

# SET

基板自立型: 105°C 3,000小时时间品  
Snap-in Terminal Type Load Life:105°C 3,000 hours

规格表 SPECIFICATIONS

项目	性能						
工作温度范围 Category Temperature Range	-25 ~ 105°C						
额定电压范围 Rated Voltage Range	160 ~ 600V.DC						
静电容量允许偏差 Electrostatic Capacitance Tolerance	± 20% ( 20°C, 120Hz)						
漏电流 Leakage Current	$I \leq 3\sqrt{CV}$ ( 5分钟值 ) ( 5minutes)						
	I=漏电流 Leakage Current ( $\mu A$ ) C=静电容量 Electrostatic Capacitance ( $\mu F$ ) V=额定电压 Rated Voltage ( V )						
损耗角正切值 Dissipation Factor	20°C 120Hz						
	额定电压 (V) Rated Voltage	160	200	250	350	400	450~600
	$\tan \delta$ (Max)	0.15					0.20
温度特性 / 阻抗比 Temperature Stability / Impedance Ratio	120Hz						
	额定电压 (V) Rated Voltage	160	200	250	350	400	450~600
	Z-25°C/Z+20°C	4			8		
耐久性 Endurance	在105°C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 105°C 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105°C,然后在20°C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 105°C,then stored at 20°C.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: 105°C 3,000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
160~250V.DC	0.80	1.00	1.17	1.32	1.45
350~600V.DC	0.77	1.00	1.16	1.30	1.41

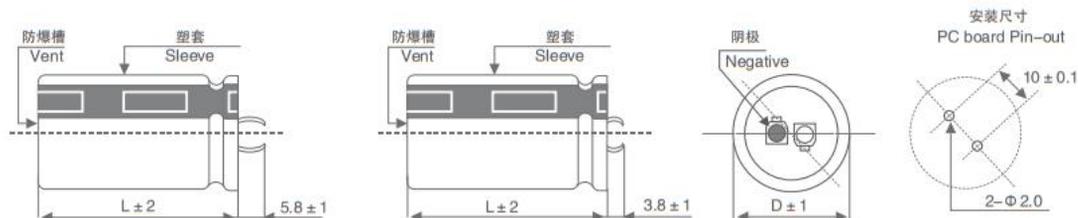
2. 周围温度系数 Temperature Coefficient

周围温度(°C) Ambient Temperature	105	85	65
系数 Coefficient	1.0	1.7	2.1

## ■ 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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# SET

## 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/105°C Ripple current Arms/105°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/105°C Ripple current Arms/105°C, 120Hz	产品型号 Part No
160	330	22 × 25	1.20	160SET331M2225YZB	200	270	22 × 25	1.00	200SET271M2225YZB
	390	22 × 25	1.26	160SET391M2225YZB		330	22 × 30	1.20	200SET331M2230YZB
	390	25 × 25	1.30	160SET391M2525YZB		330	25 × 25	1.25	200SET331M2525YZB
	470	22 × 30	1.55	160SET471M2230YZB		390	22 × 30	1.35	200SET391M2230YZB
	470	25 × 25	1.55	160SET471M2525YZB		390	25 × 25	1.35	200SET391M2525YZB
	560	22 × 35	1.67	160SET561M2235YZB		470	22 × 35	1.50	200SET471M2235YZB
	560	25 × 30	1.67	160SET561M2530YZB		470	25 × 30	1.50	200SET471M2530YZB
	560	30 × 25	1.67	160SET561M3025YZB		470	30 × 25	1.50	200SET471M3025YZB
	680	22 × 40	1.82	160SET681M2240YZB		560	22 × 40	1.67	200SET561M2240YZB
	680	25 × 30	1.82	160SET681M2530YZB		560	25 × 30	1.67	200SET561M2530YZB
	680	30 × 25	1.82	160SET681M3025YZB		560	30 × 25	1.67	200SET561M3025YZB
	820	22 × 45	2.04	160SET821M2245YZB		680	22 × 45	1.78	200SET681M2245YZB
	820	25 × 35	2.04	160SET821M2535YZB		680	25 × 35	1.78	200SET681M2535YZB
	820	30 × 30	2.04	160SET821M3030YZB		680	30 × 30	1.78	200SET681M3030YZB
	820	35 × 25	2.04	160SET821M3525YZB		680	35 × 25	1.78	200SET681M3525YZB
	1,000	22 × 50	2.25	160SET102M2250YZB		820	25 × 45	2.04	200SET821M2545YZB
	1,000	25 × 40	2.25	160SET102M2540YZB		820	30 × 30	2.04	200SET821M3030YZB
	1,000	30 × 30	2.25	160SET102M3030YZB		820	35 × 25	2.04	200SET821M3525YZB
	1,000	35 × 25	2.25	160SET102M3525YZB		1,000	25 × 50	2.30	200SET102M2550YZB
	1,200	25 × 45	2.49	160SET122M2545YZB		1,000	30 × 35	2.30	200SET102M3035YZB
	1,200	30 × 35	2.49	160SET122M3035YZB		1,000	35 × 30	2.30	200SET102M3530YZB
	1,200	35 × 30	2.49	160SET122M3530YZB		1,200	30 × 40	2.65	200SET122M3040YZB
	1,500	30 × 40	2.84	160SET152M3040YZB		1,200	35 × 35	2.65	200SET122M3535YZB
	1,500	35 × 30	2.84	160SET152M3530YZB		1,500	30 × 50	3.08	200SET152M3050YZB
1,800	30 × 45	3.32	160SET182M3045YZB	1,500	35 × 40	3.08	200SET152M3540YZB		
1,800	35 × 35	3.00	160SET182M3535YZB	1,800	35 × 45	3.48	200SET182M3545YZB		
2,200	35 × 40	3.50	160SET222M3540YZB	2,200	35 × 50	3.78	200SET222M3550YZB		
2,700	35 × 50	4.00	160SET272M3550YZB						

# SET

## 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/105°C Ripple current Arms/105°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/105°C Ripple current Arms/105°C, 120Hz	产品型号 Part No
250	180	22 × 25	0.78	250SET181M2225YZB	315	68	22 × 20	0.45	315SET680M2220YZB
	220	22 × 25	1.00	250SET221M2225YZB		82	22 × 25	0.47	315SET820M2225YZB
	220	25 × 25	0.95	250SET221M2525YZB		100	25 × 20	0.56	315SET101M2520YZB
	270	22 × 30	1.18	250SET271M2230YZB		100	22 × 25	0.61	315SET101M2225YZB
	270	25 × 25	1.18	250SET271M2525YZB		150	25 × 25	0.82	315SET151M2525YZB
	330	22 × 35	1.30	250SET331M2235YZB		150	22 × 30	0.82	315SET151M2230YZB
	330	25 × 30	1.30	250SET331M2530YZB		220	22 × 40	1.04	315SET221M2240YZB
	330	30 × 25	1.30	250SET331M3025YZB		220	25 × 30	1.04	315SET221M2530YZB
	390	22 × 40	1.49	250SET391M2240YZB		270	35 × 20	1.16	315SET271M3520YZB
	390	25 × 30	1.49	250SET391M2530YZB		270	25 × 35	1.16	315SET271M2535YZB
	390	30 × 25	1.49	250SET391M3025YZB		330	25 × 40	1.33	315SET331M2540YZB
	470	22 × 45	1.65	250SET471M2245YZB		330	30 × 30	1.33	315SET331M3030YZB
	470	25 × 35	1.65	250SET471M2535YZB		390	30 × 35	1.47	315SET391M3035YZB
	470	30 × 30	1.65	250SET471M3030YZB		470	30 × 40	1.70	315SET471M3040YZB
	470	35 × 25	1.65	250SET471M3525YZB		560	30 × 45	2.05	315SET561M3045YZB
	560	22 × 50	1.67	250SET561M2250YZB		560	35 × 35	2.05	315SET561M3535YZB
	560	25 × 40	1.80	250SET561M2540YZB		680	35 × 40	2.17	315SET681M3540YZB
	560	30 × 30	1.80	250SET561M3030YZB		680	30 × 50	2.17	315SET681M3050YZB
	560	35 × 25	1.80	250SET561M3525YZB		820	35 × 45	2.30	315SET821M3545YZB
	680	25 × 50	2.00	250SET681M2550YZB		1000	35 × 60	2.55	315SET102M3560YZB
680	30 × 35	2.00	250SET681M3035YZB						
680	35 × 30	2.00	250SET681M3530YZB						
820	30 × 40	2.30	250SET821M3040YZB						
820	35 × 35	2.30	250SET821M3535YZB						
1,000	30 × 50	2.47	250SET102M3050YZB						
1,000	35 × 40	2.47	250SET102M3540YZB						
1,200	35 × 45	2.60	250SET122M3545YZB						
1,500	30 × 60	3.00	250SET152M3060YZB						
1,500	35 × 50	3.00	250SET152M3550YZB						

# SET

## 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 rms/105°C Ripple current Arms/105°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 rms/105°C Ripple current Arms/105°C, 120Hz	产品型号 Part No
350	82	22 × 25	0.55	350SET820M2225YZB	400	68	22 × 25	0.50	400SET680M2225YZB
	100	22 × 25	0.69	350SET101M2225YZB		82	22 × 25	0.64	400SET820M2225YZB
	120	22 × 30	0.75	350SET121M2230YZB		100	22 × 30	0.70	400SET101M2230YZB
	120	25 × 25	0.75	350SET121M2525YZB		100	25 × 25	0.70	400SET101M2525YZB
	150	22 × 35	0.82	350SET151M2235YZB		120	22 × 35	0.75	400SET121M2235YZB
	150	25 × 30	0.82	350SET151M2530YZB		120	25 × 25	0.75	400SET121M2525YZB
	150	30 × 25	0.82	350SET151M3025YZB		120	30 × 25	0.73	400SET121M3025YZB
	180	22 × 40	0.92	350SET181M2240YZB		150	22 × 40	0.88	400SET151M2240YZB
	180	25 × 30	0.92	350SET181M2530YZB		150	25 × 30	0.88	400SET151M2530YZB
	180	30 × 25	0.90	350SET181M3025YZB		150	30 × 25	0.88	400SET151M3025YZB
	220	22 × 45	1.05	350SET221M2245YZB		180	22 × 45	0.98	400SET181M2245YZB
	220	25 × 35	1.04	350SET221M2535YZB		180	25 × 35	0.98	400SET181M2535YZB
	220	30 × 30	1.02	350SET221M3030YZB		180	30 × 30	0.98	400SET181M3030YZB
	220	35 × 25	1.04	350SET221M3525YZB		180	35 × 25	0.98	400SET181M3525YZB
	270	22 × 50	1.16	350SET271M2250YZB		220	22 × 50	1.10	400SET221M2250YZB
	270	25 × 40	1.18	350SET271M2540YZB		220	25 × 40	1.10	400SET221M2540YZB
	270	30 × 30	1.17	350SET271M3030YZB		220	30 × 30	1.10	400SET221M3030YZB
	270	35 × 25	1.20	350SET271M3525YZB		220	35 × 25	1.10	400SET221M3525YZB
	330	25 × 45	1.29	350SET331M2545YZB		270	25 × 45	1.22	400SET271M2545YZB
	330	30 × 35	1.34	350SET331M3035YZB		270	30 × 35	1.22	400SET271M3035YZB
	330	35 × 30	1.22	350SET331M3530YZB		270	35 × 30	1.22	400SET271M3530YZB
	390	25 × 50	1.51	350SET391M2550YZB		330	25 × 50	1.44	400SET331M2550YZB
	390	30 × 40	1.51	350SET391M3040YZB		330	30 × 40	1.44	400SET331M3040YZB
	390	35 × 35	1.47	350SET391M3535YZB		330	35 × 30	1.44	400SET331M3530YZB
470	30 × 45	1.65	350SET471M3045YZB	390	30 × 45	1.60	400SET391M3045YZB		
470	35 × 35	1.65	350SET471M3535YZB	390	35 × 35	1.60	400SET391M3535YZB		
560	30 × 50	1.85	350SET561M3050YZB	470	30 × 50	1.90	400SET471M3050YZB		
560	35 × 40	1.90	350SET561M3540YZB	470	35 × 40	1.90	400SET471M3540YZB		
680	35 × 50	1.99	350SET681M3550YZB	560	35 × 45	2.12	400SET561M3545YZB		
				680	35 × 50	2.20	400SET681M3550YZB		
				820	35 × 60	2.65	400SET821M3560YZB		
				1000	35 × 70	3.09	400SET102M3570YZB		
				1200	40 × 70	3.71	400SET122M4070YZB		

# SET

## 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/105°C Ripple current Arms/105°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/105°C Ripple current Arms/105°C, 120Hz	产品型号 Part No	
450	56	22×25	0.40	450SET560M2225YZB	500	100	25×30	0.54	500SET101M2530YZB	
	68	22×30	0.53	450SET680M2230YZB		150	25×40	0.76	500SET151M2540YZB	
	68	25×25	0.50	450SET680M2525YZB		180	25×45	0.84	500SET181M2545YZB	
	82	22×30	0.64	450SET820M2230YZB		220	30×35	0.91	500SET221M3035YZB	
	82	25×25	0.64	450SET820M2525YZB		330	35×35	1.28	500SET331M3535YZB	
	100	22×35	0.69	450SET101M2235YZB		390	35×45	1.44	500SET391M3545YZB	
	100	25×30	0.69	450SET101M2530YZB		470	35×55	1.71	500SET471M3555YZB	
	100	30×25	0.64	450SET101M3025YZB		560	35×55	1.90	500SET561M3555YZB	
	120	22×40	0.80	450SET121M2240YZB		550	220	35×40	0.94	550SET221M3540YZB
	120	25×30	0.80	450SET121M2530YZB			270	35×45	1.06	550SET271M3545YZB
	120	30×25	0.80	450SET121M3025YZB	330		35×55	1.36	550SET331M3555YZB	
	120	35×25	0.73	450SET121M3525YZB	390		35×60	1.54	550SET391M3560YZB	
	150	22×45	0.88	450SET151M2245YZB	470		35×70	1.82	550SET471M3570YZB	
	150	25×35	0.88	450SET151M2535YZB	470		40×60	1.82	550SET471M4060YZB	
	150	30×30	0.88	450SET151M3030YZB	560		35×80	1.97	550SET561M3580YZB	
	150	35×25	0.75	450SET151M3525YZB	680		40×80	2.33	550SET681M4080YZB	
	180	22×50	1.00	450SET181M2250YZB	820		40×95	2.77	550SET821M4095YZB	
	180	25×40	1.00	450SET181M2540YZB	600		220	35×45	0.80	600SET221M3545YZB
	180	30×30	1.00	450SET181M3030YZB		270	35×50	0.93	600SET271M3550YZB	
	220	25×45	1.12	450SET221M2545YZB		330	35×60	1.11	600SET331M3560YZB	
220	30×35	1.12	450SET221M3035YZB	390		35×70	1.29	600SET391M3570YZB		
220	35×30	1.12	450SET221M3530YZB	390		40×60	1.30	600SET391M4060YZB		
270	30×40	1.28	450SET271M3040YZB	470		35×80	1.50	600SET471M3580YZB		
270	35×35	1.28	450SET271M3535YZB	560		40×80	1.77	600SET561M4080YZB		
330	30×50	1.45	450SET331M3050YZB	680		40×90	2.05	600SET681M4090YZB		
330	35×40	1.45	450SET331M3540YZB	820		40×100	2.36	600SET821M40100YZB		
390	35×40	1.55	450SET391M3540YZB							
470	35×50	1.85	450SET471M3550YZB							
560	35×60	2.18	450SET561M3560YZB							
680	35×60	2.40	450SET681M3560YZB							
820	35×70	2.82	450SET821M3570YZB							
1000	40×70	3.36	450SET102M4070YZB							

## ●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.