0.12	19	EMVL500ADA4R7ME60G
10		F60	0.12	30	EMVL500ADA100MF60G
22		F80	0.12	49	EMVL500ADA220MF80G
33		HA0	0.12	77	EMVL500ADA330MHA0G
47		HA0	0.12	92	EMVL500ADA470MHA0G
100	JA0	0.12	151	EMVL500ADA101MJA0G	