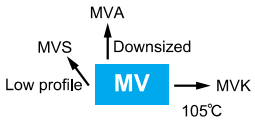
Alchip™-MV Series



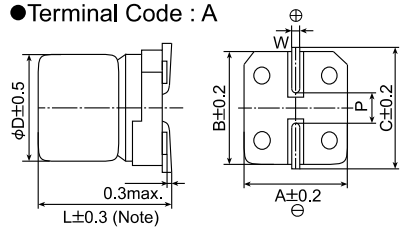
- ●Height 5.2 to 10.0mm
- ●Suitable to fit for downsized equipment
- ●Solvent resistant type (see PRECAUTIONS AND GUIDELINES)
- ●**RoHS Compliant**

◆SPECIFICATIONS

Items	Characteristics										
Category Temperature Range	−40 to +85℃										
Rated Voltage Range	4 to 63Vdc										
Capacitance Tolerance	±20% (M)										(at 20℃, 120Hz)
Leakage Current	I=0.01CV or 3μA, whichever is greater. Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V)										(at 20℃ after 2 minutes)
Dissipation Factor (tanδ)	Rated voltage (Vdc)		4V	6.3V	10V	16V	25V	35V	50V	63V	
	tanδ (Max.)	B55	0.42	0.27	0.23	0.19	0.16	0.14	0.12	—	
		D55 to F60	0.42	0.24	0.20	0.16	0.14	0.12	0.10	0.12	
		H63 to JA0	—	0.40	0.30	0.26	0.16	0.14	0.12	0.12	(at 20℃,120Hz)
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (Vdc)		4V	6.3V	10V	16V	25V	35V	50V	63V	
	Z(−25℃)/Z(+20℃)		7	4	3	2	2	2	2	2	
	Z(−40℃)/Z(+20℃)	B55	17	10	8	6	4	3	3	—	
		D55 to F60	15	10	8	6	4	3	3	3	
		H63 to JA0	—	10	8	6	4	3	3	3	(at 120Hz)
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage is applied for 2,000 hours (B55 size 1,000 hours) at 85℃.										
	Capacitance change	≦±20% of the initial value									
	D.F. (tanδ)	≦200% 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℃ after exposing them for 500 hours at 85℃ without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to Item 4.1 of JIS C 5101-4.										
	Case code	B55	D55 to JA0								
	Capacitance change	≦±20% of the initial value	≦±15% of the initial value								
	D.F. (tanδ)	≦200% of the initial specified value	≦150% of the initial specified value								
	Leakage current	≦The initial specified value	≦The initial specified value								

◆DIMENSIONS [mm]

●Terminal Code : A

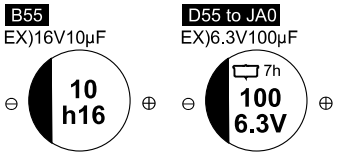


Note : L±0.5 for H63 to JA0

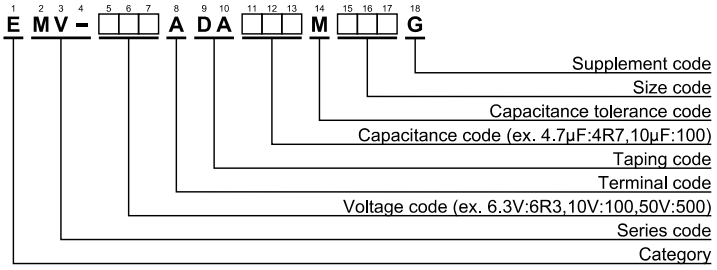
Size code	D	L	A	B	C	W	P
B55	3	5.2	3.3	3.3	3.7	0.45 to 0.75	0.8
D55 & D60	4	*5.2	4.3	4.3	5.1	0.5 to 0.8	1.0
E55 & E60	5	*5.2	5.3	5.3	5.9	0.5 to 0.8	1.4
F55 & F60	6.3	*5.2	6.6	6.6	7.2	0.5 to 0.8	1.9
H63	8	6.3	8.3	8.3	9.0	0.5 to 0.8	2.3
HA0	8	10.0	8.3	8.3	9.0	0.7 to 1.1	3.1
JA0	10	10.0	10.3	10.3	11.0	0.7 to 1.1	4.5

* : L=5.7 for D60, E60 and F60.

◆MARKING



◆PART NUMBERING SYSTEM



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

Alchip™-MV Series

◆STANDARD RATINGS

WV (Vdc)	Cap (μF)	Size code	tanδ	Rated ripple current (mArms/ 85℃,120Hz)	Part No.
4	(22)	(B55)	(0.42)	(14)	EMV-4R0ADA220MB55G
	33	D55	0.42	23	EMV-4R0ADA330MD55G
	47	D55	0.42	27	EMV-4R0ADA470MD55G
	(68)	(E55)	(0.42)	(38)	EMV-4R0ADA680ME55G
	100	E55	0.42	46	EMV-4R0ADA101ME55G
	220	F55	0.42	74	EMV-4R0ADA221MF55G
6.3	(15)	(B55)	(0.27)	(14.5)	EMV-6R3ADA150MB55G
	(22)	(B55)	(0.27)	(17.5)	EMV-6R3ADA220MB55G
	22	D55	0.24	23	EMV-6R3ADA220MD55G
	47	E55	0.24	38	EMV-6R3ADA470ME55G
	100	F55	0.24	60	EMV-6R3ADA101MF55G
	330	H63	0.40	190	EMV-6R3ADA331MH63G
	470	HA0	0.40	265	EMV-6R3ADA471MHA0G
	1,000	JA0	0.40	400	EMV-6R3ADA102MJA0G
10	(10)	(B55)	(0.23)	(12.8)	EMV-100ADA100MB55G
	(15)	(D55)	(0.20)	(20)	EMV-100ADA150MD55G
	33	E55	0.20	35	EMV-100ADA330ME55G
	(68)	(F55)	(0.20)	(54)	EMV-100ADA680MF55G
	100	F60	0.20	70	EMV-100ADA101MF60G
	220	H63	0.30	175	EMV-100ADA221MH63G
16	(6.8)	(B55)	(0.19)	(11.6)	EMV-160ADA6R8MB55G
	(10)	(B55)	(0.19)	(14)	EMV-160ADA100MB55G
	10	D55	0.16	17	EMV-160ADA100MD55G
	(15)	(E55)	(0.16)	(26)	EMV-160ADA150ME55G
	22	E55	0.16	32	EMV-160ADA220ME55G
	47	F55	0.16	50	EMV-160ADA470MF55G
	(68)	(F60)	(0.16)	(78)	EMV-160ADA680MF60G
	220	HA0	0.26	215	EMV-160ADA221MHA0G
	330	HA0	0.26	270	EMV-160ADA331MHA0G
	470	JA0	0.26	330	EMV-160ADA471MJA0G
25	(4.7)	(B55)	(0.16)	(10.5)	EMV-250ADA4R7MB55G
	(6.8)	(D55)	(0.14)	(16)	EMV-250ADA6R8MD55G
	33	F55	0.14	45	EMV-250ADA330MF55G
	47	F60	0.14	65	EMV-250ADA470MF60G
	(68)	(H63)	(0.16)	(115)	EMV-250ADA680MH63G
	100	H63	0.16	145	EMV-250ADA101MH63G
	330	JA0	0.16	305	EMV-250ADA331MJA0G
35	(2.2)	(B55)	(0.14)	(7.7)	EMV-350ADA2R2MB55G
	(3.3)	(B55)	(0.14)	(9.4)	EMV-350ADA3R3MB55G
	4.7	D55	0.12	15	EMV-350ADA4R7MD55G
	(6.8)	(E55)	(0.12)	(20)	EMV-350ADA6R8ME55G
	10	E55	0.12	25	EMV-350ADA100ME55G
	(15)	(F55)	(0.12)	(33)	EMV-350ADA150MF55G
	22	F55	0.12	40	EMV-350ADA220MF55G
	33	F60	0.12	55	EMV-350ADA330MF60G
	47	H63	0.14	105	EMV-350ADA470MH63G
	(68)	(HA0)	(0.14)	(157)	EMV-350ADA680MHA0G
	100	HA0	0.14	175	EMV-350ADA101MHA0G
	220	JA0	0.14	265	EMV-350ADA221MJA0G

WV (Vdc)	Cap (μF)	Size code	tanδ	Rated ripple current (mArms/ 85℃,120Hz)	Part No.
50	(0.10)	(B55)	(0.12)	(1.0)	EMV-500ADAR10MB55G
	0.10	D55	0.10	1.3	EMV-500ADAR10MD55G
	(0.15)	(B55)	(0.12)	(2.0)	EMV-500ADAR15MB55G
	(0.15)	(D55)	(0.10)	(2.0)	EMV-500ADAR15MD55G
	(0.22)	(B55)	(0.12)	(2.0)	EMV-500ADAR22MB55G
	0.22	D55	0.10	2.9	EMV-500ADAR22MD55G
	(0.33)	(B55)	(0.12)	(3.0)	EMV-500ADAR33MB55G
	0.33	D55	0.10	3.5	EMV-500ADAR33MD55G
	(0.47)	(B55)	(0.12)	(3.8)	EMV-500ADAR47MB55G
	0.47	D55	0.10	4.2	EMV-500ADAR47MD55G
	(0.68)	(B55)	(0.12)	(4.6)	EMV-500ADAR68MB55G
	(0.68)	(D55)	(0.10)	(5.1)	EMV-500ADAR68MD55G
	(1.0)	(B55)	(0.12)	(5.6)	EMV-500ADA1R0MB55G
	1.0	D55	0.10	6.2	EMV-500ADA1R0MD55G
	(1.5)	(B55)	(0.12)	(6.9)	EMV-500ADA1R5MB55G
	(1.5)	(D55)	(0.10)	(7.5)	EMV-500ADA1R5MD55G
	(2.2)	(B55)	(0.12)	(8.3)	EMV-500ADA2R2MB55G
	2.2	D55	0.10	10	EMV-500ADA2R2MD55G
	3.3	D55	0.10	14	EMV-500ADA3R3MD55G
	4.7	E55	0.10	19	EMV-500ADA4R7ME55G
	(6.8)	(F55)	(0.10)	(24)	EMV-500ADA6R8MF55G
	10	F55	0.10	29	EMV-500ADA100MF55G
	(15)	(F60)	(0.10)	(32)	EMV-500ADA150MF60G
	22	F60	0.10	45	EMV-500ADA220MF60G
	33	H63	0.12	95	EMV-500ADA330MH63G
	47	HA0	0.12	140	EMV-500ADA470MHA0G
	(68)	(JA0)	(0.12)	(170)	EMV-500ADA680MJA0G
	100	JA0	0.12	195	EMV-500ADA101MJA0G
63	0.10	D55	0.12	1.3	EMV-630ADAR10MD55G
	(0.15)	(D55)	(0.12)	(2.0)	EMV-630ADAR15MD55G
	0.22	D55	0.12	2.9	EMV-630ADAR22MD55G
	0.33	D55	0.12	3.5	EMV-630ADAR33MD55G
	0.47	D55	0.12	4.2	EMV-630ADAR47MD55G
	(0.68)	(D55)	(0.12)	(5.1)	EMV-630ADAR68MD55G
	1.0	D60	0.12	7.0	EMV-630ADA1R0MD60G
	(1.5)	(D60)	(0.12)	(8.4)	EMV-630ADA1R5MD60G
	2.2	D60	0.12	10	EMV-630ADA2R2MD60G
	3.3	E60	0.12	13	EMV-630ADA3R3ME60G
	4.7	F60	0.12	18.5	EMV-630ADA4R7MF60G
	(6.8)	(F60)	(0.12)	(21)	EMV-630ADA6R8MF60G
	10	HA0	0.12	46	EMV-630ADA100MHA0G
	(15)	(HA0)	(0.12)	(52)	EMV-630ADA150MHA0G
	22	HA0	0.12	69	EMV-630ADA220MHA0G
	33	HA0	0.12	85	EMV-630ADA330MHA0G
	47	HA0	0.12	101	EMV-630ADA470MHA0G
	(68)	(JA0)	(0.12)	(125)	EMV-630ADA680MJA0G

( ) : Second standard