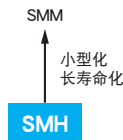


SMH 系列

标准品

RoHS2
适应品

- 保证85°C 2,000小时(叠加纹波电流)。
- 请注意不属于基板清洗类型。

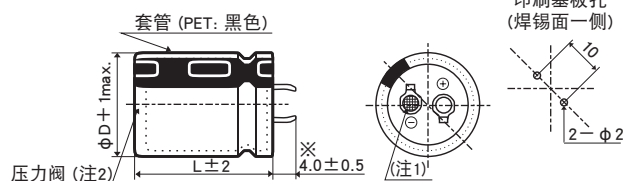


规格表

项 目	性 能										
工作温度范围	-40~+85°C										
额定电压范围	6.3~100V _{dc}										
静电容量容许差	±20% (M) (20°C、120Hz)										
漏电流	I ≤ 0.02CV 或者 3mA 中任意一个较小值 I: 漏电流 (μA)、C: 静电容量 (μF)、V: 额定电压 (V _{dc}) (20°C、5分值)										
损失角正切值 (tan δ)	额定电压 (V _{dc})	6.3V	10V	16V	25V	35V	50V	63V	80V	100V	
	tan δ (Max.)	0.60	0.50	0.40	0.30	0.25	0.20	0.15	0.15	0.15	(20°C、120Hz)
温度特性 (阻抗比 Max右表值)	额定电压 (V _{dc})	6.3V	10V	16V	25V	35V	50V	63V	80V	100V	
	Z (-25°C) / Z (+20°C)	4	4	4	3	3	2	2	2	2	
	Z (-40°C) / Z (+20°C)	15	15	15	10	8	6	6	5	5	(120Hz)
耐久性	在85°C环境中, 不超过额定电压的范围内下叠加额定纹波电流, 连续加载额定电压2,000小时后, 待温度恢复到20°C进行测量时, 应满足以下要求。										
	静电容量变化率	≤ 初始值的 ±20%									
	损失角正切值	≤ 初始规格值的200%									
	漏电流	≤ 初始规格值									
高温无负荷特性	在85°C环境中, 无负荷放置1,000小时后待温度恢复到20°C, 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。										
	静电容量变化率	≤ 初始值的 ±20%									
	损失角正切值	≤ 初始规格值的150%									
	漏电流	≤ 初始规格值									

尺寸图 (CE692形) [mm]

●端子代码: VS (φ22~φ35): 标准品

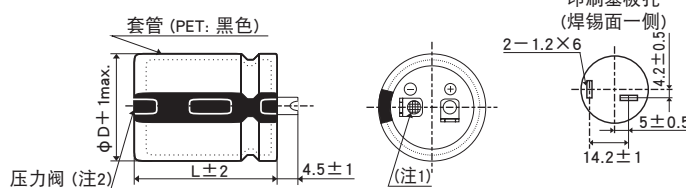


※ φ35品为3.5±0.5。

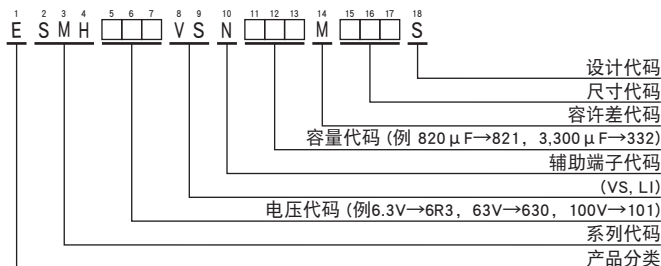
(注1) 阴极端子的铆钉部网眼刻印。

(注2) 标准规格为「无树脂板」。

●端子代码: LI (φ35)



产品型号体系



产品型号代码的详细介绍请参考「产品型号表示方法(基板自立型)」。

SMH 系列

◆标准品一览表

WV (Vdc)	Cap (μ F)	尺寸 ϕ D \times L(mm)	tan δ	额定纹波 电流 (Arms/ 85°C, 120Hz)	产品型号	WV (Vdc)	Cap (μ F)	尺寸 ϕ D \times L(mm)	tan δ	额定纹波 电流 (Arms/ 85°C, 120Hz)	产品型号	
6.3	15,000	22 \times 25	0.60	2.44	ESMH6R3VSN153MP25S	16	27,000	25.4 \times 45	0.40	4.72	ESMH160VSN273MQ45S	
	18,000	22 \times 30	0.60	2.67	ESMH6R3VSN183MP30S		27,000	30 \times 35	0.40	4.82	ESMH160VSN273MR35S	
	18,000	25.4 \times 25	0.60	2.70	ESMH6R3VSN183MQ25S		27,000	35 \times 30	0.40	4.65	ESMH160VSN273MA30S	
	22,000	22 \times 30	0.60	3.06	ESMH6R3VSN223MP30S		33,000	25.4 \times 50	0.40	5.33	ESMH160VSN333MQ50S	
	22,000	25.4 \times 25	0.60	3.07	ESMH6R3VSN223MQ25S		33,000	30 \times 40	0.40	5.36	ESMH160VSN333MR40S	
	27,000	22 \times 35	0.60	3.49	ESMH6R3VSN273MP35S		33,000	35 \times 30	0.40	5.15	ESMH160VSN333MA30S	
	27,000	25.4 \times 30	0.60	3.52	ESMH6R3VSN273MQ30S		39,000	30 \times 45	0.40	6.01	ESMH160VSN393MR45S	
	27,000	30 \times 25	0.60	3.57	ESMH6R3VSN273MR25S		39,000	35 \times 35	0.40	5.95	ESMH160VSN393MA35S	
	33,000	22 \times 40	0.60	3.97	ESMH6R3VSN333MP40S		47,000	30 \times 50	0.40	6.79	ESMH160VSN473MR50S	
	33,000	25.4 \times 35	0.60	4.02	ESMH6R3VSN333MQ35S		47,000	35 \times 40	0.40	6.76	ESMH160VSN473MA40S	
	33,000	30 \times 25	0.60	3.95	ESMH6R3VSN333MR25S		56,000	35 \times 45	0.40	7.62	ESMH160VSN563MA45S	
	39,000	22 \times 50	0.60	4.55	ESMH6R3VSN393MP50S		68,000	35 \times 50	0.40	8.63	ESMH160VSN683MA50S	
	39,000	25.4 \times 40	0.60	4.50	ESMH6R3VSN393MQ40S		25	5,600	22 \times 25	0.30	2.21	ESMH250VSN562MP25S
	39,000	30 \times 30	0.60	4.45	ESMH6R3VSN393MR30S			6,800	22 \times 30	0.30	2.40	ESMH250VSN103MP30S
	39,000	35 \times 25	0.60	4.51	ESMH6R3VSN393MA25S			6,800	25.4 \times 25	0.30	2.56	ESMH250VSN682MQ25S
	47,000	25.4 \times 45	0.60	5.09	ESMH6R3VSN473MQ45S			8,200	22 \times 35	0.30	2.72	ESMH250VSN822MP35S
	47,000	30 \times 35	0.60	5.06	ESMH6R3VSN473MR35S	8,200		25.4 \times 25	0.30	2.80	ESMH250VSN822MQ25S	
	47,000	35 \times 30	0.60	5.01	ESMH6R3VSN473MA30S	10,000		22 \times 40	0.30	3.09	ESMH250VSN103MP40S	
	56,000	25.4 \times 50	0.60	5.71	ESMH6R3VSN563MQ50S	10,000		25.4 \times 30	0.30	3.12	ESMH250VSN103MQ30S	
	56,000	30 \times 40	0.60	5.70	ESMH6R3VSN563MR40S	10,000		30 \times 25	0.30	3.21	ESMH250VSN103MR25S	
	56,000	35 \times 30	0.60	5.77	ESMH6R3VSN563MA30S	12,000		22 \times 45	0.30	3.48	ESMH250VSN123MP45S	
	68,000	30 \times 45	0.60	6.48	ESMH6R3VSN683MR45S	12,000		25.4 \times 35	0.30	3.43	ESMH250VSN123MQ35S	
	68,000	35 \times 35	0.60	6.42	ESMH6R3VSN683MA35S	12,000		30 \times 30	0.30	3.86	ESMH250VSN123MR30S	
	82,000	30 \times 50	0.60	7.32	ESMH6R3VSN823MR50S	12,000		35 \times 25	0.30	3.54	ESMH250VSN123MA25S	
	82,000	35 \times 40	0.60	7.29	ESMH6R3VSN823MA40S	15,000		22 \times 50	0.30	4.00	ESMH250VSN153MP50S	
	100,000	35 \times 45	0.60	8.31	ESMH6R3VSN104MA45S	15,000		25.4 \times 40	0.30	3.95	ESMH250VSN153MQ40S	
	10	12,000	22 \times 25	0.50	2.39	ESMH100VSN123MP25S		15,000	30 \times 30	0.30	4.00	ESMH250VSN153MR30S
		15,000	22 \times 30	0.50	2.76	ESMH100VSN153MP30S		15,000	35 \times 25	0.30	3.95	ESMH250VSN153MA25S
15,000		25.4 \times 25	0.50	2.77	ESMH100VSN153MQ25S	18,000	25.4 \times 45	0.30	4.45	ESMH250VSN183MQ45S		
18,000		22 \times 35	0.50	3.12	ESMH100VSN183MP35S	18,000	30 \times 35	0.30	4.46	ESMH250VSN183MR35S		
18,000		25.4 \times 25	0.50	3.04	ESMH100VSN183MQ25S	18,000	35 \times 30	0.30	4.63	ESMH250VSN183MA30S		
22,000		22 \times 40	0.50	3.55	ESMH100VSN223MP40S	22,000	25.4 \times 50	0.30	5.02	ESMH250VSN223MQ50S		
22,000		25.4 \times 30	0.50	3.48	ESMH100VSN223MQ30S	22,000	30 \times 45	0.30	5.21	ESMH250VSN223MR45S		
22,000		30 \times 25	0.50	3.53	ESMH100VSN223MR25S	22,000	35 \times 35	0.30	5.16	ESMH250VSN223MA35S		
27,000		22 \times 45	0.50	4.04	ESMH100VSN273MP45S	27,000	30 \times 50	0.30	5.94	ESMH250VSN273MR50S		
27,000		25.4 \times 35	0.50	3.98	ESMH100VSN273MQ35S	27,000	35 \times 40	0.30	5.92	ESMH250VSN273MA40S		
27,000		30 \times 30	0.50	3.73	ESMH100VSN273MR30S	33,000	35 \times 45	0.30	6.75	ESMH250VSN333MA45S		
27,000		35 \times 25	0.50	3.73	ESMH100VSN273MA25S	39,000	35 \times 50	0.30	7.56	ESMH250VSN393MA50S		
33,000		22 \times 50	0.50	4.58	ESMH100VSN333MP50S	35	3,900	22 \times 25	0.25	2.22	ESMH350VSN392MP25S	
33,000		25.4 \times 40	0.50	4.54	ESMH100VSN333MQ40S		4,700	22 \times 30	0.25	2.41	ESMH350VSN472MP30S	
33,000		30 \times 30	0.50	4.13	ESMH100VSN333MR30S		4,700	25.4 \times 25	0.25	2.42	ESMH350VSN472MQ25S	
33,000		35 \times 25	0.50	4.13	ESMH100VSN333MA25S		5,600	22 \times 35	0.25	2.75	ESMH350VSN562MP35S	
39,000		25.4 \times 45	0.50	5.08	ESMH100VSN393MQ45S		5,600	25.4 \times 25	0.25	2.64	ESMH350VSN562MQ25S	
39,000		30 \times 35	0.50	5.05	ESMH100VSN393MR35S		6,800	22 \times 40	0.25	2.80	ESMH350VSN682MP40S	
39,000		35 \times 30	0.50	4.80	ESMH100VSN393MA30S		6,800	25.4 \times 30	0.25	2.74	ESMH350VSN682MQ30S	
47,000		25.4 \times 50	0.50	5.73	ESMH100VSN473MQ50S		6,800	30 \times 25	0.25	2.97	ESMH350VSN682MR25S	
47,000		30 \times 40	0.50	5.72	ESMH100VSN473MR40S		8,200	22 \times 45	0.25	3.47	ESMH350VSN822MP45S	
47,000		35 \times 30	0.50	5.27	ESMH100VSN473MA30S		8,200	25.4 \times 35	0.25	3.10	ESMH350VSN822MQ35S	
56,000		30 \times 45	0.50	6.44	ESMH100VSN563MR45S		8,200	30 \times 30	0.25	3.13	ESMH350VSN822MR30S	
56,000		35 \times 35	0.50	6.38	ESMH100VSN563MA35S		8,200	35 \times 25	0.25	2.73	ESMH350VSN822MA25S	
68,000		30 \times 50	0.50	7.27	ESMH100VSN683MR50S		10,000	22 \times 50	0.25	3.57	ESMH350VSN103MP50S	
68,000		35 \times 40	0.50	7.27	ESMH100VSN683MA40S		10,000	25.4 \times 40	0.25	3.53	ESMH350VSN103MQ40S	
82,000		35 \times 50	0.50	8.49	ESMH100VSN823MA50S		10,000	30 \times 30	0.25	3.46	ESMH350VSN103MR30S	
16		8,200	22 \times 25	0.40	2.51		ESMH160VSN822MP25S	10,000	35 \times 25	0.25	3.02	ESMH350VSN103MA25S
	10,000	22 \times 25	0.40	2.77	ESMH160VSN103MP25S		12,000	25.4 \times 45	0.25	3.98	ESMH350VSN123MQ45S	
	12,000	22 \times 30	0.40	2.86	ESMH160VSN123MP30S		12,000	30 \times 35	0.25	4.01	ESMH350VSN123MR35S	
	12,000	25.4 \times 25	0.40	2.95	ESMH160VSN123MQ25S		12,000	35 \times 30	0.25	4.42	ESMH350VSN123MA30S	
	15,000	22 \times 35	0.40	3.29	ESMH160VSN153MP35S		15,000	25.4 \times 50	0.25	4.54	ESMH350VSN153MQ50S	
	15,000	25.4 \times 30	0.40	3.46	ESMH160VSN153MQ30S		15,000	30 \times 40	0.25	4.52	ESMH350VSN153MR40S	
	15,000	30 \times 25	0.40	3.66	ESMH160VSN153MR25S		15,000	35 \times 35	0.25	5.01	ESMH350VSN153MA35S	
	18,000	22 \times 40	0.40	3.72	ESMH160VSN183MP40S		18,000	30 \times 45	0.25	4.71	ESMH350VSN183MR45S	
	18,000	25.4 \times 35	0.40	3.98	ESMH160VSN183MQ35S		18,000	35 \times 40	0.25	5.54	ESMH350VSN183MA40S	
	18,000	30 \times 25	0.40	4.00	ESMH160VSN183MR25S		22,000	30 \times 50	0.25	5.33	ESMH350VSN223MR50S	
	22,000	22 \times 50	0.40	4.37	ESMH160VSN223MP50S		22,000	35 \times 45	0.25	6.04	ESMH350VSN223MA45S	
	22,000	25.4 \times 40	0.40	4.26	ESMH160VSN223MQ40S		27,000	35 \times 50	0.25	6.89	ESMH350VSN273MA50S	
	22,000	30 \times 30	0.40	4.21	ESMH160VSN223MR30S		50	2,200	22 \times 25	0.20	1.91	ESMH500VSN222MP25S
	22,000	35 \times 25	0.40	4.15	ESMH160VSN223MA25S	3,300		22 \times 30	0.20	2.37	ESMH500VSN332MP30S	

SMH 系列

◆标准品一览表

WV (V _{dc})	Cap (μF)	尺寸 φD×L(mm)	tan δ	额定纹波电流 (A _{rms} /85℃,120Hz)	产品型号	WV (V _{dc})	Cap (μF)	尺寸 φD×L(mm)	tan δ	额定纹波电流 (A _{rms} /85℃,120Hz)	产品型号
50	3,300	25.4×25	0.20	2.38	ESMH500VSN332MQ25S	80	1,200	22×25	0.15	1.69	ESMH800VSN122MP25S
	3,900	22×35	0.20	2.65	ESMH500VSN392MP35S		1,500	22×25	0.15	1.88	ESMH800VSN152MP25S
	3,900	25.4×30	0.20	2.68	ESMH500VSN392MQ30S		1,800	22×30	0.15	2.14	ESMH800VSN182MP30S
	3,900	30×25	0.20	2.55	ESMH500VSN392MR25S		1,800	25.4×25	0.15	2.26	ESMH800VSN182MQ25S
	4,700	22×40	0.20	2.99	ESMH500VSN472MP40S		2,200	22×35	0.15	2.44	ESMH800VSN222MP35S
	4,700	25.4×35	0.20	3.03	ESMH500VSN472MQ35S		2,200	25.4×30	0.15	2.46	ESMH800VSN222MQ30S
	4,700	30×25	0.20	2.81	ESMH500VSN472MR25S		2,200	30×25	0.15	2.49	ESMH800VSN222MR25S
	5,600	22×45	0.20	3.36	ESMH500VSN562MP45S		2,700	22×40	0.15	2.78	ESMH800VSN272MP40S
	5,600	25.4×35	0.20	3.31	ESMH500VSN562MQ35S		2,700	25.4×35	0.15	2.81	ESMH800VSN272MQ35S
	5,600	30×30	0.20	3.37	ESMH500VSN562MR30S		2,700	30×25	0.15	2.75	ESMH800VSN272MR25S
	5,600	35×25	0.20	3.42	ESMH500VSN562MA25S		3,300	22×45	0.15	3.16	ESMH800VSN332MP45S
	6,800	22×50	0.20	3.81	ESMH500VSN682MP50S		3,300	25.4×40	0.15	3.21	ESMH800VSN332MQ40S
	6,800	25.4×40	0.20	3.81	ESMH500VSN682MQ40S		3,300	30×30	0.15	3.17	ESMH800VSN332MR30S
	6,800	30×35	0.20	3.85	ESMH500VSN682MR35S		3,300	35×25	0.15	3.21	ESMH800VSN332MA25S
	6,800	35×30	0.20	3.85	ESMH500VSN682MA30S		3,900	22×50	0.15	3.52	ESMH800VSN392MP50S
	8,200	25.4×50	0.20	4.37	ESMH500VSN822MQ50S		3,900	25.4×45	0.15	3.59	ESMH800VSN392MQ45S
	8,200	30×40	0.20	4.36	ESMH500VSN822MR40S		3,900	30×35	0.15	3.57	ESMH800VSN392MR35S
	8,200	35×30	0.20	4.41	ESMH500VSN822MA30S		3,900	35×25	0.15	3.50	ESMH800VSN392MA25S
10,000	30×45	0.20	4.97	ESMH500VSN103MR45S	4,700	25.4×50	0.15	4.05	ESMH800VSN472MQ50S		
10,000	35×35	0.20	4.92	ESMH500VSN103MA35S	4,700	30×40	0.15	4.05	ESMH800VSN472MR40S		
12,000	30×50	0.20	5.60	ESMH500VSN123MR50S	4,700	35×30	0.15	4.09	ESMH800VSN472MA30S		
12,000	35×40	0.20	5.58	ESMH500VSN123MA40S	5,600	30×45	0.15	4.55	ESMH800VSN562MR45S		
15,000	35×45	0.20	6.44	ESMH500VSN153MA45S	5,600	35×35	0.15	4.51	ESMH800VSN562MA35S		
18,000	35×50	0.20	6.71	ESMH500VSN183MA50S	6,800	30×50	0.15	5.16	ESMH800VSN682MR50S		
63	1,800	22×25	0.15	1.82	ESMH630VSN182MP25S	100	820	22×25	0.15	1.86	ESMH101VSN821MP25S
	2,200	22×30	0.15	2.31	ESMH630VSN222MP30S		1,200	22×30	0.15	2.19	ESMH101VSN122MP30S
	2,200	25.4×25	0.15	2.30	ESMH630VSN222MQ25S		1,200	25.4×25	0.15	2.10	ESMH101VSN122MQ25S
	2,700	22×35	0.15	2.40	ESMH630VSN272MP35S		1,500	22×35	0.15	2.41	ESMH101VSN152MP35S
	2,700	25.4×25	0.15	2.40	ESMH630VSN272MQ25S		1,500	25.4×30	0.15	2.43	ESMH101VSN152MQ30S
	3,300	22×35	0.15	2.62	ESMH630VSN332MP35S		1,500	30×25	0.15	2.46	ESMH101VSN152MR25S
	3,300	25.4×30	0.15	2.64	ESMH630VSN332MQ30S		1,800	22×40	0.15	2.71	ESMH101VSN182MP40S
	3,300	30×25	0.15	2.78	ESMH630VSN332MR25S		1,800	25.4×35	0.15	2.75	ESMH101VSN182MQ35S
	3,900	22×40	0.15	2.93	ESMH630VSN392MP40S		1,800	30×25	0.15	2.72	ESMH101VSN182MR25S
	3,900	25.4×35	0.15	2.97	ESMH630VSN392MQ35S		2,200	22×45	0.15	3.08	ESMH101VSN222MP45S
	3,900	30×30	0.15	3.00	ESMH630VSN392MR30S		2,200	25.4×40	0.15	3.13	ESMH101VSN222MQ40S
	3,900	35×25	0.15	3.00	ESMH630VSN392MA25S		2,200	30×30	0.15	3.09	ESMH101VSN222MR30S
	4,700	22×50	0.15	3.39	ESMH630VSN472MP50S		2,200	35×25	0.15	3.14	ESMH101VSN222MA25S
	4,700	25.4×40	0.15	3.36	ESMH630VSN472MQ40S		2,700	22×50	0.15	3.53	ESMH101VSN272MP50S
	4,700	30×30	0.15	3.32	ESMH630VSN472MR30S		2,700	25.4×45	0.15	3.57	ESMH101VSN272MQ45S
	4,700	35×25	0.15	3.36	ESMH630VSN472MA25S		2,700	30×35	0.15	3.55	ESMH101VSN272MR35S
	5,600	25.4×45	0.15	3.77	ESMH630VSN562MQ45S		2,700	35×30	0.15	3.71	ESMH101VSN272MA30S
	5,600	30×35	0.15	3.75	ESMH630VSN562MR35S		3,300	25.4×50	0.15	4.06	ESMH101VSN332MQ50S
	5,600	35×30	0.15	3.76	ESMH630VSN562MA30S		3,300	30×40	0.15	4.05	ESMH101VSN332MR40S
	6,800	25.4×50	0.15	4.27	ESMH630VSN682MQ50S		3,300	35×30	0.15	4.05	ESMH101VSN332MA30S
	6,800	30×40	0.15	4.27	ESMH630VSN682MR40S		3,900	30×45	0.15	4.54	ESMH101VSN392MR45S
	6,800	35×30	0.15	4.15	ESMH630VSN682MA30S		3,900	35×35	0.15	4.49	ESMH101VSN392MA35S
	8,200	30×45	0.15	4.83	ESMH630VSN822MR45S		4,700	30×50	0.15	5.13	ESMH101VSN472MR50S
	8,200	35×35	0.15	4.79	ESMH630VSN822MA35S		4,700	35×40	0.15	5.11	ESMH101VSN472MA40S
10,000	30×50	0.15	5.49	ESMH630VSN103MR50S	5,600	35×45	0.15	5.75	ESMH101VSN562MA45S		
10,000	35×40	0.15	5.47	ESMH630VSN103MA40S	6,800	35×50	0.15	6.50	ESMH101VSN682MA50S		
12,000	35×45	0.15	6.19	ESMH630VSN123MA45S							

※160V_{dc} 以上的使用 SMQ 系列。

◆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的值。

●频率修正系数

频率 (Hz)	50	120	300	1k	10k	50k
6.3~50V _{dc}	0.95	1.00	1.03	1.05	1.08	1.08
63~100V _{dc}	0.92	1.00	1.07	1.13	1.19	1.20

※ 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。