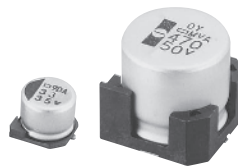


ALCHIP™-MVA系列

表面安装 小型化 耐清洗 RoHS指令适应品

4 ~ 63Vdc

MVA → MVE p94
105℃化



- 额定电压 4V ~ 450V。
- 保证 85℃ 2,000 小时、标准品。
- 产品尺寸: φ4×5.2L ~ φ18×21.5L。
- 可对应小型、薄型设备的高密度表面安装。

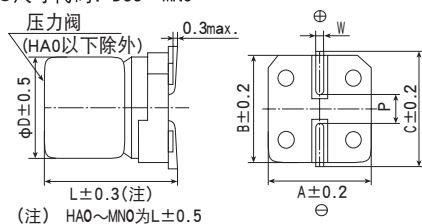
规格表

项目	性能												
工作温度范围	-40~+85℃												
额定电压范围	4~450V _{dc}												
静电容量容许差	±20%(M) (20℃、120Hz)												
漏电流	额定电压 (V _{dc})	4~100V									160~450V		
	D55~JAO	I ≤ 0.01CV 或者 3μA 中任意一个较大值 (2分值)									—		
	KEO~MNO	I ≤ 0.03CV 或者 4μA 中任意一个较大值 (1分值)									I ≤ 0.04CV+100μA (1分值)		
I: 漏电流 (μA)、C: 静电容量 (μF)、额定电压 (V _{dc}) (20℃)													
损失角正切值 (tan δ)	额定电压 (V _{dc})	4V	6.3V	10V	16V	25V	35V	50V	63V	100V	160~250V	400~450V	
	tan δ (Max.)	D55~JAO	0.42	0.35	0.30	0.26	0.16	0.14	0.12	0.12	0.10	—	—
	KEO~MNO	—	0.38	0.34	0.30	0.26	0.22	0.18	0.14	0.10	0.20	—	0.25
但是, 超过1,000μF的每增加1,000μF则tan δ设定增加0.02。 (20℃、120Hz)													
温度特性 (阻抗比 Max右表值)	额定电压 (V _{dc})	4V	6.3V	10V	16V	25V	35V	50V	63V	100V	160~250V	400~450V	
	D55~JAO	Z(-25℃) / Z(+20℃)	7	4	3	2	2	2	2	2	3	—	—
		Z(-40℃) / Z(+20℃)	17	10	8	6	4	3	3	3	4	—	—
	KEO~MNO	Z(-25℃) / Z(+20℃)	—	5	4	3	2	2	2	2	2	3	6
Z(-40℃) / Z(+20℃)		—	12	10	8	5	4	3	3	3	6	10	
(120Hz)													
耐久性	在85℃环境中, 连续加载额定电压2,000小时后, 待温度恢复到20℃进行测量时, 应满足以下要求。												
	尺寸代码	D55~JAO			D55~JAO				KEO~MNO				
	额定电压 (V _{dc})	4、6.3V			10~100V				6.3~450V				
	静电容量变化率	≤初始值的±30%						≤初始值的±20%					
	损失角正切值	≤初始规格值的200%						≤初始规格值的200%					
	漏电流	≤初始规格值						≤初始规格值					
高温无负荷特性	在85℃环境中, 无负荷放置1,000小时待温度恢复到20℃, 进行试验前处理 (JIS C 5101-4 4.1项) 后进行测量时应满足以下要求。												
	尺寸代码	D55~JAO			D55~JAO				KEO~MNO				
	额定电压 (V _{dc})	4、6.3V			10~100V				6.3~450V				
	静电容量变化率	≤初始值的±30%						≤初始值的±20%					
	损失角正切值	≤初始规格值的200%						≤初始规格值的200%					
	漏电流	≤初始规格值						≤初始规格值					
容许清洗条件	请参照Technical note 第6项「基板清洗」 (另外, 额定电压为100V _{dc} ~450V _{dc} 的产品不属于基板清洗类型。)												

尺寸图 (CE32形) [mm]

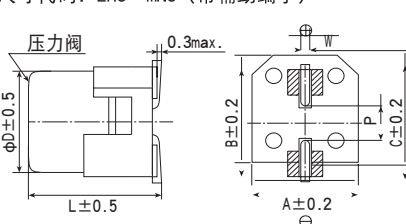
●端子代码: A

●尺寸代码: D55~MNO



●端子代码: G (耐振构造)

●尺寸代码: LHO~MNO (带辅助端子)

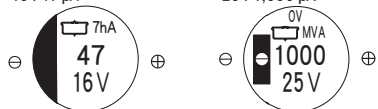


尺寸代码	D	L	A	B	C	W	P
D55	4	5.2	4.3	4.3	5.1	0.5~0.8	1.0
E55	5	5.2	5.3	5.3	5.9	0.5~0.8	1.4
F55	6.3	5.2	6.6	6.6	7.2	0.5~0.8	1.9
F80	6.3	7.7	6.6	6.6	7.2	0.5~0.8	1.9
HAO	8	10.0	8.3	8.3	9.0	0.7~1.1	3.1
JAO	10	10.0	10.3	10.3	11.0	0.7~1.1	4.5
KEO	12.5	13.5	13.0	13.0	13.7	1.0~1.3	4.2
KG5	12.5	16.0	13.0	13.0	13.7	1.0~1.3	4.2
LHO	16	16.5	17.0	17.0	18.0	1.0~1.3	6.5
LN0	16	21.5	17.0	17.0	18.0	1.0~1.3	6.5
MHO	18	16.5	19.0	19.0	20.0	1.0~1.3	6.5
MNO	18	21.5	19.0	19.0	20.0	1.0~1.3	6.5

标示

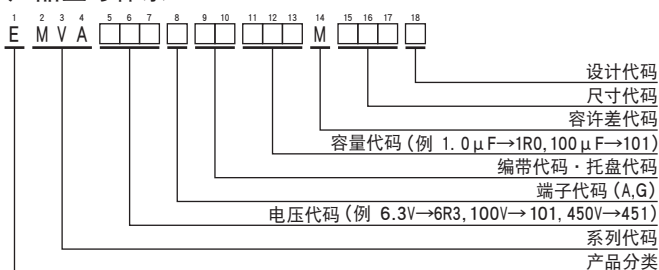
标示例 (D55~JAO)
16V47μF

标示例 (KEO~MNO)
25V1,000μF



▨内: 辅助端子

产品型号体系



产品型号代码的详细介绍请参考「产品型号的表示方法(贴片型)」。

额定纹波电流频率修正系数

纹波频率与标准品一览表的规定值相异时, 请使用小于乘以下表系数所得之值

●频率修正系数

尺寸代码	静电容量 (μF)	频率 (Hz)			
		120	1k	10k	100k
D55~JAO	1.0	1.00	1.50	1.75	1.80
	2.2~10	1.00	1.30	1.40	1.50
	22~1,500	1.00	1.05	1.08	1.08
KEO~MNO	4.7	1.00	1.75	2.30	2.50
	10~68	1.00	1.50	1.75	1.80
	100~1,000	1.00	1.30	1.40	1.50
	2,200~10,000	1.00	1.05	1.08	1.08

※ 铝电解电容器由于在纹波电流叠加时自我发热, 温度上升而老化, 每升温5℃寿命减少一半。
要想保持长寿命请在使用过程中降低纹波电流。

◆标准品一览表

□ 内的产品(100~450Vdc)不能进行基板清洗。

WV (Vdc)	Cap (μF)	尺寸代码	tan δ	额定纹波电流 (mA rms/85℃, 120Hz)	产品型号	WV (Vdc)	Cap (μF)	尺寸代码	tan δ	额定纹波电流 (mA rms/85℃, 120Hz)	产品型号	
4	33	D55	0.42	25	EMVA4R0ADA330MD55G	35	33	F55	0.14	54	EMVA350ADA330MF55G	
	47	D55	0.42	30	EMVA4R0ADA470MD55G		100	F80	0.14	120	EMVA350ADA101MF80G	
	100	E55	0.42	50	EMVA4R0ADA101ME55G		150	HA0	0.14	210	EMVA350ADA151MHA0G	
	220	F55	0.42	80	EMVA4R0ADA221MF55G		220	HA0	0.14	260	EMVA350ADA221MHA0G	
	330	F80	0.42	135	EMVA4R0ADA331MF80G		330	JA0	0.14	360	EMVA350ADA331MJA0G	
	470	F80	0.42	150	EMVA4R0ADA471MF80G		470	KE0	0.22	600	EMVA350ARA471MKE0S	
6.3	1,000	HA0	0.42	320	EMVA4R0ADA102MHA0G	1,000	LH0	0.22	1,100	EMVA350□DA102MLH0S		
	33	D55	0.35	30	EMVA6R3ADA330MD55G	2,200	MN0	0.24	1,700	EMVA350□DA222MMN0S		
	47	D55	0.35	33	EMVA6R3ADA470MD55G	50	3.3	D55	0.12	15	EMVA500ADA3R3MD55G	
	100	E55	0.35	55	EMVA6R3ADA101ME55G		4.7	D55	0.12	18	EMVA500ADA4R7MD55G	
	220	F55	0.35	88	EMVA6R3ADA221MF55G		10	E55	0.12	30	EMVA500ADA100ME55G	
	330	F80	0.35	135	EMVA6R3ADA331MF80G		22	F55	0.12	47	EMVA500ADA220MF55G	
	470	HA0	0.35	280	EMVA6R3ADA471MHA0G		33	F80	0.12	70	EMVA500ADA330MF80G	
	680	HA0	0.35	290	EMVA6R3ADA681MHA0G		47	F80	0.12	85	EMVA500ADA470MF80G	
	820	HA0	0.35	320	EMVA6R3ADA821MHA0G		100	HA0	0.12	190	EMVA500ADA101MHA0G	
	1,000	JA0	0.35	430	EMVA6R3ADA102MJA0G		220	JA0	0.12	320	EMVA500ADA221MJA0G	
	1,500	JA0	0.35	480	EMVA6R3ADA152MJA0G		330	KE0	0.18	600	EMVA500ARA331MKE0S	
	2,200	KE0	0.40	890	EMVA6R3ARA222MKE0S		470	KG5	0.18	740	EMVA500ARA471MKG5S	
	3,300	KG5	0.42	1,000	EMVA6R3ARA332MKG5S		470	LH0	0.18	850	EMVA500□DA471MLH0S	
	3,300	LH0	0.42	1,200	EMVA6R3□DA332MLH0S		1,000	LNO	0.18	1,300	EMVA500□DA102MLN0S	
4,700	LH0	0.44	1,400	EMVA6R3□DA472MLH0S	1,000		MN0	0.18	1,400	EMVA500□DA102MMN0S		
6,800	LNO	0.48	1,750	EMVA6R3□DA682MLN0S	63	1.0	D55	0.12	8.0	EMVA630ADA1R0MD55G		
6,800	MH0	0.48	1,700	EMVA6R3□DA682MMH0S		2.2	D55	0.12	12	EMVA630ADA2R2MD55G		
10,000	MN0	0.56	2,000	EMVA6R3□DA103MMN0S		3.3	E55	0.12	17	EMVA630ADA3R3ME55G		
10	22	D55	0.30	26		EMVA100ADA220MD55G	4.7	E55	0.12	20	EMVA630ADA4R7ME55G	
	33	D55	0.30	30		EMVA100ADA330MD55G	10	F55	0.12	32	EMVA630ADA100MF55G	
	47	E55	0.30	44		EMVA100ADA470ME55G	22	F80	0.12	60	EMVA630ADA220MF80G	
	100	F55	0.30	70		EMVA100ADA101MF55G	33	HA0	0.12	110	EMVA630ADA330MHA0G	
	150	F55	0.30	79		EMVA100ADA151MF55G	47	HA0	0.12	130	EMVA630ADA470MHA0G	
	220	F80	0.30	130		EMVA100ADA221MF80G	56	JA0	0.12	160	EMVA630ADA560MJA0G	
	330	HA0	0.30	270		EMVA100ADA331MHA0G	68	JA0	0.12	170	EMVA630ADA680MJA0G	
	470	HA0	0.30	280		EMVA100ADA471MHA0G	100	KE0	0.14	380	EMVA630ARA101MKE0S	
	1,000	JA0	0.30	430		EMVA100ADA102MJA0G	220	KE0	0.14	580	EMVA630ARA221MKE0S	
	2,200	KE0	0.36	960		EMVA100ARA222MKE0S	330	KG5	0.14	720	EMVA630ARA331MKG5S	
	3,300	LH0	0.38	1,300	EMVA100□DA332MLH0S	330	LH0	0.14	820	EMVA630□DA331MLH0S		
	4,700	LNO	0.40	1,550	EMVA100□DA472MLN0S	470	LH0	0.14	950	EMVA630□DA471MLH0S		
	4,700	MH0	0.40	1,600	EMVA100□DA472MMH0S	470	MH0	0.14	1,000	EMVA630□DA471MMH0S		
6,800	MN0	0.44	1,850	EMVA100□DA682MMN0S	100	22	HA0	0.12	90	EMVA101ADA220MHA0G		
16	22	D55	0.26	26		EMVA160ADA220MD55G	33	JA0	0.12	120	EMVA101ADA330MJA0G	
	33	E55	0.26	37		EMVA160ADA330ME55G	68	KE0	0.10	380	EMVA101ARA680MKE0S	
	47	E55	0.26	44		EMVA160ADA470ME55G	100	KE0	0.10	440	EMVA101ARA101MKE0S	
	100	F55	0.26	70		EMVA160ADA101MF55G	220	LNO	0.10	850	EMVA101□DA221MLN0S	
	150	F80	0.26	110		EMVA160ADA151MF80G	220	MH0	0.10	800	EMVA101□DA221MMH0S	
	220	F80	0.26	130	EMVA160ADA221MF80G	330	MN0	0.10	1,000	EMVA101□DA331MMN0S		
	330	HA0	0.26	270	EMVA160ADA331MHA0G	160	47	KG5	0.20	370	EMVA161ARA470MKG5S	
	470	HA0	0.26	280	EMVA160ADA471MHA0G		68	LH0	0.20	500	EMVA161□DA680MLH0S	
	680	JA0	0.26	380	EMVA160ADA681MJA0G		100	LNO	0.20	590	EMVA161□DA101MLN0S	
	1,000	KE0	0.30	710	EMVA160ARA102MKE0S		100	MH0	0.20	590	EMVA161□DA101MMH0S	
	2,200	LH0	0.32	1,150	EMVA160□DA222MLH0S		200	22	KE0	0.20	240	EMVA201ARA220MKE0S
	3,300	LNO	0.34	1,450	EMVA160□DA332MLN0S			33	KG5	0.20	310	EMVA201ARA330MKG5S
	3,300	MH0	0.34	1,450	EMVA160□DA332MMH0S	47		LH0	0.20	420	EMVA201□DA470MLH0S	
4,700	MN0	0.36	1,750	EMVA160□DA472MMN0S	68	LNO		0.20	510	EMVA201□DA680MLN0S		
25	10	D55	0.16	24	EMVA250ADA100MD55G	68		MH0	0.20	510	EMVA201□DA680MMH0S	
	22	E55	0.16	41	EMVA250ADA220ME55G	100		MN0	0.20	590	EMVA201□DA101MMN0S	
	33	E55	0.16	47	EMVA250ADA330ME55G	250	10	KE0	0.20	150	EMVA251ARA100MKE0S	
	47	F55	0.16	60	EMVA250ADA470MF55G		22	KG5	0.20	240	EMVA251ARA220MKG5S	
	56	F55	0.16	66	EMVA250ADA560MF55G		33	LH0	0.20	340	EMVA251□DA330MLH0S	
	100	F80	0.16	120	EMVA250ADA101MF80G		47	LNO	0.20	420	EMVA251□DA470MLN0S	
	150	HA0	0.16	210	EMVA250ADA151MHA0G		47	MH0	0.20	420	EMVA251□DA470MMH0S	
	220	HA0	0.16	260	EMVA250ADA221MHA0G		68	MN0	0.20	490	EMVA251□DA680MMN0S	
	330	HA0	0.16	300	EMVA250ADA331MHA0G	400	4.7	KE0	0.25	120	EMVA401ARA4R7MKE0S	
	470	JA0	0.16	400	EMVA250ADA471MJA0G		10	LH0	0.25	140	EMVA401□DA100MLH0S	
	1,000	KE0	0.26	820	EMVA250ARA102MKE0S		22	LNO	0.25	280	EMVA401□DA220MLN0S	
	2,200	LNO	0.28	1,450	EMVA250□DA222MLN0S		22	MH0	0.25	280	EMVA401□DA220MMH0S	
	2,200	MH0	0.28	1,400	EMVA250□DA222MMH0S		33	MN0	0.25	350	EMVA401□DA330MMN0S	
3,300	MN0	0.30	1,800	EMVA250□DA332MMN0S	450		4.7	KE0	0.25	120	EMVA451ARA4R7MKE0S	
35	4.7	D55	0.14	18		EMVA350ADA4R7MD55G	10	LH0	0.25	140	EMVA451□DA100MLH0S	
	10	D55	0.14	24		EMVA350ADA100MD55G	22	LNO	0.25	280	EMVA451□DA220MLN0S	
	22	E55	0.14	41		EMVA350ADA220ME55G	33	MN0	0.25	350	EMVA451□DA330MMN0S	

端子代码在□内。