

Alchip[™] Series

●Lower ESR, Higher ripple current

●Endurance : 1,000 to 5,000 hours at 125°C

- •Suitable to fit for automotive equipment ●Solvent resistant type (10 to 50V)
- ●RoHS Compliant



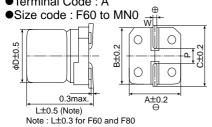


SPECIFICATIONS

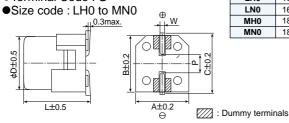
Items	Characteristics														
Category Temperature Range	-40 to +125℃														
Rated Voltage Range	10 to 450Vdc														
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)														
Leakage Current	Rated volta	ge (Vdc)		10 to 100V _{dc} 160 to 450V _{dc}											
	F60 to JA0	I=0.01C	=0.01CV or 3μA, whichever is greater.												
	KE0 to MN0	I=0.03C	=0.03CV or 4μA, whichever is greater.												
	Where, I: N	1ax. leaka	ge curren	current (μA), C : Nominal capacitance (μF), V : Rated voltage (V)									(at 20	°C after 2 minutes)	
Dissipation Factor	Rated volta	ge (Vdc)		10V	16V	25V	35V	50V	63V	80V	100V	160 to 250V	400 & 450V		
(tan∂)	tanδ (Max.)	F60 to JA0		0.24	0.20	0.16	0.14	0.14	0.12	0.12	0.10	_	_		
	` ′	KE0 to N		0.22	0.18	0.16	0.14	0.12	0.14	_	0.10	0.20	0.24		
	When nominal capacitance exceeds 1,000 μF , add 0.02 to the value above for ϵ										, , , , , , , , , , , , , , , , , , , ,				
Low Temperature	Rated volta	, ,		10V	16V	25V	35V	50V	63V	80V	100V	160 to 250V	400 & 450V		
Characteristics (Max. Impedance Ratio)	F60 to JA0		/Z(+20°C)	3	2	2	2	2	2	2	2	_	_		
(maxi impodanoo ridio)		,	/Z(+20°C)	6	4	4	3	3	3	3	3	_	_		
	KE0 to MN0		/Z(+20°C)	4	3	2	2	2	2	_	2	3	6		
		Z(-40°C)	8	6	4	3	3	3	_	3	6	10	(at 120Hz)		
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for the specified														
	time at 125°C.														
				F60 to H63 (10 to 100V _{dc}) : 1,000hours											
	Time		1	HA0 to JA0 (10 to 100V _{dc}) : 2,000hours											
			KE0 to MN0 (10 to 100Vdc) : 5,000hours												
			KE0 to MN0 (160 to 450Vdc) : 2,000hours												
	Capacitance		≦±30% of the initial value ≤300% of the initial specified value												
	D.F. (tanδ)		·												
Shelf Life	Leakage cu			≤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 (500 hours for 400 to 450V _{dc}) at 125°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.									itor snall be p	reconditioned t	by applying voltage			
	0	01 313 C 3	10 to 50V _{dc}					60 4- 41							
	Rated volta Capacitance	<u> </u>	<+20						63 to 450V _{dc} ≦±30% of the initial value						
			≤±30% of the initial value												
	D.F. (tanδ)		≦300% of the initial specified value					≤300% of the initial specified value ≤500% of the initial specified value							
	Leakage cu	≥ine	≦The initial specified value					0 %000	ı ıne ın	ıuaı spe	cinea value				

◆DIMENSIONS [mm]

●Terminal Code : Ā



●Terminal Code : G



Size code	D	L	Α	В	С	W	Р
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
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
KE0	12.5	13.5	13.0	13.0	13.7	1.0 to 1.3	4.2
KG5	12.5	16.0	13.0	13.0	13.7	1.0 to 1.3	4.2
LH0	16	16.5	17.0	17.0	18.0	1.0 to 1.3	6.5
LN0	16	21.5	17.0	17.0	18.0	1.0 to 1.3	6.5
МНО	18	16.5	19.0	19.0	20.0	1.0 to 1.3	6.5
MNO	18	21.5	19.0	19.0	20.0	1.0 to 1.3	6.5

◆MARKING



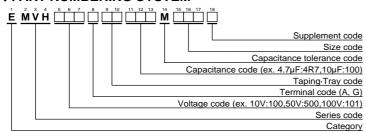


CAT. No. E1001K (1/2)





◆PART NUMBERING SYSTEM



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

◆STANDARD RATINGS

is not solvent resistant (63 to 450Vdc).

WV (Vdc)	Cap (µF)	Size code	ESR (Ωmax/ 100kHz)		Rated ripple current (mArms/125°C)		Part No.	WV (Vdc)	Cap (µF)	Size code	ESR (Ωmax/ 100kHz)		Rated ripple current (mArms/125°C)		Part No.
			20℃	-40℃	100kHz	120Hz					20℃	-40℃	100kHz	120Hz	
	100	F80	0.90	14.0	110	_	EMVH100ADA101MF80G	A101MF80G		F80	2.0	30.0	83	_	EMVH500ADA330MF80G
	100	H63	0.90	14.0	110	_	EMVH100ADA101MH63G		33	H63	1.6	30.0	83	_	EMVH500ADA330MH63G
	220	F80	0.90	14.0	110	_	EMVH100ADA221MF80G		33	HA0	0.70	11.0	160	_	EMVH500ADA330MHA0G
	220	H63	0.90	14.0	110		EMVH100ADA221MH63G		47	HA0	0.70	11.0	160		EMVH500ADA470MHA0G
	220	HA0	0.40	6.0	220	_	EMVH100ADA221MHA0G		47	JA0	0.50	7.5	247	_	EMVH500ADA470MJA0G
	330	HA0	0.40	6.0	220	_	EMVH100ADA331MHA0G	50	100	JA0	0.50	7.5	247	_	EMVH500ADA101MJA0G
10	330	JA0	0.30	4.5	296	_	EMVH100ADA331MJA0G		100	KE0	0.23	3.5	550	_	EMVH500ARA101MKE0S
	470	JA0	0.30	4.5	296	_	EMVH100ADA471MJA0G		220	KE0	0.23	3.5	550	_	EMVH500ARA221MKE0S
	1,000	KE0	0.14	2.1	750	_	EMVH100ARA102MKE0S		220	LH0	0.15	2.3	850	_	EMVH500DA221MLH0S
	2,200	LH0	0.10	1.5	1,000	_	EMVH100□DA222MLH0S		330	KG5	0.18	2.7	700	_	EMVH500ARA331MKG5S
	2,200	MH0	0.10	1.5	1,200	_	EMVH100□DA222MMH0S		330	LH0	0.15	2.3	850	_	EMVH500□DA331MLH0S
	3,300	MH0	0.10	1.5	1,200	_	EMVH100□DA332MMH0S		470	MH0	0.15	2.3	920	_	EMVH500DDA471MMH0S
	4,700	MN0	0.058	0.87	1,550	_	EMVH100DDA472MMN0S		10	F80	2.0	100	60	_	EMVH630ADA100MF80G
	47 100	F60 HA0	1.6 0.40	24.0 6.0	69 220	_	EMVH160ADA470MF60G		10 22	H63 HA0	2.0 0.70	110 35.0	60 100	_	EMVH630ADA100MH63G EMVH630ADA220MHA0G
	220	HA0	0.40	6.0	220	_	EMVH160ADA101MHA0G EMVH160ADA221MHA0G	63	33	HA0	0.70	35.0	100		EMVH630ADA330MHA0G
	220	JA0	0.40	4.5	296	_	EMVH160ADA221MJA0G		33	JA0	0.70	25.0	170		EMVH630ADA330MJA0G
	330	JA0	0.30	4.5	296		EMVH160ADA331MJA0G		47	HA0	0.70	35.0	100		EMVH630ADA470MHA0G
16	470	KE0	0.14	2.1	750		EMVH160ARA471MKE0S		47	JA0	0.70	25.0	170		EMVH630ADA470MJA0G
	680	KE0	0.14	2.1	750	_	EMVH160ARA681MKE0S		100	KE0	0.25	12.5	500	_	EMVH630ARA101MKE0S
	680	LH0	0.10	1.5	1,000	_	EMVH160 DA681MLH0S		220	KG5	0.20	10.0	600	_	EMVH630ARA221MKG5S
	1,000	MH0	0.10	1.5	1,200	_	EMVH160□DA102MMH0S		330	LH0	0.18	9.0	820	_	EMVH630DA331MLH0S
	2,200	MH0	0.10	1.5	1,200	_	EMVH160□DA222MMH0S		470	LN0	0.11	5.5	1.100	_	EMVH630DDA471MLN0S
	33	F60	1.6	24.0	69	_	EMVH250ADA330MF60G		10	HA0	0.75	50.0	70	_	EMVH800ADA100MHA0G
	47	F80	0.90	14.0	110	_	EMVH250ADA470MF80G		22	HA0	0.75	50.0	70	_	EMVH800ADA220MHA0G
	47	H63	0.90	14.0	110	_	EMVH250ADA470MH63G		22	JA0	0.55	35.0	115	_	EMVH800ADA220MJA0G
	100	F80	0.90	14.0	110	_	EMVH250ADA101MF80G	80	33	HA0	0.75	50.0	70	_	EMVH800ADA330MHA0G
	100	H63	0.90	14.0	110	_	EMVH250ADA101MH63G		33	JA0	0.55	35.0	115	_	EMVH800ADA330MJA0G
	100	HA0	0.40	6.0	220		EMVH250ADA101MHA0G		47	JA0	0.55	35.0	115	_	EMVH800ADA470MJA0G
	220	HA0	0.40	6.0	220	_	EMVH250ADA221MHA0G		10	HA0	0.75	50.0	70	_	EMVH101ADA100MHA0G
25	220	JA0	0.30	4.5	296	_	EMVH250ADA221MJA0G		22	HA0	0.75	50.0	70	_	EMVH101ADA220MHA0G
	330	JA0	0.30	4.5	296	_	EMVH250ADA331MJA0G		22	JA0	0.55	35.0	115	_	EMVH101ADA220MJA0G
	330	KE0	0.14	2.1	750	_	EMVH250ARA331MKE0S	100	33	JA0	0.55	35.0	115	_	EMVH101ADA330MJA0G
	470	KE0	0.14	2.1	750	_	EMVH250ARA471MKE0S	1.00	47	KE0	0.33	16.5	450	_	EMVH101ARA470MKE0S
	470	LH0	0.10	1.5	1,000	_	EMVH250□DA471MLH0S		68	KG5	0.26	13.0	550	_	EMVH101ARA680MKG5S
	680	LH0	0.10	1.5	1,000	_	EMVH250□DA681MLH0S		100	LH0	0.24	12.0	650	_	EMVH101□DA101MLH0S
	680	MH0	0.10	1.5	1,200	_	EMVH250DA681MMH0S		220	MN0	0.16	8.0	950		EMVH101□DA221MMN0S
	1,000	MN0	0.058	0.87	1,550		EMVH250 DA102MMN0S		10	KE0	_	_	_	100	EMVH161ARA100MKE0S
	10	F60	1.6	24.0	69	_	EMVH350ADA100MF60G	160	22	LH0	_	_	_	180	EMVH161□DA220MLH0S
	22	F60	1.6	24.0	69	_	EMVH350ADA220MF60G		33	MH0	_	_	_	245	EMVH161 DA330MMH0S
	33	F80	0.90	14.0	110	_	EMVH350ADA330MF80G		68	MN0		_	_	380	EMVH161 DA680MMN0S
	33 47	H63	0.90	14.0	110	_	EMVH350ADA330MH63G		10	KE0	_	_	_	100	EMVH201ARA100MKE0S
		F80	0.90	14.0	110	_	EMVH350ADA470MF80G	200	22	LH0	_	_	_	180	EMVH201□DA220MLH0S EMVH201□DA330MLN0S
	47 47	H63 HA0	0.90	14.0 6.0	110 220	_	EMVH350ADA470MH63G EMVH350ADA470MHA0G	200	33	LN0 MH0	_	_	_	250 245	EMVH201\(\text{DA330MLN0S}\) EMVH201\(\text{DA330MMH0S}\)
35	100	HA0	0.40	6.0	220		EMVH350ADA101MHA0G		47	MN0	_	_	_	315	EMVH201\(\text{DA330WWH0S}\)
35										KG5	_	_	_		
	100 220	JA0 JA0	0.30	4.5 4.5	296 296	_	EMVH350ADA101MJA0G EMVH350ADA221MJA0G		10 22	LN0	=		_	110 200	EMVH251ARA100MKG5S EMVH251□DA220MLN0S
	330	KE0	0.30	2.1	750		EMVH350ARA331MKE0S	250	22	MH0				205	EMVH251 DA220MMH0S
	330	LH0	0.14	1.5	1,000	_	EMVH350DDA331MLH0S		33	MN0		_	_	260	EMVH251\(\text{DA220WINH0S}\)
	470	KG5	0.10	1.5	900	_	EMVH350ARA471MKG5S		4.7	KE0			_	70	EMVH401ARA4R7MKE0S
	470	LH0	0.11	1.5	1,000	_	EMVH350\(\text{DA471MLH0S}\)		6.8	LH0	=			100	EMVH401\(\text{DDA6R8MLH0S}\)
	680	MH0	0.10	1.5	1,200	_	EMVH350DDA681MMH0S	400	10	LN0	=			140	EMVH401 DA100MLN0S
	10	F60	2.8	42.0	51		EMVH500ADA100MF60G		10	MH0				135	EMVH401 DA100MMH0S
	10	H63	1.6	30.0	83		EMVH500ADA100MH63G		3.3	KG5				65	EMVH451ARA3R3MKG5S
50	22	F80	2.0	30.0	83		EMVH500ADA220MF80G	450		LH0	ΗΞ-			85	EMVH451\(\text{DA4R7MLH0S}\)
	22	H63	1.6	30.0	83	_	EMVH500ADA220MH63G	.55	10	MN0	_	_	_	145	EMVH451□DA100MMN0S
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 $[\]square$: Enter the appropriate terminal code.