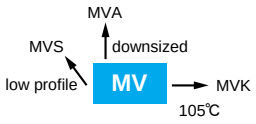
NIPPON CHEMI-CON

SURFACE MOUNT ALUMINUM ELECTROLYTIC CAPACITORS

Standard, 85℃

Alchip® MV Series

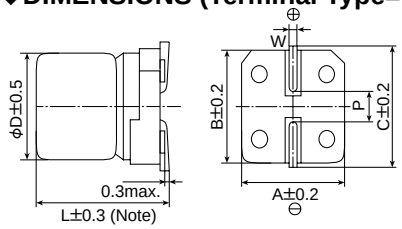
- From 5.5mm height
- Suitable to fit for downsized equipment
- Solvent-proof type (see PRECAUTIONS AND GUIDELINES)



◆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 J10	—	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 J10	—	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 2000 hours (B55 size 1000 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.									
	Case code	B55	D55 to J10							
	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 (Terminal Type=VC) [mm]

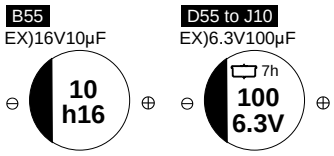


Case code	D	L	A	B	C	W	P
B55	3	5.2	3.3	3.3	3.7	0.45 to 0.75	0.8
D55 & D60	4	*5.2	4.3	4.3	5.1	0.5 to 0.8	1.0
E55 & E60	5	*5.2	5.3	5.3	5.9	0.5 to 0.8	1.4
F55 & F60	6.3	*5.2	6.6	6.6	7.2	0.5 to 0.8	1.9
H63	8	6.3	8.3	8.3	9.0	0.5 to 0.8	2.3
H10	8	10.0	8.3	8.3	9.0	0.7 to 1.1	3.1
J10	10	10.0	10.3	10.3	11.0	0.7 to 1.1	4.5

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

Note : L±0.5 for H63. H10 and J10

◆MARKING



◆PART NUMBERING SYSTEM

MV 50 VC R1 M D55

- D55 — Case code
- M — Cap tolerance (±20%)
- R1 — Nominal cap code
- VC — Terminal type (VC)
- 50 — Rated voltage in volts
- MV — Series name

Capacitance	Code
0.1μF	R1
0.47μF	R47
1.0μF	1
4.7μF	4R7
10μF	10
100μF	100
1000μF	1000

◆STANDARD RATINGS

μF \ Vdc	4		6.3		10		16		25		35		50		63	
0.1													B55	D55 1.0	D55	1.3
0.15													B55	D55 2.0	D55	2.0
0.22													B55	D55 2.0	D55	2.9
0.33													B55	D55 3.0	D55	3.5
0.47													B55	D55 3.8	D55	4.2
0.68													B55	D55 4.6	D55	5.1
1.0													B55	D55 5.6	D60	7.0
1.5													B55	D55 6.9	D60	8.4
2.2											B55	7.7	B55	D55 8.3	D60	10
3.3											B55	9.4	D55	14	E60	13
4.7									B55	10.5	D55	15	E55	19	F60	18.5
6.8							B55	11.6	D55	16	E55	20	F55	24	F60	21
10					B55	12.8	B55 D55	14 17	→		E55	25	F55	29	H10	46
15			B55	14.5	D55	20	E55	26	→		F55	33	F60	32	H10	52
22	B55	14	B55 D55	17.5 23	→		E55	32	→		F55	40	F60	45	H10	69
33	D55	23	→		E55	35	→		F55	45	F60	55	H63	95	H10	85
47	D55	27	E55	38	→		F55	50	F60	65	H63	105	H10	140	H10	101
68	E55	38	→		F55	54	F60	78	H63	115	H10	157	J10	170	J10	125
100	E55	46	F55	60	F60	70	→		H63	145	H10	175	J10	195		
220	F55	74	→		H63	175	H10	215	→		J10	265				
330			H63	190	→		H10	270	J10	305						
470			H10	265	→		J10	330								
1,000			J10	400												

Case code

Rated ripple current (mArms) at 85℃, 120Hz

Note : → Use next higher voltage part.

CAT. No. E1001D