

# SAS

基板自立型: 85℃ 2,000小时时间品  
Snap-in Terminal Type Load Life:85℃ 2,000 hours

规格表 SPECIFICATIONS

项目 Item	性能 Performance				
工作温度范围 Category Temperature Range	-40 ~ 85℃(50 ~ 100V) -25 ~ 85℃(160 ~ 450V)				
额定电压范围 Rated Voltage Range	50 ~ 450V.DC				
静电容量允许偏差 Electrostatic Capacitance Tolerance	± 20% ( 20℃, 120Hz)				
漏电流 Leakage Current	$I \leq 3\sqrt{CV}$ (5分钟值) ( 5minutes )				
	I=漏电流 Leakage Current (μA) V=额定电压 Rated Voltage (V)	C=静电容量 Electrostatic Capacitance(μF)			
损耗角正切值 Dissipation Factor	20℃ 120Hz				
	额定电压 Rated Voltage	50~100	160~400	450	
	tan δ (Max)	0.20	0.15	0.20	
温度特性 / 阻抗比 Temperature Stability / Impedance Ratio	120Hz				
	额定电压 Rated Voltage	50~63	80~100	160~400	450
	Z-25℃/Z+20℃	2	2	4	8
	Z-40℃/Z+20℃	6	5	-	-
耐久性 Endurance	在85℃的环境中, 在不超过额定电压的范围内重叠印加规定的额定纹波电流2,000小时后应符合下列要求。 After 2,000 hour life test at 85℃ with rated voltage and ripple current,the capacitors shall meet the following requirements .				
	静电容量变化率 Electrostatic Capacitance Change	初始值的 ± 20% ± 20% of the initial value			
	损耗角正切值 Dissipation Factor	初始值的200% 200% of the initial value			
	漏电流 Leakage Current	初始规格值 The initial specification value			
高温无负荷特性 Shelf Life	经过1,000个小时的保质寿命试验85℃,然后在20℃保存。经过预处理后 ( JIS C 5102规范4.4), 电容器应符合下列要求。 After 1,000 hour shelf life test at 85℃,then stored at 20℃.And after pre-treatment (JIS C 5102 4.4),the capacitors shall meet the following requirements.				
	静电容量变化率 Electrostatic Capacitance Change	初始值的 ± 20% ± 20% of the initial value			
	修正系数 Correction Coefficient	初始值 ± 10% Initial value ± 10%	初始值 ± 15% Initial value ± 15%	初始值 ± 20% Initial value ± 20%	初始值 ± 30% Initial value ± 30%
		0.7	0.85	1	2.47
	损耗角正切值 Dissipation Factor	初始值的200% 200% of the initial value			
漏电流 Leakage Current	初始规格值 The Initial specification value				

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基板自立型: 85°C 2,000小时时间品  
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## ■ 纹波电流修正系数 / CORRECTION COEFFICIENT FOR RIPPLE CURRENT

1. 频率系数 Frequency Coefficient

频率 Frequency	60 (50)	120	500	1K	≧10K
系数 Coefficient	0.80	1.00	1.20	1.30	1.50

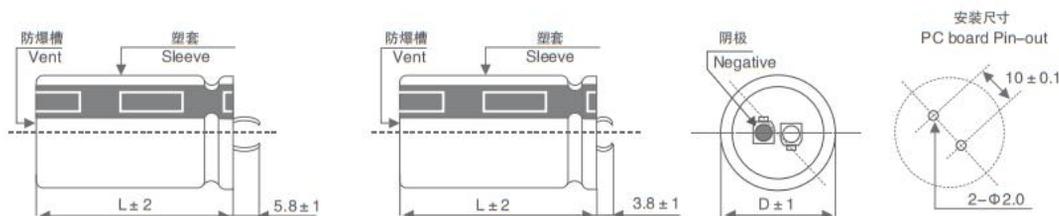
2. 周围温度系数 Temperature Coefficient

周围温度 (°C) Ambient Temperature	85	65	45
系数 Coefficient	1.0	1.3	1.7

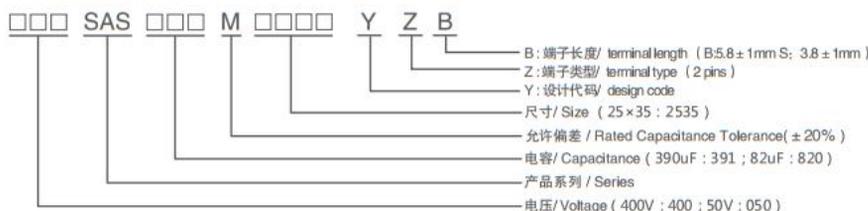
## ■ 尺寸图 / DIMENSIONS

标准端子 / Standard terminal type

短端子 / Short terminal type



## ■ 产品代码规则 / PRODUCT CODE SYSTEM



## ■ 产品型号体系 / PRODUCT MODE

电压代码 Voltage Code	系列代码 Series Code	容量代码 Capacitance Code	允许偏差代码 Allowable Tolerance Code	尺寸代码 Size Code	设计代码 Design code	端子 Terminal
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# SAS

## 标准品一览表、额定纹波电流

### TYPICAL DIMENSIONS、RATED RIPPLE CURRENT

V.DC	Cpa (uF)	外壳尺寸 Case Size φD±1×L± 2mm	纹波电流 arms/85°C Ripple current Arms/85°C, 120Hz	产品型号 Part No	V.DC	Cpa (uF)	外壳尺寸 Case Size φD±1×L± 2mm	纹波电流 arms/85°C Ripple current Arms/85°C, 120Hz	产品型号 Part No
50	2,700	22 × 25	1.56	050SAS272M2225YZB	63	1,800	22 × 25	1.45	063SAS182M2225YZB
	3,300	22 × 30	1.89	050SAS332M2230YZB		2,200	22 × 30	1.82	063SAS222M2230YZB
	3,300	25 × 25	1.89	050SAS332M2525YZB		2,200	25 × 25	1.82	063SAS222M2525YZB
	3,900	22 × 35	2.10	050SAS392M2235YZB		2,700	22 × 35	1.91	063SAS272M2235YZB
	3,900	25 × 30	2.12	050SAS392M2530YZB		2,700	25 × 25	1.90	063SAS272M2525YZB
	3,900	30 × 25	2.04	050SAS392M3025YZB		3,300	22 × 40	2.09	063SAS332M2240YZB
	4,700	22 × 40	2.38	050SAS472M2240YZB		3,300	25 × 30	2.10	063SAS332M2530YZB
	4,700	25 × 35	2.41	050SAS472M2535YZB		3,300	30 × 25	2.20	063SAS332M3025YZB
	4,700	30 × 25	2.23	050SAS472M3025YZB		3,900	22 × 45	2.33	063SAS392M2245YZB
	5,600	22 × 45	2.66	050SAS562M2245YZB		3,900	25 × 35	2.36	063SAS392M2535YZB
	5,600	25 × 40	2.65	050SAS562M2540YZB		3,900	30 × 30	2.38	063SAS392M3030YZB
	5,600	30 × 30	2.68	050SAS562M3030YZB		3,900	35 × 25	2.38	063SAS392M3525YZB
	5,600	35 × 25	2.73	050SAS562M3525YZB		4,700	22 × 50	2.70	063SAS472M2250YZB
	6,800	22 × 50	3.05	050SAS682M2250YZB		4,700	25 × 40	2.66	063SAS472M2540YZB
	6,800	25 × 45	3.05	050SAS682M2545YZB		4,700	30 × 30	2.63	063SAS472M3030YZB
	6,800	30 × 35	3.08	050SAS682M3035YZB		4,700	35 × 25	2.66	063SAS472M3525YZB
	6,800	35 × 30	3.06	050SAS682M3530YZB		5,600	25 × 45	3.00	063SAS562M2545YZB
	8,200	25 × 50	3.48	050SAS822M2550YZB		5,600	30 × 35	2.97	063SAS562M3035YZB
	8,200	30 × 40	3.49	050SAS822M3040YZB		5,600	35 × 30	2.99	063SAS562M3530YZB
	8,200	35 × 30	3.50	050SAS822M3530YZB		6,800	25 × 50	3.40	063SAS682M2550YZB
10,000	30 × 45	3.97	050SAS103M3045YZB	6,800	30 × 40	3.40	063SAS682M3040YZB		
10,000	35 × 35	3.93	050SAS103M3535YZB	6,800	35 × 35	3.30	063SAS682M3535YZB		
12,000	30 × 50	4.44	050SAS123M3050YZB	8,200	30 × 45	3.86	063SAS822M3045YZB		
12,000	35 × 40	4.44	050SAS123M3540YZB	8,200	35 × 40	3.82	063SAS822M3540YZB		
15,000	35 × 45	5.13	050SAS153M3545YZB	10,000	30 × 50	4.37	063SAS103M3050YZB		
18,000	35 × 50	5.33	050SAS183M3550YZB	10,000	35 × 45	4.36	063SAS103M3545YZB		
					12,000	35 × 50	4.92	063SAS123M3550YZB	

# SAS

## 标准品一览表、额定纹波电流

### TYPICAL DIMENSIONS、RATED RIPPLE CURRENT

V.DC	Cpa (uF)	外壳尺寸 Case Size φD±1×L± 2mm	纹波电流 arms/85℃ Ripple current Arms/85℃, 120Hz	产品型号 Part No	V.DC	Cpa (uF)	外壳尺寸 Case Size φD±1×L± 2mm	纹波电流 arms/85℃ Ripple current Arms/85℃, 120Hz	产品型号 Part No
80	1,200	22×25	1.32	080SAS122M2225YZB	100	1,000	22×25	1.49	100SAS102M2225YZB
	1,500	22×25	1.48	080SAS152M2225YZB		1,200	22×30	1.64	100SAS122M2230YZB
	1,800	22×30	1.69	080SAS182M2230YZB		1,200	25×25	1.66	100SAS122M2525YZB
	1,800	25×25	1.79	080SAS182M2525YZB		1,500	22×35	1.90	100SAS152M2235YZB
	2,200	22×35	1.93	080SAS222M2235YZB		1,500	25×30	1.93	100SAS152M2530YZB
	2,200	25×30	1.95	080SAS222M2530YZB		1,500	30×25	1.95	100SAS152M3025YZB
	2,200	30×25	1.96	080SAS222M3025YZB		1,800	22×40	2.15	100SAS182M2240YZB
	2,700	22×40	2.20	080SAS272M2240YZB		1,800	25×35	2.17	100SAS182M2535YZB
	2,700	25×35	2.22	080SAS272M2535YZB		1,800	30×25	2.15	100SAS182M3025YZB
	2,700	30×25	2.17	080SAS272M3025YZB		2,200	22×45	2.44	100SAS222M2245YZB
	3,300	22×45	2.51	080SAS332M2245YZB		2,200	25×40	2.49	100SAS222M2540YZB
	3,300	25×40	2.54	080SAS332M2540YZB		2,200	30×30	2.44	100SAS222M3030YZB
	3,300	30×30	2.52	080SAS332M3030YZB		2,200	35×25	2.49	100SAS222M3525YZB
	3,300	35×25	2.52	080SAS332M3525YZB		2,700	22×50	2.81	100SAS272M2250YZB
	3,900	22×50	2.82	080SAS392M2250YZB		2,700	25×45	2.84	100SAS272M2545YZB
	3,900	25×45	2.86	080SAS392M2545YZB		2,700	30×35	2.82	100SAS272M3035YZB
	3,900	30×35	2.84	080SAS392M3035YZB		2,700	35×30	2.94	100SAS272M3530YZB
	3,900	35×25	2.77	080SAS392M3525YZB		3,300	25×50	3.24	100SAS332M2550YZB
	4,700	25×50	3.23	080SAS472M2550YZB		3,300	30×40	3.21	100SAS332M3040YZB
	4,700	30×40	3.22	080SAS472M3040YZB		3,300	35×30	3.22	100SAS332M3530YZB
4,700	35×30	3.24	080SAS472M3530YZB	3,900	30×45	3.62	100SAS392M3045YZB		
5,600	30×45	3.62	080SAS562M3045YZB	3,900	35×35	3.56	100SAS392M3535YZB		
5,600	35×35	3.56	080SAS562M3535YZB	4,700	30×50	4.07	100SAS472M3050YZB		
6,800	30×50	4.10	080SAS682M3050YZB	4,700	35×40	4.06	100SAS472M3540YZB		
6,800	35×40	4.10	080SAS682M3540YZB	5,600	35×45	4.57	100SAS562M3545YZB		
8,200	35×45	4.65	080SAS822M3545YZB	6,800	35×50	5.16	100SAS682M3550YZB		
10,000	35×50	5.29	080SAS103M3550YZB						

# SAS

## 标准品一览表、额定纹波电流

### TYPICAL DIMENSIONS, RATED RIPPLE CURRENT

V.DC	Cpa ( $\mu$ F)	外壳尺寸 Case Size $\phi D \pm 1 \times L \pm 2$ mm	纹波电流 arms/85°C Ripple current Arms/85°C, 120Hz	产品型号 Part No	V.DC	Cpa ( $\mu$ F)	外壳尺寸 Case Size $\phi D \pm 1 \times L \pm 2$ mm	纹波电流 arms/85°C Ripple current Arms/85°C, 120Hz	产品型号 Part No
160	390	22 × 25	1.19	160SAS391M2225YZB	180	270	22 × 25	1.00	180SAS271M2225YZB
	470	22 × 30	1.37	160SAS471M2230YZB		330	22 × 25	1.10	180SAS331M2225YZB
	470	25 × 25	1.37	160SAS471M2525YZB		390	22 × 30	1.24	180SAS391M2230YZB
	560	22 × 35	1.56	160SAS561M2235YZB		390	25 × 25	1.24	180SAS391M2525YZB
	560	25 × 25	1.56	160SAS561M2525YZB		470	22 × 35	1.42	180SAS471M2235YZB
	680	22 × 40	1.78	160SAS681M2240YZB		470	25 × 25	1.42	180SAS471M2525YZB
	680	25 × 30	1.72	160SAS681M2530YZB		560	22 × 40	1.58	180SAS561M2240YZB
	680	30 × 25	1.72	160SAS681M3025YZB		560	25 × 30	1.56	180SAS561M2530YZB
	820	22 × 45	1.98	160SAS821M2245YZB		560	30 × 25	1.58	180SAS561M3025YZB
	820	25 × 35	1.95	160SAS821M2535YZB		680	22 × 45	1.80	180SAS681M2245YZB
	820	30 × 30	1.95	160SAS821M3030YZB		680	25 × 35	1.78	180SAS681M2535YZB
	820	35 × 25	1.98	160SAS821M3525YZB		680	30 × 25	1.78	180SAS681M3025YZB
	1,000	22 × 50	2.25	160SAS103M2250YZB		820	22 × 50	2.04	180SAS821M2250YZB
	1,000	25 × 40	2.22	160SAS102M2540YZB		820	25 × 40	2.01	180SAS821M2540YZB
	1,000	30 × 35	2.21	160SAS102M3035YZB		820	30 × 30	2.12	180SAS821M3030YZB
	1,000	35 × 25	2.22	160SAS102M3525YZB		820	35 × 25	2.01	180SAS821M3525YZB
	1,200	25 × 45	2.50	160SAS221M2545YZB		1,000	25 × 45	2.28	180SAS102M2545YZB
	1,200	30 × 40	2.50	160SAS122M3040YZB		1,000	30 × 35	2.28	180SAS102M3035YZB
	1,200	35 × 30	2.60	160SAS122M3530YZB		1,000	35 × 30	2.36	180SAS102M3530YZB
	1,500	25 × 50	2.94	160SAS151M2550YZB		1,200	25 × 50	2.62	180SAS122M2550YZB
1,500	30 × 45	2.97	160SAS152M3045YZB	1,200	30 × 40	2.57	180SAS122M3040YZB		
1,500	35 × 35	2.93	160SAS152M3535YZB	1,200	35 × 35	2.62	180SAS122M3535YZB		
1,800	30 × 50	3.33	160SAS182M3050YZB	1,500	30 × 50	3.05	180SAS152M3050YZB		
1,800	35 × 40	3.31	160SAS182M3540YZB	1,500	35 × 40	3.03	180SAS152M3540YZB		
2,200	35 × 45	3.80	160SAS222M3545YZB	1,800	35 × 45	3.45	180SAS182M3545YZB		
2,700	35 × 50	4.33	160SAS272M3550YZB	2,200	35 × 50	3.90	180SAS222M3550YZB		

# SAS

## 标准品一览表、额定纹波电流

### TYPICAL DIMENSIONS, RATED RIPPLE CURRENT

V.DC	Cpa (uF)	外壳尺寸 Case Size φD±1×L± 2mm	纹波电流 arms/85°C Ripple current Arms/85°C, 120Hz	产品型号 Part No	V.DC	Cpa (uF)	外壳尺寸 Case Size φD±1×L± 2mm	纹波电流 arms/85°C Ripple current Arms/85°C, 120Hz	产品型号 Part No
200	270	22×25	1.00	200SAS271M2225YZB	250	180	22×25	0.81	250SAS181M2225YZB
	330	22×30	1.15	200SAS331M2230YZB		220	22×25	0.90	250SAS221M2225YZB
	330	25×25	1.15	200SAS331M2525YZB		270	22×30	1.02	250SAS271M2230YZB
	390	22×35	1.24	200SAS391M2235YZB		270	25×25	1.02	250SAS271M2525YZB
	390	25×25	1.24	200SAS391M2525YZB		330	22×35	1.16	250SAS331M2235YZB
	470	22×40	1.41	200SAS471M2240YZB		330	25×30	1.18	250SAS331M2530YZB
	470	25×30	1.42	200SAS471M2530YZB		330	30×25	1.19	250SAS331M3025YZB
	470	30×25	1.42	200SAS471M3025YZB		390	22×40	1.33	250SAS391M2240YZB
	560	22×45	1.56	200SAS561M2245YZB		390	25×35	1.32	250SAS391M2535YZB
	560	25×35	1.61	200SAS561M2535YZB		390	30×25	1.32	250SAS391M3025YZB
	560	30×25	1.57	200SAS561M3025YZB		470	22×45	1.48	250SAS471M2245YZB
	680	22×50	1.85	200SAS681M2250YZB		470	25×40	1.47	250SAS471M2540YZB
	680	25×40	1.82	200SAS681M2540YZB		470	30×30	1.48	250SAS471M3030YZB
	680	30×30	1.80	200SAS681M3030YZB		470	35×25	1.48	250SAS471M3525YZB
	680	35×25	1.82	200SAS681M3525YZB		560	22×50	1.64	250SAS561M2250YZB
	820	25×45	2.06	200SAS821M2545YZB		560	25×45	1.64	250SAS561M2545YZB
	820	30×35	2.04	200SAS821M3035YZB		560	30×35	1.69	250SAS561M3035YZB
	820	35×25	2.05	200SAS821M3525YZB		560	35×25	1.63	250SAS561M3525YZB
	1,000	25×50	2.33	200SAS102M2550YZB		680	25×50	1.93	250SAS681M2550YZB
	1,000	30×40	2.33	200SAS102M3040YZB		680	30×40	1.93	250SAS681M3040YZB
1,000	35×30	2.33	200SAS102M3530YZB	680	35×30	1.93	250SAS681M3530YZB		
1,200	30×45	2.62	200SAS122M3045YZB	820	30×45	2.18	250SAS821M3045YZB		
1,200	35×35	2.62	200SAS122M3535YZB	820	35×35	2.18	250SAS821M3535YZB		
1,500	30×50	3.02	200SAS152M3050YZB	1,000	30×50	2.62	250SAS102M3050YZB		
1,500	35×40	3.02	200SAS152M3540YZB	1,000	35×40	2.63	250SAS102M3540YZB		
1,800	35×45	3.43	200SAS182M3545YZB	1,200	35×45	2.81	250SAS122M3545YZB		
2,200	35×50	3.90	200SAS222M3550YZB	1,500	35×50	3.21	250SAS152M3550YZB		

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## 标准品一览表、额定纹波电流 TYPICAL DIMENSIONS、RATED RIPPLE CURRENT

V.DC	Cpa (uF)	外壳尺寸 Case Size φD±1×L± 2mm	纹波电流 arms/85°C Ripple current Arms/85°C, 120Hz	产品型号 Part No	V.DC	Cpa (uF)	外壳尺寸 Case Size φD±1×L± 2mm	纹波电流 arms/85°C Ripple current Arms/85°C, 120Hz	产品型号 Part No
350	100	22×25	0.66	350SAS101M2225YZB	400	82	22×25	0.58	400SAS820M2225YZB
	120	22×30	0.76	350SAS121M2230YZB		100	22×30	0.65	400SAS101M2230YZB
	120	25×25	0.76	350SAS121M2525YZB		100	25×25	0.65	400SAS101M2525YZB
	150	22×35	0.89	350SAS151M2235YZB		120	22×35	0.74	400SAS121M2235YZB
	150	25×25	0.83	350SAS151M2525YZB		120	25×25	0.73	400SAS121M2525YZB
	180	22×40	1.00	350SAS181M2240YZB		150	22×40	0.83	400SAS151M2240YZB
	180	25×30	0.97	350SAS181M2530YZB		150	25×30	0.82	400SAS151M2530YZB
	180	30×25	0.98	350SAS181M3025YZB		150	30×25	0.83	400SAS151M3025YZB
	220	22×45	1.13	350SAS221M2245YZB		180	22×45	0.94	400SAS181M2245YZB
	220	25×35	1.11	350SAS221M2535YZB		180	25×35	0.94	400SAS181M2535YZB
	220	30×30	1.13	350SAS221M3030YZB		180	30×30	1.02	400SAS181M3030YZB
	220	35×25	1.13	350SAS221M3525YZB		180	35×25	0.95	400SAS181M3525YZB
	270	22×50	1.29	350SAS271M2250YZB		220	22×45	1.08	400SAS221M2245YZB
	270	25×40	1.26	350SAS271M2540YZB		220	25×40	1.06	400SAS221M2540YZB
	270	30×35	1.30	350SAS271M3035YZB		220	30×30	1.06	400SAS221M3030YZB
	270	35×25	1.27	350SAS271M3525YZB		220	35×25	1.06	400SAS221M3525YZB
	330	25×50	1.46	350SAS331M2550YZB		270	22×50	1.21	400SAS271M2250YZB
	330	30×40	1.43	350SAS331M3040YZB		270	25×45	1.23	400SAS271M2545YZB
	330	35×30	1.46	350SAS331M3530YZB		270	30×35	1.22	400SAS271M3035YZB
	390	30×45	1.62	350SAS391M3045YZB		270	35×30	1.25	400SAS271M3530YZB
	390	35×30	1.59	350SAS391M3530YZB		330	25×50	1.38	400SAS331M2550YZB
	470	30×50	1.88	350SAS471M3050YZB		330	30×40	1.40	400SAS331M3040YZB
	470	35×35	1.82	350SAS471M3535YZB		330	35×30	1.38	400SAS331M3530YZB
	560	35×40	2.04	350SAS561M3540YZB		390	30×45	1.61	400SAS391M3045YZB
	680	35×45	2.33	350SAS681M3545YZB		390	35×35	1.58	400SAS391M3535YZB
	820	35×50	2.39	350SAS821M3550YZB		470	30×50	1.82	400SAS471M3050YZB
				470	35×40	1.82	400SAS471M3540YZB		
				560	35×45	2.05	400SAS561M3545YZB		
				680	35×50	2.30	400SAS681M3550YZB		
				820	35×60	2.70	400SAS821M3560YZB		
				1000	35×70	3.00	400SAS102M3570YZB		

# SAS

## 标准品一览表、额定纹波电流

### TYPICAL DIMENSIONS、RATED RIPPLE CURRENT

V.DC	Cpa (uF)	外壳尺寸 Case Size φD±1×L± 2mm	纹波电流 Arms85℃ Ripple current Arms/85℃, 120Hz	产品型号 Part No
450	56	22 × 25	0.49	450SAS560M2225YZB
	68	22 × 25	0.54	450SAS680M2225YZB
	82	22 × 30	0.62	450SAS820M2230YZB
	82	25 × 25	0.62	450SAS820M2525YZB
	100	22 × 35	0.70	450SAS101M2235YZB
	100	25 × 25	0.69	450SAS101M2525YZB
	120	22 × 40	0.78	450SAS121M2240YZB
	120	25 × 30	0.77	450SAS121M2530YZB
	120	30 × 25	0.78	450SAS121M3025YZB
	150	22 × 45	0.84	450SAS151M2245YZB
	150	25 × 35	0.85	450SAS151M2535YZB
	150	30 × 30	0.85	450SAS151M3030YZB
	150	35 × 25	0.86	450SAS151M3525YZB
	180	22 × 50	1.00	450SAS181M2250YZB
	180	25 × 40	0.99	450SAS181M2540YZB
	180	30 × 35	0.99	450SAS181M3035YZB
	180	35 × 25	0.98	450SAS181M3525YZB
	220	25 × 50	1.18	450SAS221M2550YZB
	220	30 × 40	1.18	450SAS221M3040YZB
	220	35 × 30	1.16	450SAS221M3530YZB
	270	30 × 45	1.34	450SAS271M3045YZB
	270	35 × 35	1.33	450SAS271M3535YZB
	330	30 × 50	1.50	450SAS331M3050YZB
	330	35 × 40	1.50	450SAS331M3540YZB
	390	35 × 45	1.69	450SAS391M3545YZB
	470	35 × 50	1.94	450SAS471M3550YZB
560	35 × 50	2.12	450SAS561M3550YZB	
680	35 × 60	2.33	450SAS681M3560YZB	

## ●重要说明 Important note

- ◆KAOUNE并不了解每一个客户对产品的应用，也不比客户更了解他们对产品的应用。因此，客户负有最终的责任，根据其整机电路参数选择适合其的KAOUNE产品，并根据KAOUNE产品参数判定其是否适用。
- ◆我们也毫不避讳地指出，即使在正常的应用条件下无源电子元器件仍有可能在使用寿命结束前出现故障或失效。这在目前的技术水平下是无法完全排除的。因此，对于操作安全水平要求非常高的应用场合，特别是当无源电子元器件出现故障时可能会危及人身安全或健康的情况下，客户必须适当设计其应用装置或由客户采取措施（如安全保护性电路或冗余），确保在无源电子元件出现故障时，第三方不会受到伤害或损害。
- ◆我们的工程师持续不断地致力于改善产品。因此，本出版物所述产品可能会发生变化。所以，订货之前或订货的时候请咨询我们的销售工程师本出版物的产品说明和规格在多大程度上是适用的。我们保留产品尺寸及技术参数发生变更的权利。因此，我们不保证任何时候均可购买到本出版物所列全部产品。
- ◆由于客户的应用领域、安装尺寸、回路参数要求千差万别，对于同一电压同一容值的电容器亦是如此。因此，建议在订货前尽可能详尽地提供您所要求的信息，包括但不限于电压、容值、外形尺寸、安装尺寸及本出版物中《订货信息一览表》中所列明的项目。
- ◆KAOUNE do not understand each client on the application of the product, nor more than customers about their products. Customers have the ultimate responsibility to select suitable KAOUNE products for their whole circuit parameters, and under KAOUNE products parameters determine its applicability.
- ◆We also forthrightly pointed out that even in normal conditions of passive electronic components, it is still will failure or breakdown before the end of its useful life. And it cannot be completely excluded in the current level of technology. Therefore, requires a high level of operational safety applications, especially when passive electronic components failure could endanger the personal safety or health of the case, The customer must be properly designed appliance or measures taken by the customer (such as security protective circuitry or redundancy), to ensure when the failure in the passive electronic components, the third party will not harm or damage.
- ◆KAOUNE engineers constantly committed to improve the product. Therefore, the publication of the product may change. Therefore, please consult our sales engineer before order. We reserve the right to change the product dimensions and technical parameters. Therefore, we cannot guarantee that at any time can be purchased to the publications listed all products.
- ◆Due to the customer's applications, installation size, circuit parameters requirements vary widely, as well as the same capacitor values for the same voltage. Therefore, we suggest that provide requested information as much details as possible before order, including but not limited to voltage, capacitance, dimensions, installation size and the other parameters items of order information.

## ● 敬告和警告 Warning



- ◆ 电容器经过耐压测试后或退出运行后，其上存储的能量足以对人身造成伤害。因此，在接触电容器出线端子之前必须首先经过电阻放电、再短接引出端子，确保残存电荷泄放掉。
- ◆ 金属化薄膜介质电容器不应过多直接短路放电。短路放电试验属于型式试验项目，做过型式试验的产品不宜再正常使用。
- ◆ 进行耐压测试会对其绝缘造成损害，且该损害具备累积效应。
- ◆ 电容器与电路的连接应可靠，避免接触不良引起高频振荡造成电容器过压或过热。
- ◆ 避免电容器暴露于强酸、强碱及其他腐蚀性介质的环境中运行。
- ◆ 避免电容器在充满易燃易爆的气体或尘埃的环境中运行。
- ◆ 避免外部能量传导到电容器内部，如火、热、雷电。
- ◆ 避免电容器过温运行。
- ◆ 避免电容器异常过载。
- ◆ 避免核辐射。
  
- ◆ After resistant voltage test or out of operation, the capacitor stored energy is sufficient to cause the damage to the human. Therefore, in contact with the capacitor outlet terminals must discharge through the resistor first, and then short-circuited lead terminal, ensure that the residual charge of release.
- ◆ Metalized film dielectric capacitors should not over discharge to the short circuit. Short circuit discharge test are type of pilot projects, the test products are not appropriate to normal use.
- ◆ Excessive resistant voltage capacitor test will damage the insulation, and the damage has a cumulative effect.
- ◆ The capacitor circuit connection should be reliable, to avoid capacitor overvoltage or overheating by high-frequency oscillation because of poor contact.
- ◆ Avoid capacitor is exposed to strong acid, alkali and other corrosive medium environment operate.
- ◆ Avoid the capacitor filled with flammable and explosive gas or dust environment operate.
- ◆ Avoid external energy transmitted to the capacitor internal, such as fire, heat, electricity.
- ◆ Avoid capacitor operate over-temperature.
- ◆ Avoid capacitor abnormal overload.
- ◆ Avoid nuclear radiation.