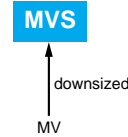


**Alchip® MVS Series**

- 4.5mm height
- Endurance : 85°C 2000 hours
- Reflow capability
- Solvent-proof type (see PRECAUTIONS AND GUIDELINES)
- Pb-free design

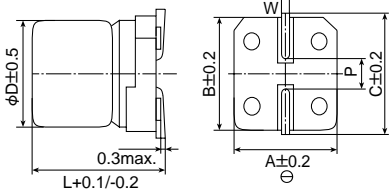


**◆ SPECIFICATIONS**

Items	Characteristics	
<b>Category</b> Temperature Range	-40 to +85°C	
<b>Rated Voltage Range</b>	4 to 50V <sub>dc</sub>	
<b>Capacitance Tolerance</b>	±20% (M) (at 20°C, 120Hz)	
<b>Leakage Current</b>	I=0.01CV or 3µA, whichever is greater. Where, I : Max. leakage current (µA), C : Nominal capacitance (µF), V : Rated voltage (V) (at 20°C after 2 minutes)	
<b>Dissipation Factor (tanδ)</b>	Rated voltage (V <sub>dc</sub> )	4V 6.3V 10V 16V 25V 35V 50V
	tanδ (Max.)	0.50 0.30 0.24 0.19 0.16 0.14 0.14 (at 20°C, 120Hz)
<b>Low Temperature Characteristics (Max. Impedance Ratio)</b>	Rated voltage (V <sub>dc</sub> )	4V 6.3V 10V 16V 25V 35V 50V
	Z(-25°C)/Z(+20°C)	7 4 3 2 2 2 2 (at 120Hz)
	Z(-40°C)/Z(+20°C)	15 8 8 4 4 3 3
<b>Endurance</b>	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for 2000 hours at 85°C.	
	Rated voltage	4 & 6.3V <sub>dc</sub> 10 to 50V <sub>dc</sub>
	Capacitance change	≤±30% of the initial value ≤±25% of the initial value
	DF (tanδ)	≤300% of the initial specified value ≤300% 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 at 85°C without voltage applied.	
	Rated voltage	4 & 6.3V <sub>dc</sub> 10 to 50V <sub>dc</sub>
	Capacitance change	≤±30% of the initial value ≤±25% of the initial value
	DF (tanδ)	≤300% of the initial specified value ≤300% of the initial specified value
	Leakage current	≤The initial specified value ≤The initial specified value

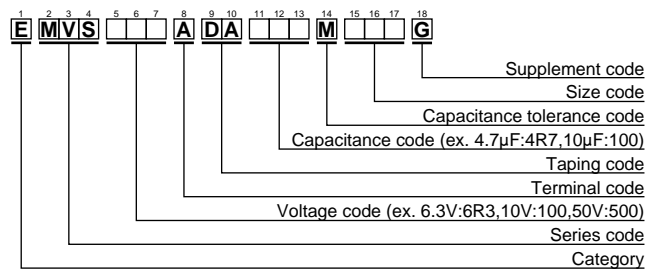
**◆ DIMENSIONS [mm]**

● Terminal Code : A



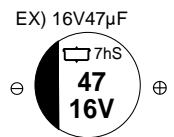
Size code	D	L	A	B	C	W	P
D46	4	4.5	4.3	4.3	5.1	0.5 to 0.8	1.0
E46	5	4.5	5.3	5.3	5.9	0.5 to 0.8	1.4
F46	6.3	4.5	6.6	6.6	7.2	0.5 to 0.8	1.9

**◆ PART NUMBERING SYSTEM**



Please refer to "A guide to global code (surface mount type)"

**◆ MARKING**



**◆ STANDARD RATINGS**

WV (V <sub>dc</sub> )	Cap (µF)	Size code	tanδ	Rated ripple current (mA <sub>rms</sub> /85°C, 120Hz)	Part No.	WV (V <sub>dc</sub> )	Cap (µF)	Size code	tanδ	Rated ripple current (mA <sub>rms</sub> /85°C, 120Hz)	Part No.
4	33	D46	0.50	28	EMVS4R0ADA330MD46G	35	4.7	D46	0.14	18	EMVS350ADA4R7MD46G
	47	D46	0.50	33	EMVS4R0ADA470MD46G		10	E46	0.14	29	EMVS350ADA100ME46G
	100	E46	0.50	56	EMVS4R0ADA101ME46G		22	F46	0.14	46	EMVS350ADA220MF46G
	220	F46	0.50	96	EMVS4R0ADA221MF46G		50	0.10	D46	0.14	1.0
6.3	22	D46	0.30	28	EMVS6R3ADA220MD46G	0.22		D46	0.14	2.0	EMVS500ADAR22MD46G
	47	E46	0.30	45	EMVS6R3ADA470ME46G	0.33		D46	0.14	2.8	EMVS500ADAR33MD46G
	100	F46	0.30	70	EMVS6R3ADA101MF46G	0.47		D46	0.14	4.0	EMVS500ADAR47MD46G
10	33	E46	0.24	41	EMVS100ADA330ME46G	1.0		D46	0.14	8.4	EMVS500ADA1R0MD46G
	10	D46	0.19	23	EMVS160ADA100MD46G	2.2		D46	0.14	13	EMVS500ADA2R2MD46G
16	22	E46	0.19	37	EMVS160ADA220ME46G	3.3		D46	0.14	17	EMVS500ADA3R3MD46G
	47	F46	0.19	58	EMVS160ADA470MF46G	4.7		E46	0.14	20	EMVS500ADA4R7ME46G
25	33	F46	0.16	52	EMVS250ADA330MF46G	10	F46	0.14	33	EMVS500ADA100MF46G	