

Upgrade!

アルチップ™-MVHシリーズ

面実装

高温度

耐洗浄

RoHS指令
適合品

10～50V

MVH

125℃化
サイズ拡大

MVK



- 低 ESR 化、高リプル電流化。
- 125℃ 1,000～5,000 時間保証。
- 定格電圧範囲 10～450V。
- 自動車電装品等の高温用途に最適。
- EIAJ 外形寸法登録制度登録部品 (F60、H63、HA0、JA0)。
- 製品サイズφ 6.3×5.7L～φ 18×21.5L。

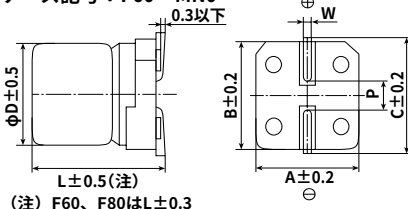
◆規格表

項 目	性 能											
カテゴリ温度範囲	-40～+125℃											
定格電圧範囲	10～450V _{dc}											
静電容量許容差	±20% (M) (20℃、120Hz)											
漏れ電流	定格電圧 (V _{dc})	10～100V _{dc}						160～450V _{dc}				
	F60～JA0	I=0.01CVまたは3μAのうちいずれか大なる値以下						I=0.04CV+100				
	KE0～MN0	I=0.03CVまたは4μAのうちいずれか大なる値以下										
	I: 漏れ電流 (μA)、C: 静電容量 (μF)、V: 定格電圧 (V _{dc}) (20℃、2分値)											
損失角の正接 (tan δ)	定格電圧 (V _{dc})	10V	16V	25V	35V	50V	63V	80V	100V	160～250V	400、450V	
	tan δ (Max.)	F60～JA0	0.24	0.20	0.16	0.14	0.14	0.12	0.12	0.10	—	—
		KE0～MN0	0.22	0.18	0.16	0.14	0.12	0.14	—	0.10	0.20	0.24
	但し、1,000μFを超えるものについては、1,000μFを増す毎に0.02を加えた値とする。 (20℃、120Hz)											
温度特性 (インピーダンス比 右表の値以下)	定格電圧 (V _{dc})	10V	16V	25V	35V	50V	63V	80V	100V	160～250V	400、450V	
	F60～JA0	Z(-25℃)／Z(+20℃)	3	2	2	2	2	2	2	2	—	—
		Z(-40℃)／Z(+20℃)	6	4	4	3	3	3	3	3	—	—
	KE0～MN0	Z(-25℃)／Z(+20℃)	4	3	2	2	2	2	—	2	3	6
		Z(-40℃)／Z(+20℃)	8	6	4	3	3	3	—	3	6	10
(120Hz)												
耐久性	125℃において定格電圧を規定時間印加後、20℃に復帰させ測定を行なったとき、下記を満足すること											
	規定時間	F60～H63 (10～100V) : 1,000時間										
		HA0～JA0 (10～100V) : 2,000時間										
		KE0～MN0 (10～100V) : 5,000時間										
		KE0～MN0 (160～450V) : 2,000時間										
	静電容量変化率	初期値の±30%以内										
損失角の正接	初期規格値の300%以下											
漏れ電流	初期規格値以下											
高温無負荷特性	125℃において電圧を印加せし1,000時間(350～450WV: 500時間)放置後、20℃に復帰させ試験前処理(JIS C 5102 4.4項)の後、測定を行なったとき、下記を満足すること											
	定格電圧	10～50V _{dc}				63～450V _{dc}						
	静電容量変化率	初期値の±30%以内				初期値の±30%以内						
	損失角の正接	初期規格値の300%以下				初期規格値の300%以下						
	漏れ電流	初期規格値以下				初期規格値の500%以下						
	許容洗浄条件	テクニカルノート 6項「基板洗浄について」をご参照下さい (尚、定格電圧63～450V _{dc} は洗浄対策品ではありません)										

◆寸法図 (CE32 形) [mm]

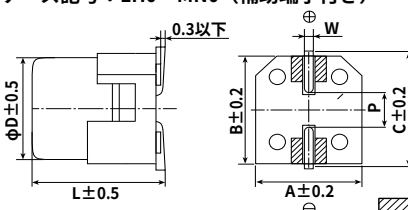
●端子コード: A

●ケース記号: F60～MN0



●端子コード: G

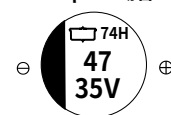
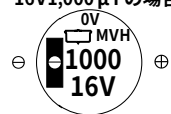
●ケース記号: LH0～MN0 (補助端子付き)



内: 補助端子

サイズコード	D	L	A	B	C	W	P
F60	6.3	5.7	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
H63	8	6.3	8.3	8.3	9.0	0.5～0.8	2.3
HA0	8	10.0	8.3	8.3	9.0	0.7～1.1	3.1
JA0	10	10.0	10.3	10.3	11.0	0.7～1.1	4.5
KE0	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
LH0	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
MH0	18	16.5	19.0	19.0	20.0	1.0～1.3	6.5
MN0	18	21.5	19.0	19.0	20.0	1.0～1.3	6.5

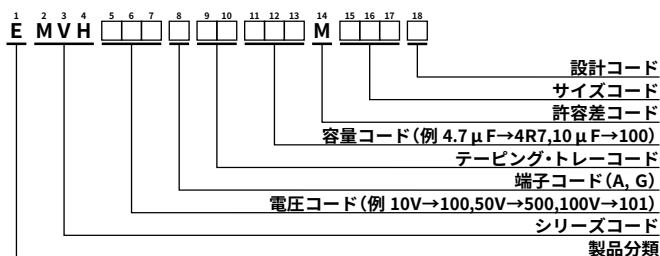
◆表示

表示例 (F60～JA0)
35V47μFの場合表示例 (KE0～MN0)
16V1,000μFの場合

Upgrade!

アルチップ™-MVHシリーズ

◆品番体系



品番コードの詳細は「品番の表し方(チップ形)」をご参照下さい。

◆標準品一覧表

□内の製品(63～450Vdc)は基板洗浄できません。

WV (Vdc)	Cap (μF)	サイズ コード	等価直列抵抗 (Ω max/ 100kHz)		定格リプル電流 (mA rms/125℃)		品番
			20℃	-40℃	100kHz	120Hz	
10	100	F80	0.90	14.0	110	—	EMVH100ADA101MF80G
	100	H63	0.90	14.0	110	—	EMVH100ADA101MH63G
	220	F80	0.90	14.0	110	—	EMVH100ADA221MF80G
	220	H63	0.90	14.0	110	—	EMVH100ADA221MH63G
	220	HA0	0.40	6.0	220	—	EMVH100ADA221MHA0G
	330	HA0	0.40	6.0	220	—	EMVH100ADA331MHA0G
	330	JA0	0.30	4.5	296	—	EMVH100ADA331MJA0G
	470	JA0	0.30	4.5	296	—	EMVH100ADA471MJA0G
	1,000	KE0	0.14	2.1	750	—	EMVH100A□□102MKE0S
	2,200	LH0	0.10	1.5	1,000	—	EMVH100□□222MLH0S
	2,200	MH0	0.10	1.5	1,200	—	EMVH100□□222MMH0S
	3,300	MH0	0.10	1.5	1,200	—	EMVH100□□332MMH0S
	4,700	MN0	0.058	0.87	1,550	—	EMVH100□□472MMN0S
16	47	F60	1.6	24.0	69	—	EMVH160ADA470MF60G
	100	HA0	0.40	6.0	220	—	EMVH160ADA101MHA0G
	220	HA0	0.40	6.0	220	—	EMVH160ADA221MHA0G
	220	JA0	0.30	4.5	296	—	EMVH160ADA221MJA0G
	330	JA0	0.30	4.5	296	—	EMVH160ADA331MJA0G
	470	KE0	0.14	2.1	750	—	EMVH160A□□471MKE0S
	680	KE0	0.14	2.1	750	—	EMVH160A□□681MKE0S
	680	LH0	0.10	1.5	1,000	—	EMVH160□□681MLH0S
	1,000	MH0	0.10	1.5	1,200	—	EMVH160□□102MMH0S
	2,200	MH0	0.10	1.5	1,200	—	EMVH160□□222MMH0S
25	33	F60	1.6	24.0	69	—	EMVH250ADA330MF60G
	47	F80	0.90	14.0	110	—	EMVH250ADA470MF80G
	47	H63	0.90	14.0	110	—	EMVH250ADA470MH63G
	100	F80	0.90	14.0	110	—	EMVH250ADA101MF80G
	100	H63	0.90	14.0	110	—	EMVH250ADA101MH63G
	100	HA0	0.40	6.0	220	—	EMVH250ADA101MHA0G
	220	HA0	0.40	6.0	220	—	EMVH250ADA221MHA0G
	220	JA0	0.30	4.5	296	—	EMVH250ADA221MJA0G
	330	JA0	0.30	4.5	296	—	EMVH250ADA331MJA0G
	330	KE0	0.14	2.1	750	—	EMVH250A□□331MKE0S
	470	KE0	0.14	2.1	750	—	EMVH250A□□471MKE0S
	470	LH0	0.10	1.5	1,000	—	EMVH250□□471MLH0S
	680	LH0	0.10	1.5	1,000	—	EMVH250□□681MLH0S
680	MH0	0.10	1.5	1,200	—	EMVH250□□681MMH0S	
1,000	MN0	0.058	0.87	1,550	—	EMVH250□□102MMN0S	
35	10	F60	1.6	24.0	69	—	EMVH350ADA100MF60G
	22	F60	1.6	24.0	69	—	EMVH350ADA220MF60G
	33	F80	0.90	14.0	110	—	EMVH350ADA330MF80G
	33	H63	0.90	14.0	110	—	EMVH350ADA330MH63G
	47	F80	0.90	14.0	110	—	EMVH350ADA470MF80G
	47	H63	0.90	14.0	110	—	EMVH350ADA470MH63G
	47	HA0	0.40	6.0	220	—	EMVH350ADA470MHA0G
	100	HA0	0.40	6.0	220	—	EMVH350ADA101MHA0G
	100	JA0	0.30	4.5	296	—	EMVH350ADA101MJA0G
	220	JA0	0.30	4.5	296	—	EMVH350ADA221MJA0G
	330	KE0	0.14	2.1	750	—	EMVH350A□□331MKE0S
	330	LH0	0.10	1.5	1,000	—	EMVH350□□331MLH0S
	470	KG5	0.11	1.5	900	—	EMVH350A□□471MKG5S
470	LH0	0.10	1.5	1,000	—	EMVH350□□471MLH0S	
680	MH0	0.10	1.5	1,200	—	EMVH350□□681MMH0S	
50	10	F60	2.8	42.0	51	—	EMVH500ADA100MF60G
	10	H63	1.6	30.0	83	—	EMVH500ADA100MH63G
	22	F80	2.0	30.0	83	—	EMVH500ADA220MF80G
	22	H63	1.6	30.0	83	—	EMVH500ADA220MH63G
	33	F80	2.0	30.0	83	—	EMVH500ADA330MF80G
	33	H63	1.6	30.0	83	—	EMVH500ADA330MH63G
	47	F80	2.0	30.0	83	—	EMVH500ADA470MF80G
	47	H63	1.6	30.0	83	—	EMVH500ADA470MH63G
	100	HA0	0.40	6.0	220	—	EMVH500ADA101MHA0G
	100	JA0	0.30	4.5	296	—	EMVH500ADA101MJA0G
50	33	F80	2.0	30.0	83	—	EMVH500ADA330MF80G
	33	H63	1.6	30.0	83	—	EMVH500ADA330MH63G
	47	F80	2.0	30.0	83	—	EMVH500ADA470MF80G
	47	H63	1.6	30.0	83	—	EMVH500ADA470MH63G
	100	HA0	0.40	6.0	220	—	EMVH500ADA101MHA0G
	100	JA0	0.30	4.5	296	—	EMVH500ADA101MJA0G
	220	JA0	0.30	4.5	296	—	EMVH500ADA221MJA0G
	330	KE0	0.14	2.1	750	—	EMVH500A□□331MKE0S
	330	LH0	0.10	1.5	1,000	—	EMVH500□□331MLH0S
	470	KG5	0.11	1.5	900	—	EMVH500A□□471MKG5S
	470	LH0	0.10	1.5	1,000	—	EMVH500□□471MLH0S
	680	MH0	0.10	1.5	1,200	—	EMVH500□□681MMH0S
	50	10	F60	2.8	42.0	51	—
10		H63	1.6	30.0	83	—	EMVH500ADA100MH63G
22		F80	2.0	30.0	83	—	EMVH500ADA220MF80G
22		H63	1.6	30.0	83	—	EMVH500ADA220MH63G
33		F80	2.0	30.0	83	—	EMVH500ADA330MF80G
33		H63	1.6	30.0	83	—	EMVH500ADA330MH63G
47		F80	2.0	30.0	83	—	EMVH500ADA470MF80G
47		H63	1.6	30.0	83	—	EMVH500ADA470MH63G
100		HA0	0.40	6.0	220	—	EMVH500ADA101MHA0G
100		JA0	0.30	4.5	296	—	EMVH500ADA101MJA0G
220		JA0	0.30	4.5	296	—	EMVH500ADA221MJA0G
330		KE0	0.14	2.1	750	—	EMVH500A□□331MKE0S
330		LH0	0.10	1.5	1,000	—	EMVH500□□331MLH0S
470	KG5	0.11	1.5	900	—	EMVH500A□□471MKG5S	
470	LH0	0.10	1.5	1,000	—	EMVH500□□471MLH0S	
680	MH0	0.10	1.5	1,200	—	EMVH500□□681MMH0S	
50	10	F60	2.8	42.0	51	—	EMVH500ADA100MF60G
	10	H63	1.6	30.0	83	—	EMVH500ADA100MH63G
	22	F80	2.0	30.0	83	—	EMVH500ADA220MF80G
	22	H63	1.6	30.0	83	—	EMVH500ADA220MH63G
	33	F80	2.0	30.0	83	—	EMVH500ADA330MF80G
	33	H63	1.6	30.0	83	—	EMVH500ADA330MH63G
	47	F80	2.0	30.0	83	—	EMVH500ADA470MF80G
	47	H63	1.6	30.0	83	—	EMVH500ADA470MH63G
	100	HA0	0.40	6.0	220	—	EMVH500ADA101MHA0G
	100	JA0	0.30	4.5	296	—	EMVH500ADA101MJA0G
	220	JA0	0.30	4.5	296	—	EMVH500ADA221MJA0G
	330	KE0	0.14	2.1	750	—	EMVH500A□□331MKE0S
	330	LH0	0.10	1.5	1,000	—	EMVH500□□331MLH0S
470	KG5	0.11	1.5	900	—	EMVH500A□□471MKG5S	
470	LH0	0.10	1.5	1,000	—	EMVH500□□471MLH0S	
680	MH0	0.10	1.5	1,200	—	EMVH500□□681MMH0S	
50	10	F60	2.8	42.0	51	—	EMVH500ADA100MF60G
	10	H63	1.6	30.0	83	—	EMVH500ADA100MH63G
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	47	F80	2.0	30.0	83	—	EMVH500ADA470MF80G
	47	H63	1.6	30.0	83	—	EMVH500ADA470MH63G
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	220	JA0	0.30	4.5	296	—	EMVH500ADA221MJA0G
	330	KE0	0.14	2.1	750	—	EMVH500A□□331MKE0S
	330	LH0	0.10	1.5	1,000	—	EMVH500□□331MLH0S
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470	LH0	0.10	1.5	1,000	—	EMVH500□□471MLH0S	
680	MH0	0.10	1.5	1,200	—	EMVH500□□681MMH0S	
50	10	F60	2.8	42.0	51	—	EMVH500ADA100MF60G
	10	H63	1.6	30.0	83	—	EMVH500ADA100MH63G
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	47	H63	1.6	30.0	83	—	EMVH500ADA470MH63G
	100	HA0	0.40	6.0	220	—	EMVH500ADA101MHA0G
	100	JA0	0.30	4.5	296	—	EMVH500ADA101MJA0G
	220	JA0	0.30	4.5	296	—	EMVH500ADA221MJA0G
	330	KE0	0.14	2.1	750	—	EMVH500A□□331MKE0S
	330	LH0	0.10	1.5	1,000	—	EMVH500□□331MLH0S
470	KG5	0.11	1.5	900	—	EMVH500A□□471MKG5S	
470	LH0	0.10	1.5	1,000	—	EMVH500□□471MLH0S	
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	33	H63	1.6	30.0	83	—	EMVH500ADA330MH63G
	47	F80	2.0	30.0	83	—	EMVH500ADA470MF80G
	47	H63	1.6	30.0	83	—	EMVH500ADA470MH63G
	100	HA0	0.40	6.0	220	—	EMVH500ADA101MHA0G
	100	JA0	0.30	4.5	296	—	EMVH500ADA101MJA0G
	220	JA0	0.30	4.5	296	—	EMVH500ADA221MJA0G
	330	KE0	0.14	2.1	750	—	EMVH500A□□331MKE0S
	330	LH0	0.10	1.5	1,000	—	EMVH500□□331MLH0S
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470	LH0	0.10	1.5	1,000	—	EMVH500□□471MLH0S	
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	220	JA0	0.30	4.5	296	—	EMVH500ADA221MJA0G
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	330	LH0	0.10	1.5	1,000	—	EMVH500□□331MLH0S
470	KG5	0.11	1.5	900	—	EMVH500A□□471MKG5S	
470	LH0						