

SAT

基板自立型: 85℃ 3,000小时时间品
Snap-in Terminal Type Load Life:85℃ 3,000 hours

规格表 SPECIFICATIONS

项目 Item	性能 Performance							
工作温度范围 Category Temperature Range	-25 ~ 85℃							
额定电压范围 Rated Voltage Range	160 ~ 450V.DC							
静电容量允许偏差 Electrostatic Capacitance Tolerance	± 20% (20℃, 120Hz)							
漏电流 Leakage Current	I ≤ 3√CV (5分钟值) (5minutes)							
	I=漏电流 V=额定电压	Leakage Current (μA)	C=静电容量		Electrostatic Capacitance(μF)			
损耗角正切值 Dissipation Factor	20℃ 120Hz							
	额定电压 Rated Voltage	160	200	250	350	400	450	
	tan δ (Max)	0.15					0.20	
温度特性 / 阻抗比 Temperature Stability / Impedance Ratio	120Hz							
	额定电压 Rated Voltage	160	200	250	350	400	450	
	Z-25℃/Z+20℃	4			8			
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3,000小时后应符合下列要求。 After 3,000 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%	初始值 ± 15%	初始值 ± 20%	初始值 ± 30%			
		Initial value ± 10%	Initial value ± 15%	Initial value ± 20%	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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■ 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
160~250V.DC	0.80	1.00	1.20	1.30	1.45
350~450V.DC	0.77	1.00	1.16	1.30	1.41

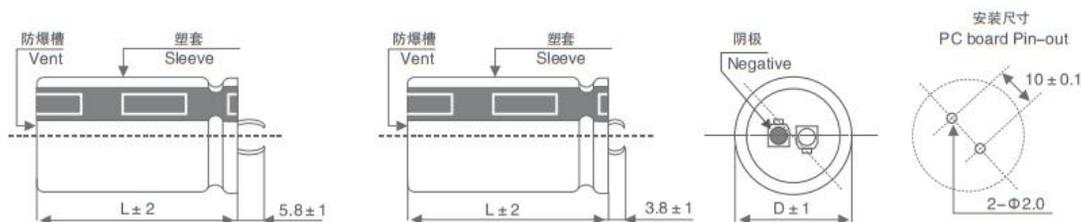
2. 周围温度系数 Temperature Coefficient

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

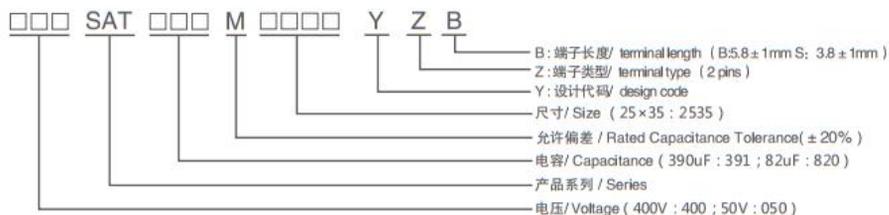
■ 尺寸图 / DIMENSIONS

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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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
160	330	22 × 25	1.20	160SAT331M2225YZB	200	270	22 × 25	1.00	200SAT271M2225YZB
	390	22 × 25	1.30	160SAT391M2225YZB		330	22 × 30	1.20	200SAT331M2230YZB
	390	25 × 25	1.26	160SAT391M2525YZB		330	25 × 25	1.25	200SAT331M2525YZB
	470	22 × 30	1.55	160SAT471M2230YZB		390	22 × 30	1.35	200SAT391M2230YZB
	470	25 × 25	1.55	160SAT471M2525YZB		390	25 × 25	1.35	200SAT391M2525YZB
	560	22 × 35	1.67	160SAT561M2235YZB		470	22 × 35	1.50	200SAT471M2235YZB
	560	25 × 30	1.67	160SAT561M2530YZB		470	25 × 30	1.50	200SAT471M2530YZB
	560	30 × 25	1.67	160SAT561M3025YZB		470	30 × 25	1.50	200SAT471M3025YZB
	680	22 × 40	1.82	160SAT681M2240YZB		560	22 × 40	1.67	200SAT561M2240YZB
	680	25 × 30	1.82	160SAT681M2530YZB		560	25 × 30	1.67	200SAT561M2530YZB
	680	30 × 25	1.82	160SAT681M3025YZB		560	30 × 25	1.67	200SAT561M3025YZB
	820	22 × 45	2.04	160SAT821M2245YZB		680	22 × 45	1.78	200SAT681M2245YZB
	820	25 × 35	2.04	160SAT821M2535YZB		680	25 × 35	1.78	200SAT681M2535YZB
	820	30 × 30	2.04	160SAT821M3030YZB		680	30 × 30	1.78	200SAT681M3030YZB
	820	35 × 25	2.04	160SAT821M3525YZB		680	35 × 25	1.78	200SAT681M3525YZB
	1,000	22 × 50	2.25	160SAT102M2250YZB		820	25 × 45	2.04	200SAT821M2545YZB
	1,000	25 × 40	2.25	160SAT102M2540YZB		820	30 × 30	2.04	200SAT821M3030YZB
	1,000	30 × 30	2.25	160SAT102M3030YZB		820	35 × 25	2.04	200SAT821M3525YZB
	1,000	35 × 25	2.25	160SAT102M3525YZB		1,000	25 × 50	2.30	200SAT102M2550YZB
	1,200	25 × 45	2.49	160SAT122M2545YZB		1,000	30 × 35	2.30	200SAT102M3035YZB
1,200	30 × 35	2.49	160SAT122M3035YZB	1,000	35 × 30	2.30	200SAT102M3530YZB		
1,200	35 × 30	2.49	160SAT122M3530YZB	1,200	30 × 40	2.65	200SAT122M3040YZB		
1,500	30 × 40	2.84	160SAT152M3040YZB	1,200	35 × 35	2.65	200SAT122M3535YZB		
1,500	35 × 30	2.84	160SAT152M3530YZB	1,500	30 × 50	3.08	200SAT152M3050YZB		
1,800	30 × 45	3.32	160SAT182M3045YZB	1,500	35 × 40	3.08	200SAT152M3540YZB		
1,800	35 × 35	3.00	160SAT182M3535YZB	1,800	35 × 45	3.48	200SAT182M3545YZB		
2,200	35 × 40	3.50	160SAT222M3540YZB	2,200	35 × 50	3.78	200SAT222M3550YZB		
2,700	35 × 50	4.00	160SAT272M3550YZB						

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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
250	180	22 × 25	0.78	250SAT181M2225YZB	350	82	22 × 25	0.55	350SAT820M2225YZB
	220	22 × 25	1.00	250SAT221M2225YZB		100	22 × 25	0.69	350SAT101M2225YZB
	220	25 × 25	0.95	250SAT221M2525YZB		120	22 × 30	0.75	350SAT121M2230YZB
	270	22 × 30	1.18	250SAT271M2230YZB		120	25 × 25	0.75	350SAT121M2525YZB
	270	25 × 25	1.18	250SAT271M2525YZB		150	22 × 35	0.82	350SAT151M2235YZB
	330	22 × 35	1.30	250SAT331M2235YZB		150	25 × 30	0.82	350SAT151M2530YZB
	330	25 × 30	1.30	250SAT331M2530YZB		150	30 × 25	0.82	350SAT151M3025YZB
	330	30 × 25	1.30	250SAT331M3025YZB		180	22 × 40	0.92	350SAT181M2240YZB
	390	22 × 40	1.49	250SAT391M2240YZB		180	25 × 30	0.92	350SAT181M2530YZB
	390	25 × 30	1.49	250SAT391M2530YZB		180	30 × 25	0.90	350SAT181M3025YZB
	390	30 × 25	1.49	250SAT391M3025YZB		220	22 × 45	1.05	350SAT221M2245YZB
	470	22 × 45	1.65	250SAT471M2245YZB		220	25 × 35	1.04	350SAT221M2535YZB
	470	25 × 35	1.65	250SAT471M2535YZB		220	30 × 30	1.02	350SAT221M3030YZB
	470	30 × 30	1.65	250SAT471M3030YZB		220	35 × 25	1.04	350SAT221M3525YZB
	470	35 × 25	1.65	250SAT471M3525YZB		270	22 × 50	1.16	350SAT271M2250YZB
	560	22 × 50	1.67	250SAT561M2250YZB		270	25 × 40	1.18	350SAT271M2540YZB
	560	25 × 40	1.80	250SAT561M2540YZB		270	30 × 30	1.17	350SAT271M3030YZB
	560	30 × 30	1.80	250SAT561M3030YZB		270	35 × 25	1.20	350SAT271M3525YZB
	560	35 × 25	1.80	250SAT561M3525YZB		330	25 × 45	1.29	350SAT331M2545YZB
	680	25 × 50	2.00	250SAT681M2550YZB		330	30 × 35	1.34	350SAT331M3035YZB
680	30 × 35	2.00	250SAT681M3035YZB	330	35 × 30	1.22	350SAT331M3530YZB		
680	35 × 30	2.00	250SAT681M3530YZB	390	25 × 50	1.51	350SAT391M2550YZB		
820	30 × 40	2.30	250SAT821M3040YZB	390	30 × 40	1.51	350SAT391M3040YZB		
820	35 × 35	2.30	250SAT821M3535YZB	390	35 × 35	1.47	350SAT391M3535YZB		
1,000	30 × 50	2.47	250SAT102M3050YZB	470	30 × 45	1.65	350SAT471M3045YZB		
1,000	35 × 40	2.47	250SAT102M3540YZB	470	35 × 35	1.65	350SAT471M3535YZB		
1,200	35 × 45	2.60	250SAT122M3545YZB	560	30 × 50	1.85	350SAT561M3050YZB		
1,500	35 × 50	3.00	250SAT152M3550YZB	560	35 × 40	1.90	350SAT561M3540YZB		
				680	35 × 50	1.99	350SAT681M3550YZB		

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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
400	68	22×25	0.50	400SAT680M2225YZB	450	56	22×25	0.40	450SAT560M2225YZB
	82	22×25	0.64	400SAT820M2225YZB		68	22×30	0.53	450SAT680M2230YZB
	100	22×30	0.70	400SAT101M2230YZB		68	25×25	0.50	450SAT680M2525YZB
	100	25×25	0.70	400SAT101M2525YZB		82	22×30	0.64	450SAT820M2230YZB
	120	22×35	0.75	400SAT121M2235YZB		82	25×25	0.64	450SAT820M2525YZB
	120	25×25	0.75	400SAT121M2525YZB		100	22×35	0.69	450SAT101M2235YZB
	120	30×25	0.73	400SAT121M3025YZB		100	25×30	0.69	450SAT101M2530YZB
	150	22×40	0.88	400SAT151M2240YZB		100	30×25	0.64	450SAT101M3025YZB
	150	25×30	0.88	400SAT151M2530YZB		120	22×40	0.80	450SAT121M2240YZB
	150	30×25	0.88	400SAT151M3025YZB		120	25×30	0.80	450SAT121M2530YZB
	180	22×45	0.98	400SAT181M2245YZB		120	30×25	0.80	450SAT121M3025YZB
	180	25×35	0.98	400SAT181M2535YZB		120	35×25	0.73	450SAT121M3525YZB
	180	30×30	0.98	400SAT181M3030YZB		150	22×45	0.88	450SAT151M2245YZB
	180	35×25	0.98	400SAT181M3525YZB		150	25×35	0.88	450SAT151M2535YZB
	220	22×50	1.10	400SAT221M2250YZB		150	30×30	0.88	450SAT151M3030YZB
	220	25×40	1.10	400SAT221M2540YZB		150	35×25	0.75	450SAT151M3525YZB
	220	30×30	1.10	400SAT221M3030YZB		180	22×50	1.00	450SAT181M2250YZB
	220	35×25	1.10	400SAT221M3525YZB		180	25×40	1.00	450SAT181M2540YZB
	270	25×45	1.22	400SAT271M2545YZB		180	30×30	1.00	450SAT181M3030YZB
	270	30×35	1.22	400SAT271M3035YZB		220	25×45	1.12	450SAT221M2545YZB
	270	35×30	1.22	400SAT271M3530YZB		220	30×35	1.12	450SAT221M3035YZB
	330	25×50	1.44	400SAT331M2550YZB		220	35×30	1.12	450SAT221M3530YZB
	330	30×40	1.44	400SAT331M3040YZB		270	30×40	1.28	450SAT271M3040YZB
	330	35×30	1.44	400SAT331M3530YZB		270	35×35	1.28	450SAT271M3535YZB
	390	30×45	1.60	400SAT391M3045YZB		330	30×50	1.45	450SAT331M3050YZB
390	35×35	1.60	400SAT391M3535YZB	330	35×40	1.45	450SAT331M3540YZB		
470	30×50	1.90	400SAT471M3050YZB	390	35×40	1.55	450SAT391M3540YZB		
470	35×40	1.90	400SAT471M3540YZB	470	35×50	1.85	450SAT471M3550YZB		
560	35×45	2.12	400SAT561M3545YZB	560	35×55	2.10	450SAT561M3555YZB		
680	35×50	2.44	400SAT681M3550YZB	680	35×60	2.41	450SAT681M3560YZB		
820	35×60	2.90	400SAT821M3560YZB	820	35×70	2.83	450SAT821M3570YZB		
1000	35×70	3.10	400SAT102M3570YZB	1000	40×70	3.37	450SAT102M4070YZB		
1200	40×70	3.30	400SAT122M4070YZB						
1500	40×70	3.60	400SAT152M4070YZB						

●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，确保残余电荷泄放掉。
- ◆ 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.