

RT曲线也反映PPTC的质量水准

例如:

P点电阻跃升水平如 $<10^3$, 一般会代表Vmax水平差或动作状态功耗较高.

G点至P点曲线平缓如图A, 一般代表PPTC断开时间较长.

RT曲线有NTC形态, 如图B一般代表PPTC保护力差, 甚至在Vmax或Imax时会自燃.

RT curve also reflects the quality level of PPTC, for example: P-point resistance jump level, such as $<10^3$, generally represents the Vmax level difference or higher power consumption in action state. The curve from G-point to P-point is smooth, as shown in Figure A. Generally speaking, PPTC has a long disconnection time. The RT curve has NTC shape, as shown in Figure B, which generally represents poor PPTC protection and even spontaneous combustion in Vmax or Imax.

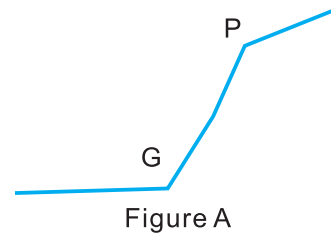


Figure A

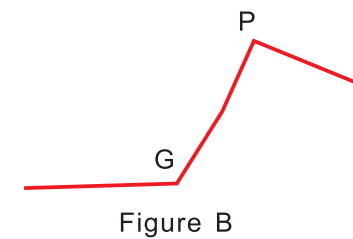
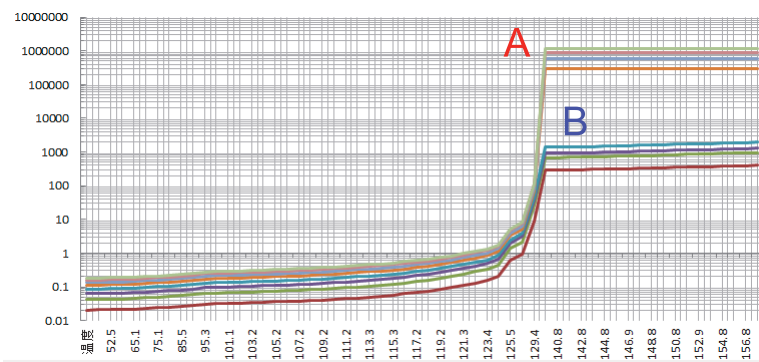


Figure B

EXAMPLE



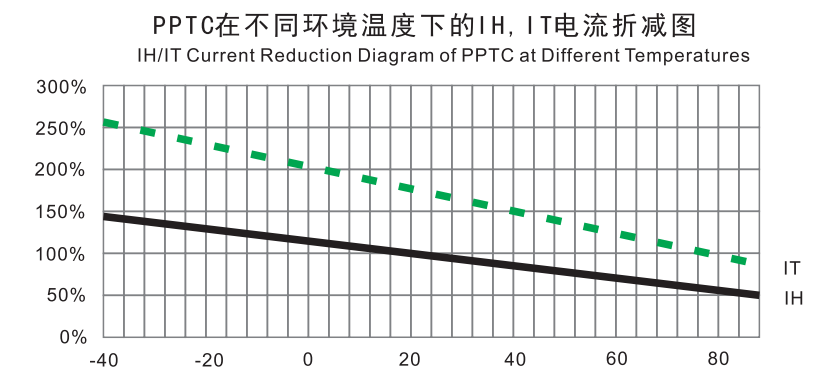
左图为RT曲线对比实测, 从图上可以看出, A的跳跃阻值远远高于B, 那么A的Vmax应该远远优于B的Vmax.

The left figure is RT curve. It can be seen from the graph that the jump resistance value of A is much higher than that of B, so the Vmax of A should be much better than that of B.

● 温度敏感性 Temperature sensitivity

PPTC的电性能参数均采用使用环境25°C(或23°C)所测, 而实际使用时温度有高低, 甚至是变化的, 这就对其电性能有一定影响, 一般情况规格书中附有温度与电流(Ih)关系图, 见下图.

The electrical performance parameters of PPTC are measured at 25 °C or 23 °C, but the actual temperature varies from high to low, which has a certain impact on its electrical performance. In general, the specifications are accompanied by temperature and current (Ih) diagram, as shown below.



● 电性能处在一定范围 Electrical performance is in a certain range

PPTC在制造中, 由于导电粒子无法均匀地分布在聚合物中, 且在使用过程因受到热冲击(波峰焊、回流焊、大电流冲击动作) 导电粒子又会局部迁移, 所以导致每种规格的PPTC电阻值有三种界定: Rmin, Rmax, R1max, 如60V050 (右图)

In the manufacture of PPTC, because the conductive particles can not be evenly distributed in the polymer, and the conductive particles will migrate locally in the process of using due to thermal shock (wave soldering, reflow soldering, high current impact action), there are three definitions of PTC resistance values for each specification: Rmin, Rmax and R1max, such as 60V050 (right figure).

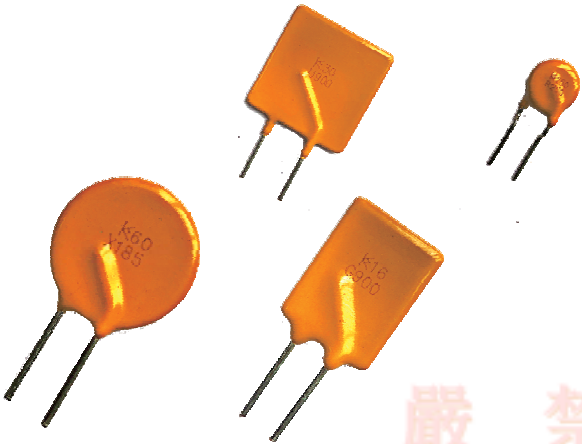
EXAMPLE

model	Rmin	Rmax	R1max
K60X050	0.41Ω	0.77Ω	1.16Ω

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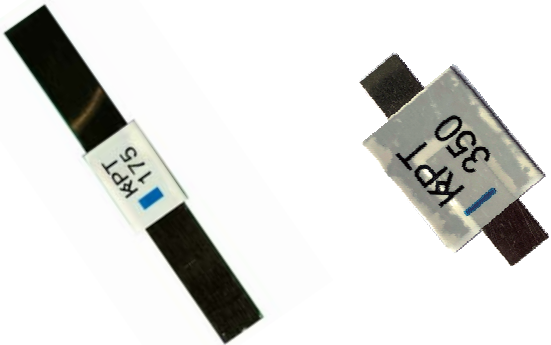


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片状产品
Flake PPTC

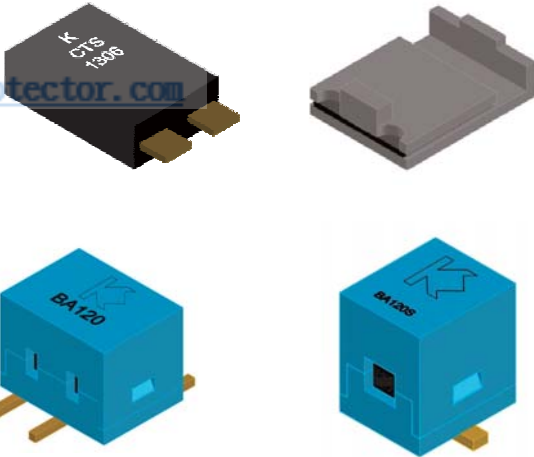
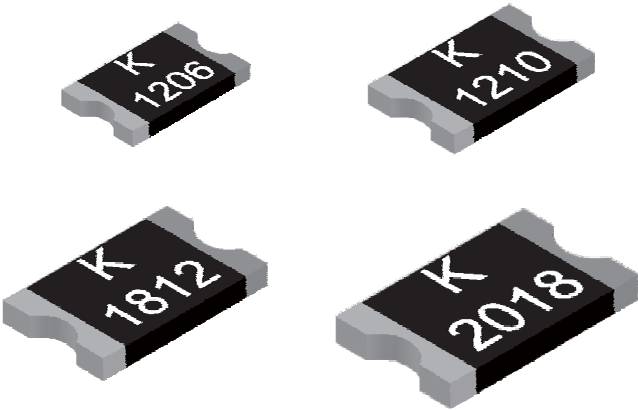
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KS6 Series 插件KS6系列

Application
Wide variety of electronic equipment
Product Features
Very high hold current, Solid state
Radial-leaded product ideal for up to 6V

产品应用
各种各样的电子设备
产品特点
高保持电流, 适合6V电路

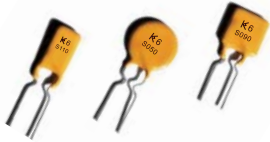
Operation Current
0.3A-2.5A
MaxIMUM Voltage
6V

工作电流
0.3A-2.5A
最大耐压
6V

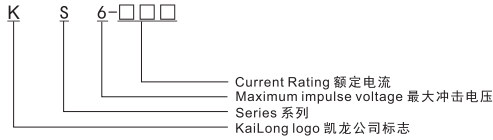
Temperature Range
-40°C to 85°C
Agency Recognition

工作温度
-40°C to 85°C
认证机构

AGENCY	AGENCY FILE NUMBER
	E312438
	B0766790003



Part Numbering System 型号定义



Part Marking System 标识定义



Thermal Deration Chart-Ihold 工作电流/温度环境折减表

Product model	Max ambien operating temperature VS. Hold current(Ihold)								
	-40°C	-20°C	0°C	25°C	40°C	50°C	60°C	70°C	85°C
KS6-030	0.45	0.39	0.35	0.30	0.27	0.26	0.21	0.19	0.15
KS6-050	0.75	0.65	0.58	0.50	0.45	0.43	0.35	0.33	0.25
KS6-075	1.05	0.95	0.85	0.75	0.65	0.60	0.55	0.50	0.43
KS6-090	1.40	1.25	1.10	0.90	0.75	0.69	0.65	0.60	0.50
KS6-110	1.75	1.52	1.33	1.10	0.99	0.90	0.80	0.73	0.63
KS6-120	1.69	1.52	1.36	1.20	1.04	0.96	0.88	0.80	0.68
KS6-135	2.15	1.94	1.70	1.35	1.20	1.14	1.00	0.90	0.81
KS6-155	2.33	2.02	1.78	1.55	1.40	1.32	1.09	1.01	0.78
KS6-160	2.49	2.21	1.94	1.60	1.42	1.31	1.19	1.03	0.88
KS6-185	2.87	2.59	2.28	1.85	1.63	1.52	1.33	1.21	1.05
KS6-250	3.82	3.44	3.03	2.50	2.17	2.00	1.81	1.59	1.39

Dimensional parameters 尺寸参数(mm)

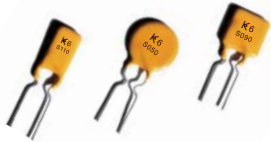
Product model	A	B	C	D	E	F	Lead	Fig
	Max	Max	Typ	Min	Max	Typ	φ	
KS6-030	4.50	9.00	5.10	7.60	3.00	0.80	0.50	1
KS6-050	5.20	9.00	5.10	7.60	3.00	0.80	0.50	1
KS6-075	7.40	12.20	5.10	7.60	3.00	0.80	0.50	1
KS6-090	7.40	12.20	5.10	7.60	3.00	0.80	0.50	2
KS6-110	7.40	14.20	5.10	7.60	3.00	0.80	0.50	2
KS6-120	6.90	11.70	5.10	7.60	3.00	0.80	0.50	1
KS6-135	8.90	13.50	5.10	7.60	3.00	0.90	0.60	2
KS6-155	6.90	11.70	5.10	7.60	3.00	0.80	0.50	1
KS6-160	8.90	15.20	5.10	7.60	3.00	0.90	0.60	2
KS6-185	10.20	15.70	5.10	7.60	3.00	0.90	0.60	2
KS6-250	11.40	18.30	5.10	7.60	3.00	0.90	0.60	2

Electrical Characteristics 电气参数

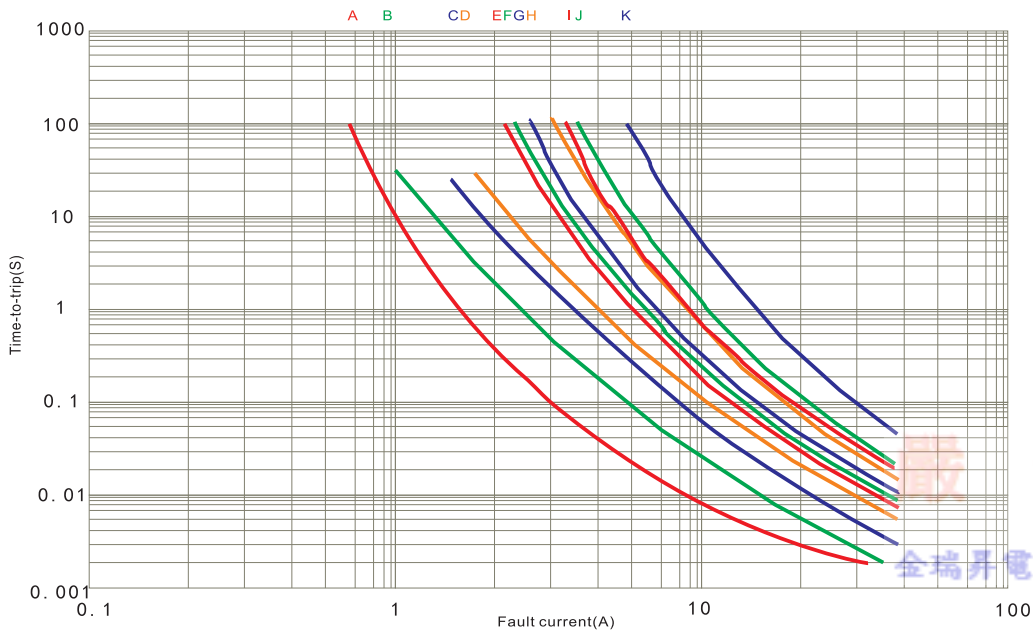
Product model	Vmax (V)	Imax (A)	Ihold (A)	Itrip (A)	Pd Max (W)	Max Time to trip		Resistance	
						Current(A)	Time(S)	Rmin(Ω)	R1max(Ω)
KS6-030	6	50	0.30	0.60	0.30	1.50	1.50	0.30	0.750
KS6-050	6	50	0.50	1.00	0.40	2.50	1.10	0.20	0.750
KS6-075	6	50	0.75	1.50	0.30	3.75	5.00	0.110	0.263
KS6-090	6	50	0.90	1.80	0.60	4.50	1.20	0.070	0.180
KS6-110	6	50	1.10	2.20	0.70	5.50	2.30	0.050	0.143
KS6-120	6	50	1.20	2.40	0.60	6.00	3.00	0.065	0.146
KS6-135	6	50	1.35	2.70	0.80	6.75	4.50	0.040	0.111
KS6-155	6	50	1.55	3.10	0.60	7.75	6.00	0.043	0.106
KS6-160	6	50	1.60	3.20	0.90	8.00	9.00	0.030	0.092
KS6-185	6	50	1.85	3.70	1.00	9.25	10.00	0.030	0.077
KS6-250	6	50	2.50	5.00	1.20	12.50	40.00	0.020	0.054

自恢复保险丝 Polymeric Positive Temperature Coefficient

KS6 Series 插件KS6系列



Typical Time-To-Trip at 25°C±2°C
PPTC在25°C±2°C动作保护时间曲线表



physical characteristics 物理特性

引线材料 lead material: KS030-KS250镀锡铜包钢线 KS030-KS250 Tin-plated Copper-clad Steel Wire

绝缘材料 Insulation material: 环氧树脂聚合物符合UL94-V-0要求 Epoxy resin polymers meet UL94-V-0 requirements

Warning:

1. 工作环境温度-40℃~85℃。
2. 超过本产品的适用条件或其它不适当的使用有可能导致损害，甚至可能引起电击穿或火苗。
3. PPTC组件是为电路中偶尔出现过流而设计，不建议用在连续且持续过流的电路中。
4. 避免PPTC组件接触化学溶剂，长时间的接触将损坏组件性能。
5. 在跳闸状态下，产品的表面最高温度为125℃。
1. Working environment temperature - 40-85 C.
2. Exceeding the applicable conditions or other inappropriate use of the product may cause damage or even electric breakdown or fire.
3. PPTC components are designed for occasional overcurrent in circuits, and are not recommended for continuous and continuous overcurrent circuits.
4. Avoid contact with chemical solvents for PPTC components. Long-term contact will damage the performance of components.
5. Under tripping condition, the highest surface temperature of the product is 125 C.

Polymeric Positive Temperature Coefficient 自恢复保险丝

KG16 Series 插件KG16系列

Application
Wide variety of electronic equipment
Product Features
Very high hold current, Solid state
Radial-leaded product ideal for up to 16V

产品应用
各种各样的电子设备
产品特点
高保持电流, 适合16V电路

Operation Current
0.3A-14A
MaxIMUM Voltage
16V

工作电流
0.3A~14A
最大耐压
16V

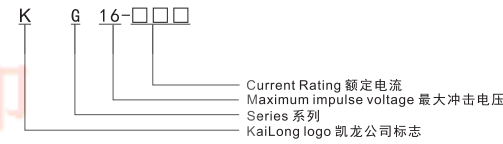
Temperature Range
-40°C to 85°C
Agency Recognition

工作温度
-40°C to 85°C
认证机构

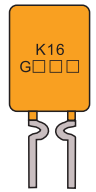
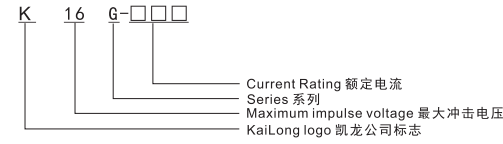
AGENCY	AGENCY FILE NUMBER
	E312438
	B0766790003



Part Numbering System 型号定义



Part Marking System 标识定义



Thermal Deration Chart-Ihold 工作电流/温度环境折减表

Product model	Max ambien operating temperature VS. Hold current(Ihold)								
	-40°C	-20°C	0°C	25°C	40°C	50°C	60°C	70°C	85°C
KG16-030	0.47	0.41	0.36	0.30	0.27	0.25	0.22	0.19	0.16
KG16-050	0.78	0.69	0.60	0.50	0.45	0.40	0.37	0.32	0.28
KG16-065	1.00	0.90	0.78	0.65	0.58	0.53	0.48	0.42	0.36
KG16-075	1.05	0.95	0.85	0.75	0.65	0.60	0.55	0.50	0.43
KG16-090	1.40	1.25	1.10	0.90	0.75	0.69	0.65	0.60	0.50
KG16-110	1.75	1.52	1.33	1.10	0.99	0.90	0.80	0.73	0.63
KG16-120	1.90	1.52	1.36	1.20	1.04	0.96	0.88	0.80	0.68
KG16-135	2.15	1.94	1.70	1.35	1.20	1.14	1.00	0.90	0.81
KG16-160	2.49	2.21	1.94	1.60	1.42	1.31	1.19	1.03	0.88
KG16-185	2.87	2.59	2.28	1.85	1.63	1.52	1.33	1.21	1.05
KG16-200	3.10	2.76	2.40	2.00	1.78	1.63	1.48	1.28	1.10
KG16-250	3.82	3.44	3.03	2.50	2.17	2.00	1.81	1.59	1.39

physical characteristics 物理特性

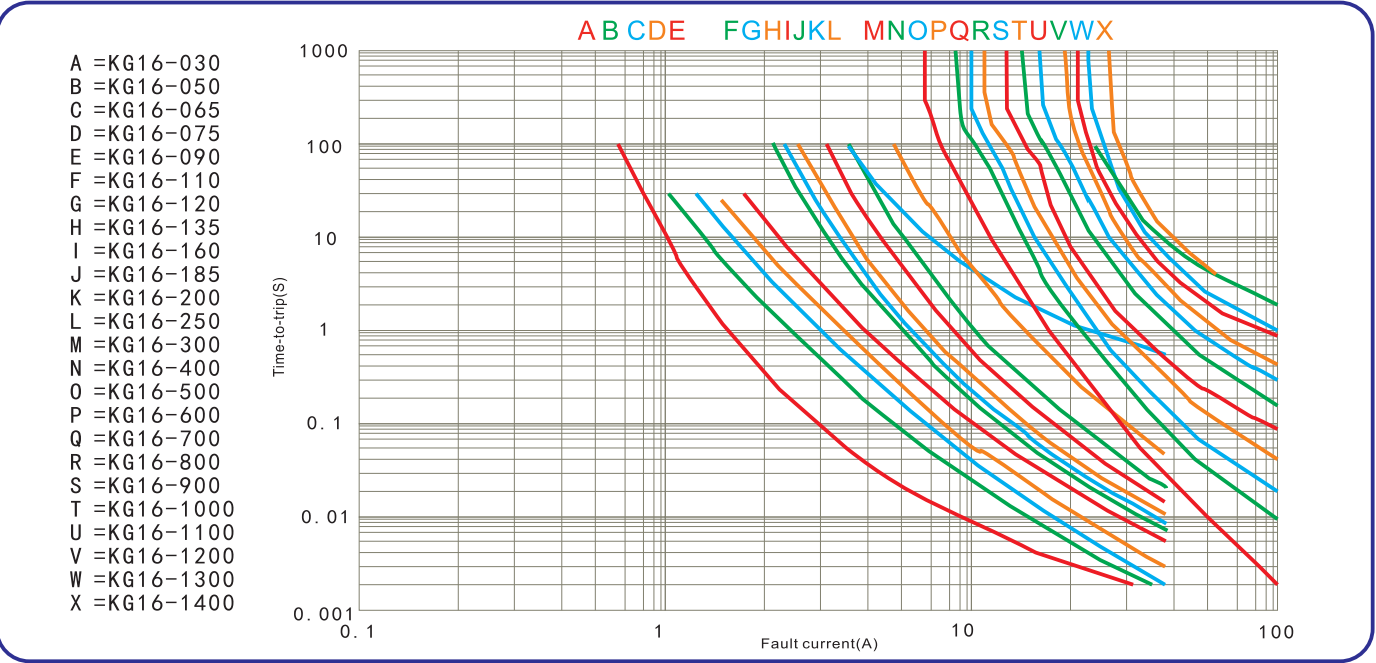
引线材料 lead material: KG030-KG250镀锡铜包钢线 KG030-KG250 Tin-plated Copper-clad Steel Wire
KG300-KG1400镀锡铜线 KG300-KG1400Tin-plated copper wire

绝缘材料 Insulation material: 环氧树脂聚合物符合UL94-V-0要求 Epoxy resin polymers meet UL94-V-0 requirements

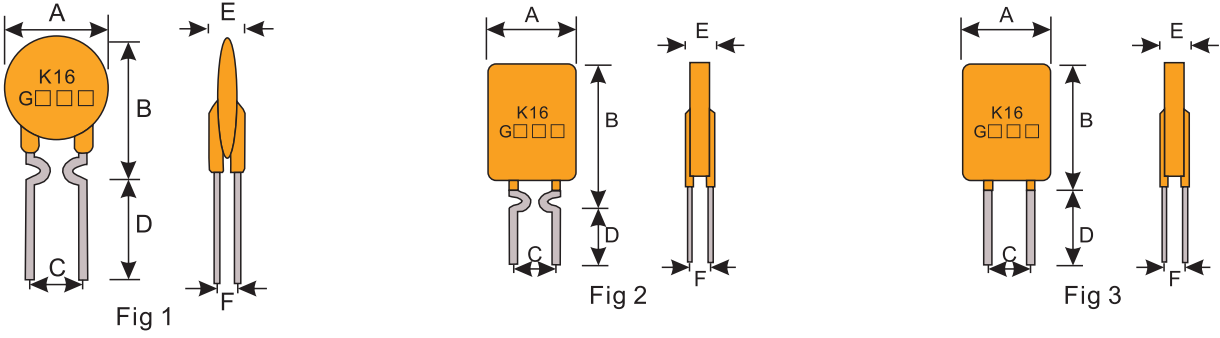
KG16 Series 插件KG16系列

Product model	Max ambien operating temperature VS.Hold current(Ihold)								
	-40℃	-20℃	0℃	25℃	40℃	50℃	60℃	70℃	85℃
KG16-300	4.40	4.00	3.60	3.00	2.60	2.40	2.10	1.90	1.40
KG16-400	5.90	5.30	4.80	4.00	3.50	3.20	2.80	2.50	1.90
KG16-500	7.30	6.60	6.00	5.00	4.40	4.00	3.60	3.10	2.40
KG16-600	8.80	8.00	7.20	6.00	5.20	4.80	4.20	3.80	2.80
KG16-700	10.30	9.30	8.40	7.00	6.20	5.60	5.00	4.40	3.30
KG16-800	11.70	10.70	9.60	8.00	6.90	6.40	5.60	5.10	3.70
KG16-900	13.20	11.90	10.70	9.00	7.90	7.20	6.40	5.60	4.20
KG16-1000	14.70	13.30	12.00	10.00	8.70	8.00	7.00	6.30	4.70
KG16-1100	16.10	14.60	13.10	11.00	9.70	8.80	7.80	6.90	5.20
KG16-1200	17.60	16.00	14.40	12.00	10.40	9.60	8.40	7.60	5.60
KG16-1300	20.15	17.94	15.73	13.00	11.53	10.65	9.62	8.36	7.15
KG16-1400	20.50	18.70	16.80	14.00	12.10	11.20	9.80	8.90	6.50

● PPTC在25℃±2℃动作保护时间曲线表
Typical Time-To-Trip at 25℃±2℃



● Dimensional parameters 尺寸参数(mm)



Product model	A	B	C	D	E	F	Lead	Fig
	Max	Max	Typ	Min	Max	Typ	φ	
KG16-030	4.50	9.00	5.10	7.60	3.00	0.80	0.50	1
KG16-050	4.50	9.00	5.10	7.60	3.00	0.80	0.50	1
KG16-065	6.90	11.40	5.10	7.60	3.00	0.80	0.50	1
KG16-075	6.90	11.40	5.10	7.60	3.00	0.80	0.50	1
KG16-090	7.40	12.20	5.10	7.60	3.00	0.80	0.50	2
KG16-110	7.40	14.40	5.10	7.60	3.00	0.80	0.50	2
KG16-120	7.40	14.40	5.10	7.60	3.00	0.80	0.50	2
KG16-135	8.90	15.90	5.10	7.60	3.00	0.90	0.60	2
KG16-160	8.90	16.70	5.10	7.60	3.00	0.90	0.60	2
KG16-185	10.70	17.70	5.10	7.60	3.00	0.90	0.60	2
KG16-200	11.20	16.00	5.10	7.60	3.00	0.90	0.60	1
KG16-250	8.90	13.50	5.10	7.60	3.00	0.90	0.60	2
KG16-300	7.10	11.00	5.10	7.60	3.00	1.20	0.80	3
KG16-400	8.90	12.80	5.10	7.60	3.00	1.20	0.80	3
KG16-500	10.40	14.30	5.10	7.60	3.00	1.20	0.80	3
KG16-600	10.70	17.10	5.10	7.60	3.00	1.20	0.80	3
KG16-700	11.20	19.70	5.10	7.60	3.00	1.20	0.80	3
KG16-800	14.00	20.90	5.10	7.60	3.00	1.20	0.80	3
KG16-900	14.00	21.70	5.10	7.60	3.00	1.20	0.80	3
KG16-1000	16.50	25.20	5.10	7.60	3.00	1.20	0.80	3
KG16-1100	17.50	26.00	5.10	7.60	3.00	1.20	0.80	3
KG16-1200	17.50	28.00	5.10	7.60	3.50	1.40	0.80	3
KG16-1300	25.00	28.00	10.20	7.60	3.50	1.40	0.80	3
KG16-1400	25.00	28.00	10.20	7.60	3.50	1.40	0.80	3

KG16 Series 插件KG16系列

Electrical Characteristics 电气参数

Product model	Vmax (V)	Imax (A)	Ihold (A)	Itrip (A)	Pd Max (W)	Max Time to trip		Resistance	
						Current(A)	Time(S)	Rmin(Ω)	R1max(Ω)
KG16-030	16	40	0.30	0.60	0.30	1.50	1.00	0.30	0.750
KG16-050	16	40	0.50	1.00	0.40	2.50	1.10	0.20	0.750
KG16-065	16	40	0.65	1.30	0.30	3.25	5.00	0.120	0.270
KG16-075	16	40	0.75	1.50	0.30	3.75	4.80	0.100	0.255
KG16-090	16	40	0.90	1.80	0.60	4.50	1.20	0.090	0.240
KG16-110	16	40	1.10	2.20	0.70	5.50	2.30	0.080	0.225
KG16-120	16	40	1.20	2.40	0.60	6.00	5.50	0.070	0.225
KG16-135	16	40	1.35	2.70	0.80	6.75	4.50	0.040	0.180
KG16-160	16	40	1.60	3.20	0.90	8.00	9.00	0.030	0.105
KG16-185	16	40	1.85	3.70	1.00	9.25	10.00	0.030	0.135
KG16-200	16	40	2.00	4.00	1.00	10.00	8.00	0.030	0.075
KG16-250	16	50	2.50	5.00	1.30	12.50	2.50	0.020	0.075
KG16-300	16	50	3.00	6.00	2.30	15.00	2.00	0.038	0.105
KG16-400	16	50	4.00	8.00	2.40	20.00	3.50	0.021	0.060
KG16-500	16	100	5.00	10.00	2.60	25.00	3.60	0.015	0.038
KG16-600	16	100	6.00	12.00	2.80	30.00	5.80	0.010	0.030
KG16-700	16	100	7.00	14.00	3.00	35.00	8.00	0.008	0.023
KG16-800	16	100	8.00	16.00	3.00	40.00	9.00	0.006	0.018
KG16-900	16	100	9.00	18.00	3.30	45.00	12.00	0.005	0.017
KG16-1000	16	100	10.00	20.00	3.60	50.00	12.50	0.004	0.014
KG16-1100	16	100	11.00	22.00	3.70	55.00	13.50	0.004	0.012
KG16-1200	16	100	12.00	24.00	4.20	60.00	16.00	0.004	0.011
KG16-1300	16	100	13.00	26.00	4.60	65.00	18.00	0.0035	0.0083
KG16-1400	16	100	14.00	28.00	4.60	70.00	20.00	0.003	0.075

1. 工作环境温度-40℃~85℃。
2. 超过本产品的适用条件或其它不适当的使用有可能导致损害，甚至可能引起电击穿或火苗。
3. PPTC组件是为电路中偶尔出现过流而设计，不建议用在连续且持续过流的电路中。
4. 避免PPTC组件接触化学溶剂，长时间的接触将损坏组件性能。
5. 在跳闸状态下，产品的表面最高温度为125℃。
1. Working environment temperature - 40-85 C.
2. Exceeding the applicable conditions or other inappropriate use of the product may cause damage or even electric breakdown or fire.
3. PPTC components are designed for occasional overcurrent in circuits, and are not recommended for continuous and continuous overcurrent circuits.
4. Avoid contact with chemical solvents for PPTC components. Long-term contact will damage the performance of components.
5. Under tripping condition, the highest surface temperature of the product is 125 C.



Warning:

KU30 Series 插件KU30系列

Application
Wide variety of electronic equipment
Product Features
Very high hold current, Solid state
Radial-leaded product ideal for up to 30V

产品应用
各种各样的电子设备
产品特点
高保持电流, 适合30V电路

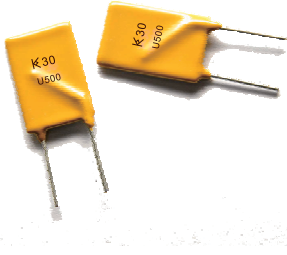
Operation Current
0.5A-9A
Maximum Voltage
30V

工作电流
0.5A-9A
最大耐压
30V

Temperature Range
-40°C to 85°C
Agency Recognition

工作温度
-40°C to 85°C
认证机构

AGENCY	AGENCY FILE NUMBER
	E312438
	B0766790003



Part Numbering System 型号定义

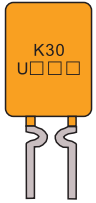
K U 30-□□□

Current Rating 额定电流
Maximum impulse voltage 最大冲击电压
Series 系列
KaiLong logo 凯龙公司标志

Part Marking System 标识定义

K 30 U-□□□

Current Rating 额定电流
Series 系列
Maximum impulse voltage 最大冲击电压
KaiLong logo 凯龙公司标志



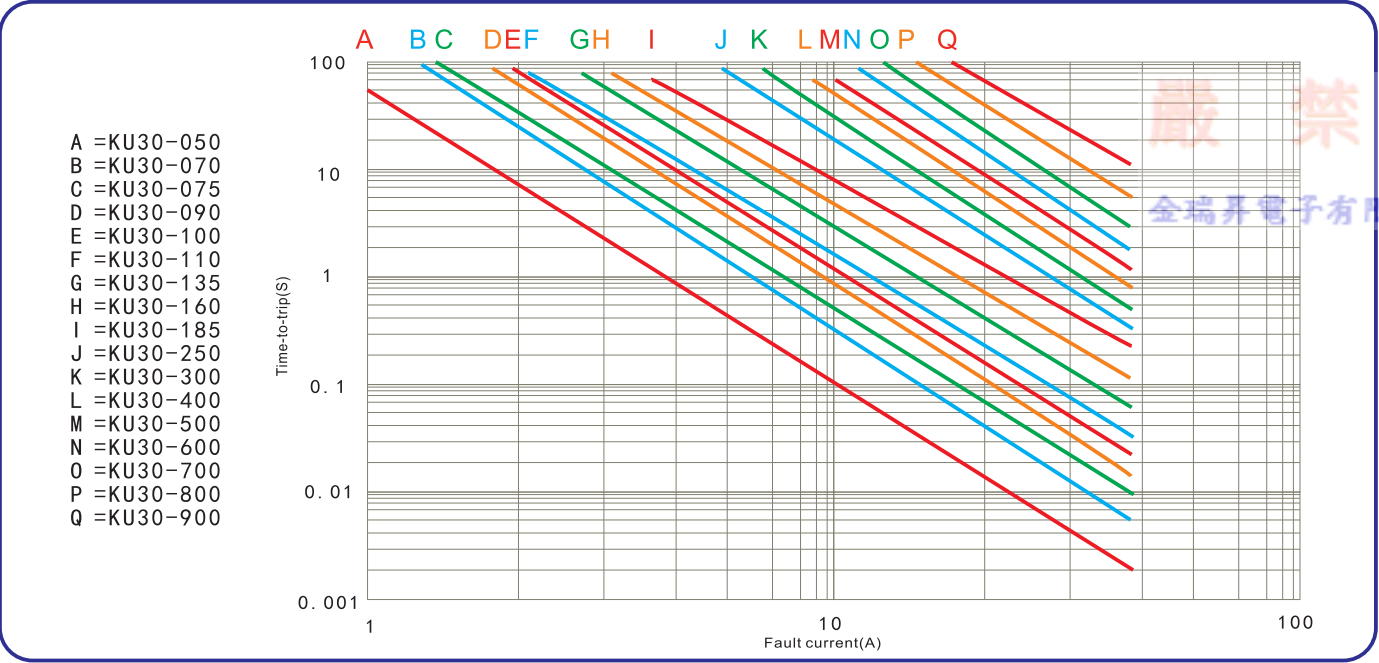
Thermal Deration Chart-Ihold 工作电流/温度环境折减表

Product model	Max ambien operating temperature VS. Hold current(Ihold)								
	-40℃	-20℃	0℃	25℃	40℃	50℃	60℃	70℃	85℃
KU30-050	0.83	0.74	0.63	0.50	0.41	0.36	0.30	0.25	0.18
KU30-070	1.17	1.03	0.88	0.70	0.56	0.50	0.42	0.36	0.25
KU30-075	1.26	1.11	0.95	0.75	0.61	0.54	0.45	0.39	0.28
KU30-090	1.40	1.25	1.10	0.90	0.75	0.69	0.65	0.60	0.50
KU30-100	1.68	1.48	1.26	1.00	0.81	0.72	0.70	0.65	0.52
KU30-110	1.75	1.52	1.33	1.10	0.99	0.90	0.80	0.73	0.63
KU30-135	2.15	1.94	1.70	1.35	1.20	1.14	1.00	0.90	0.81
KU30-160	2.49	2.21	1.94	1.60	1.42	1.31	1.19	1.03	0.88
KU30-185	2.87	2.59	2.28	1.85	1.63	1.52	1.33	1.21	1.05
KU30-250	3.82	3.44	3.03	2.50	2.17	2.00	1.81	1.59	1.39
KU30-300	4.55	4.10	3.60	3.00	2.65	2.51	2.24	2.01	1.74
KU30-400	6.00	5.40	4.74	4.00	3.47	3.28	2.82	2.63	2.26

KU30 Series 插件KU30系列

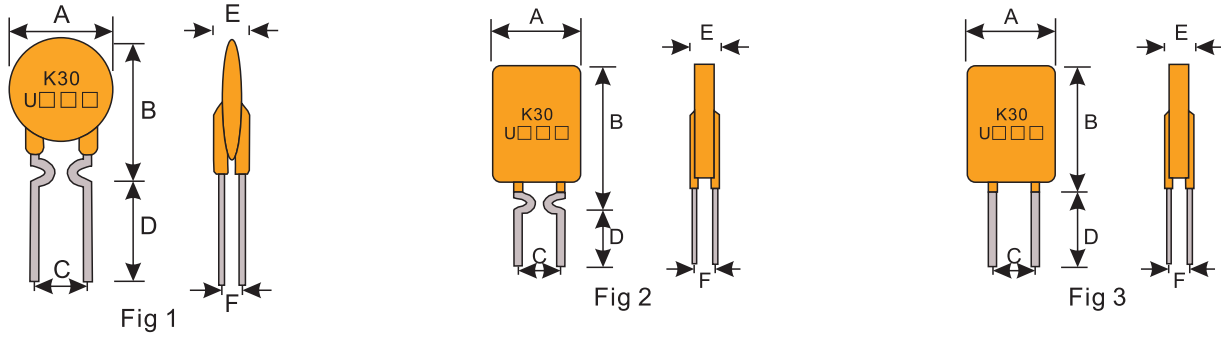
Product model	Max ambien operating temperature VS.Hold current(Ihold)								
	-40℃	-20℃	0℃	25℃	40℃	50℃	60℃	70℃	85℃
KU30-500	7.44	6.68	5.80	5.00	4.30	4.03	3.58	3.22	2.77
KU30-600	8.90	7.99	7.08	6.00	5.13	4.82	4.27	3.84	3.30
KU30-700	10.35	9.30	8.21	7.00	5.95	5.58	4.96	4.46	3.84
KU30-800	11.60	10.60	9.35	8.00	6.79	6.36	5.64	5.07	4.36
KU30-900	13.25	11.90	10.49	9.00	7.53	7.12	6.32	5.69	4.88

● Typical Time-To-Trip at 25℃±2℃
PPTC在25℃±2℃动作保护时间曲线表



● physical characteristics 物理特性
引线材料 lead material: KU050-KU185镀锡铜包钢线 KU050-KU185 Tin-plated Copper-clad Steel Wire
KU250-KU900镀锡铜线 KU250-KU900Tin-plated copper wire
绝缘材料Insulation material: 环氧树脂聚合物符合UL94-V-0要求 Epoxy resin polymers meet UL94-V-0 requirements

● Dimensional parameters 尺寸参数(mm)



Product model	A	B	C	D	E	F	Lead	Fig
	Max	Max	Typ	Min	Max	Typ	φ	
KU30-050	7.00	12.50	5.10	7.60	3.00	0.90	0.50	1
KU30-070	7.40	14.20	5.10	7.60	3.00	0.90	0.50	2
KU30-075	7.40	14.20	5.10	7.60	3.00	0.90	0.50	2
KU30-090	7.40	14.20	5.10	7.60	3.00	0.90	0.50	2
KU30-100	7.40	15.20	5.10	7.60	3.00	0.90	0.50	2
KU30-110	7.40	15.20	5.10	7.60	3.00	0.90	0.50	2
KU30-135	8.90	16.50	5.10	7.60	3.00	0.90	0.60	2
KU30-160	8.90	16.70	5.10	7.60	3.00	0.90	0.60	2
KU30-185	10.20	17.70	5.10	7.60	3.00	0.90	0.60	2
KU30-250	11.40	19.30	5.10	7.60	3.00	0.90	0.60	2
KU30-300	11.40	17.30	5.10	7.60	3.00	1.20	0.80	3
KU30-400	14.00	20.10	5.10	7.60	3.00	1.20	0.80	3
KU30-500	14.50	24.90	10.20	7.60	3.00	1.20	0.80	3
KU30-600	16.50	24.90	10.20	7.60	3.00	1.20	0.80	3
KU30-700	19.10	26.70	10.20	7.60	3.00	1.20	0.80	3
KU30-800	21.60	29.20	10.20	7.60	3.00	1.20	0.80	3
KU30-900	25.00	29.70	10.20	7.60	3.00	1.20	0.80	3

KU 30 Series 插件KU30系列

● Electrical Characteristics 电气参数

Product model	Vmax (V)	Imax (A)	Ihold (A)	Itrip (A)	Pd Max (W)	Max Time to trip		Resistance	
						Current(A)	Time(S)	Rmin(Ω)	R1max(Ω)
KU30-050	30	40	0.50	1.00	0.50	2.50	4.10	0.29	0.765
KU30-070	30	40	0.70	1.40	0.60	3.50	4.30	0.14	0.330
KU30-075	30	40	0.75	1.50	0.60	3.75	5.20	0.12	0.300
KU30-090	30	40	0.90	1.80	0.60	4.50	5.90	0.07	0.180
KU30-100	30	40	1.00	2.00	0.70	5.00	6.50	0.065	0.240
KU30-110	30	40	1.10	2.20	0.70	5.50	6.60	0.05	0.150
KU30-135	30	40	1.35	2.70	0.80	6.75	7.30	0.04	0.120
KU30-160	30	40	1.60	3.20	0.90	8.00	8.00	0.03	0.105
KU30-185	30	40	1.85	3.70	1.00	9.25	8.70	0.03	0.090
KU30-250	30	40	2.50	5.00	1.20	12.50	10.30	0.02	0.060
KU30-300	30	40	3.00	6.00	2.00	15.00	10.80	0.02	0.075
KU30-400	30	40	4.00	8.00	2.50	20.00	12.70	0.01	0.045
KU30-500	30	40	5.00	10.00	3.00	25.00	14.50	0.01	0.045
KU30-600	30	40	6.00	12.00	3.50	30.00	16.00	0.005	0.030
KU30-700	30	40	7.00	14.00	3.80	35.00	17.50	0.005	0.030
KU30-800	30	40	8.00	16.00	4.00	40.00	18.80	0.005	0.030
KU30-900	30	40	9.00	18.00	4.20	45.00	20.00	0.005	0.015

Warning:

1. 工作环境温度-40℃~85℃。

2. 超过本产品的适用条件或其它不适当的使用有可能导致损害，甚至可能引起电击穿或火苗。

3. PPTC组件是为电路中偶尔出现过流而设计，不建议用在连续且持续过流的电路中。

4. 避免PPTC组件接触化学溶剂，长时间的接触将损坏组件性能。

5. 在跳闸状态下，产品的表面最高温度为125℃。

1. Working environment temperature - 40-85 C.

2. Exceeding the applicable conditions or other inappropriate use of the product may cause damage or even electric breakdown or fire.

3. PPTC components are designed for occasional overcurrent in circuits, and are not recommended for continuous and continuous overcurrent circuits.

4. Avoid contact with chemical solvents for PPTC components. Long-term contact will damage the performance of components.

5. Under tripping condition, the highest surface temperature of the product is 125 C.

KX60 Series 插件KX 60系列

Application
Wide variety of electronic equipment

Product Features
Very high hold current, Solid state
Radial-leaded product ideal for up to 60V

产品应用
各种各样的电子设备

产品特点
高保持电流, 适合60V电路

Operation Current
0.03A-5A

Maximum Voltage
60V

工作电流
0.03A-5A

最大耐压
60V

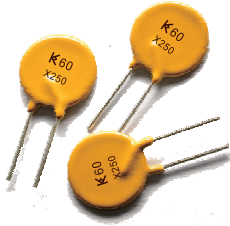
Temperature Range
-40°C to 85°C

Agency Recognition

工作温度
-40°C to 85°C

认证机构

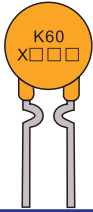
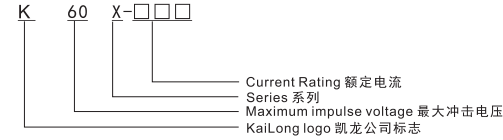
AGENCY	AGENCY FILE NUMBER
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	B0766790003



Part Numbering System 型号定义



Part Marking System 标识定义



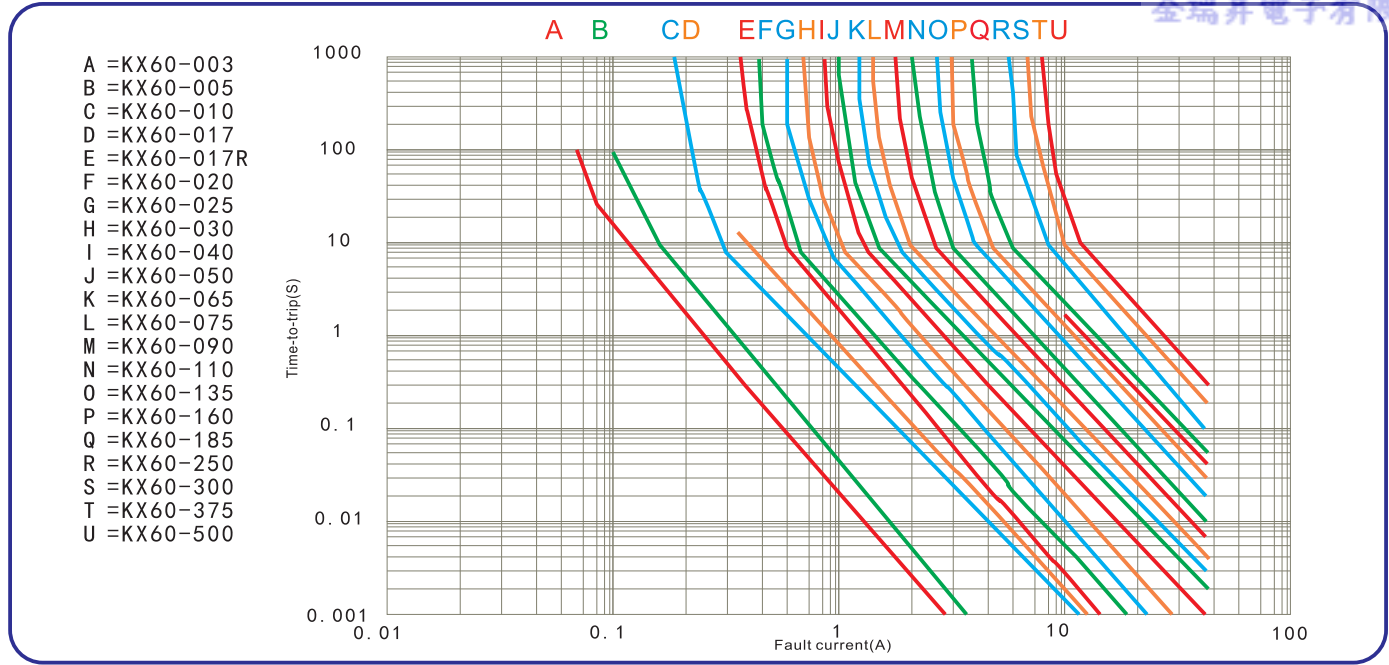
● Thermal Deration Chart-Ihold 工作电流/温度环境折减表

Product model	Max ambien operating temperature VS. Hold current(Ihold)								
	-40℃	-20℃	0℃	25℃	40℃	50℃	60℃	70℃	85℃
KX60-003	0.046	0.041	0.036	0.030	0.027	0.025	0.022	0.019	0.016
KX60-005	0.077	0.069	0.061	0.050	0.044	0.040	0.036	0.032	0.025
KX60-010	0.18	0.15	0.13	0.10	0.08	0.07	0.06	0.05	0.03
KX60-017	0.28	0.24	0.20	0.17	0.14	0.12	0.10	0.09	0.06
KX60-017R	0.28	0.24	0.20	0.17	0.14	0.12	0.10	0.09	0.06
KX60-020	0.34	0.29	0.25	0.20	0.16	0.14	0.13	0.10	0.07
KX60-025	0.42	0.36	0.31	0.25	0.20	0.18	0.16	0.12	0.09
KX60-030	0.52	0.44	0.38	0.30	0.24	0.22	0.18	0.14	0.10
KX60-040	0.66	0.57	0.50	0.40	0.32	0.29	0.24	0.20	0.14
KX60-050	0.83	0.74	0.63	0.50	0.41	0.36	0.30	0.25	0.18
KX60-065	1.10	0.95	0.82	0.65	0.53	0.47	0.40	0.33	0.24
KX60-075	1.26	1.11	0.95	0.75	0.61	0.54	0.45	0.39	0.28

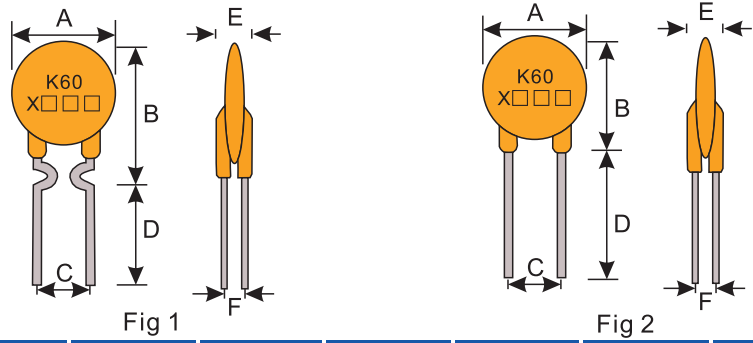
KX 60 Series 插件KX60系列

Product model	Max ambien operating temperature VS.Hold current(Ihold)								
	-40℃	-20℃	0℃	25℃	40℃	50℃	60℃	70℃	85℃
KX60-090	1.52	1.30	1.15	0.90	0.73	0.65	0.55	0.47	0.33
KX60-110	1.82	1.60	1.35	1.10	0.89	0.79	0.65	0.55	0.40
KX60-135	2.20	1.91	1.65	1.35	1.09	0.96	0.80	0.68	0.50
KX60-160	2.60	2.30	1.95	1.60	1.30	1.13	1.00	0.80	0.60
KX60-185	3.00	2.63	2.30	1.85	1.50	1.33	1.12	0.92	0.67
KX60-250	4.05	3.58	3.02	2.50	2.02	1.80	1.55	1.30	0.90
KX60-300	4.82	4.16	3.62	3.00	2.43	2.16	1.85	1.50	1.09
KX60-375	6.02	5.19	4.50	3.75	3.02	2.68	2.30	1.95	1.39
KX60-500	7.44	6.68	5.80	5.00	4.30	4.03	3.58	3.22	2.77

● PPTC在25℃±2℃动作保护时间曲线表
Typical Time-To-Trip at 25℃±2℃



● Dimensional parameters 尺寸参数 (mm)



Product model	A	B	C	D	E	F	Lead	Fig
	Max	Max	Typ	Min	Max	Typ	φ	
KX60-003	7.40	12.70	5.10	7.60	3.10	0.90	0.50	1
KX60-005	7.40	12.70	5.10	7.60	3.10	0.90	0.50	1
KX60-010	7.40	11.60	5.10	7.60	3.10	0.90	0.50	1
KX60-017	7.40	12.70	5.10	7.60	3.10	0.90	0.50	1
KX60-017R	7.40	12.70	5.10	7.60	3.10	0.90	0.50	1
KX60-020	7.40	11.70	5.10	7.60	3.10	0.90	0.50	1
KX60-025	7.40	12.70	5.10	7.60	3.10	0.90	0.50	1
KX60-030	7.40	12.70	5.10	7.60	3.10	0.90	0.50	1
KX60-040	9.40	14.50	5.10	7.60	3.10	0.90	0.50	1
KX60-050	7.90	13.70	5.10	7.60	3.10	0.90	0.50	1
KX60-065	9.40	14.50	5.10	7.60	3.10	1.00	0.60	1
KX60-075	10.20	15.20	5.10	7.60	3.10	1.00	0.60	1
KX60-090	11.20	15.80	5.10	7.60	3.10	1.00	0.60	1
KX60-110	12.80	17.50	5.10	7.60	3.10	1.40	0.80	2
KX60-135	14.50	19.10	5.10	7.60	3.10	1.40	0.80	2
KX60-160	16.30	20.80	5.10	7.60	3.10	1.40	0.80	2
KX60-185	17.50	22.40	5.10	7.60	3.10	1.40	0.80	2
KX60-250	20.80	25.40	10.20	7.60	3.10	1.40	0.80	2
KX60-300	23.90	28.60	10.20	7.60	3.10	1.40	0.80	2
KX60-375	27.20	31.80	10.20	7.60	3.10	1.40	0.80	2
KX60-500	27.20	31.80	10.20	7.60	3.10	1.40	0.80	2

● physical characteristics 物理特性

引线材料 lead material: KX003-KX185镀锡铜包钢线 KX003-KX185 Tin-plated Copper-clad Steel Wire
KX250-KX500镀锡铜线 KX250-KX500Tin-plated copper wire

绝缘材料Insulation material: 环氧树脂聚合物符合UL94-V-0要求 Epoxy resin polymers meet UL94-V-0 requirements

KX 60 Series 插件KX 60系列

Electrical Characteristics 电气参数

Product model	Vmax (V)	Imax (A)	Ihold (A)	Itrip (A)	Pd Max (W)	Max Time to trip		Resistance	
						Current(A)	Time(S)	Rmin(Ω)	R1max(Ω)
KX60-003	60	20	0.03	0.06	0.32	0.15	4.50	33.00	97.50
KX60-005	60	20	0.05	0.10	0.30	0.25	5.00	16.00	39.00
KX60-010	60	20	0.10	0.20	0.51	0.50	6.00	2.50	6.75
KX60-017	60	20	0.17	0.34	0.60	0.85	5.00	2.00	4.80
KX60-017R	60	20	0.17	0.34	0.60	0.85	3.00	3.30	7.82
KX60-020	60	20	0.20	0.40	0.52	1.00	3.60	1.50	4.26
KX60-025	60	20	0.25	0.50	0.52	1.25	3.20	1.00	2.93
KX60-030	60	20	0.30	0.60	0.60	1.50	3.00	0.76	2.04
KX60-040	60	20	0.40	0.80	0.66	2.00	5.60	0.52	1.29
KX60-050	60	20	0.50	1.00	0.80	2.50	4.00	0.41	1.16
KX60-065	60	40	0.65	1.30	0.90	3.25	5.30	0.27	0.72
KX60-075	60	40	0.75	1.50	0.95	3.75	6.30	0.18	0.60
KX60-090	60	40	0.90	1.80	1.00	4.50	7.20	0.14	0.465
KX60-110	60	40	1.10	2.20	1.51	5.50	8.20	0.14	0.375
KX60-135	60	40	1.35	2.70	1.71	6.75	9.60	0.12	0.285
KX60-160	60	40	1.60	3.20	1.98	8.00	11.40	0.09	0.210
KX60-185	60	40	1.85	3.70	2.10	9.25	12.60	0.08	0.180
KX60-250	60	40	2.50	5.00	2.50	12.50	15.60	0.05	0.120
KX60-300	60	40	3.00	6.00	2.80	15.00	19.80	0.04	0.090
KX60-375	60	40	3.75	7.50	3.20	18.75	24.00	0.03	0.075
KX60-500	60	40	5.00	10.00	3.20	25.00	30.00	0.012	0.045

Warning:

1. 工作环境温度-40℃~85℃。

2. 超过本产品的适用条件或其它不适当的使用有可能导致损害，甚至可能引起电击穿或火苗。

3. PPTC组件是为电路中偶尔出现过流而设计，不建议用在连续且持续过流的电路中。

4. 避免PPTC组件接触化学溶剂，长时间的接触将损坏组件性能。

5. 在跳闸状态下，产品的表面最高温度为125℃。

1. Working environment temperature - 40 85 C.

2. Exceeding the applicable conditions or other inappropriate use of the product may cause damage or even electric breakdown or fire.

3. PPTC components are designed for occasional overcurrent in circuits, and are not recommended for continuous and continuous overcurrent circuits.

4. Avoid contact with chemical solvents for PPTC components. Long-term contact will damage the performance of components.

5. Under tripping condition, the highest surface temperature of the product is 125 C.

KBR 120 Series 插件KBR120系列

Application
Line Voltage Power Supply,
Transformer and Appliances Product

Product Features
Solid State,Radial leaded product
ideal for up to 120V

产品应用
电源线路,变压器和各种消费电器

产品特点
高耐压,适合120V电路



Operation Current
0.15A-0.80A

Maximum Voltage
120V

工作电流
0.15A~0.80A

最大耐压
120V

Temperature Range
-40℃to85℃

Agency Recognition

工作温度
-40℃to85℃

认证机构

AGENCY	AGENCY FILE NUMBER
	E312438
	B0766790003



Part Numbering System 型号定义

K BR 120-□□□

Current Rating 额定电流
Maximum impulse voltage 最大冲击电压(90V)
Series 系列
KaiLong logo 凯龙公司标志

Part Marking System 标识定义

K 120 BR-□□□

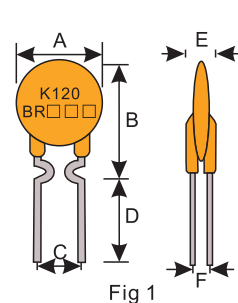
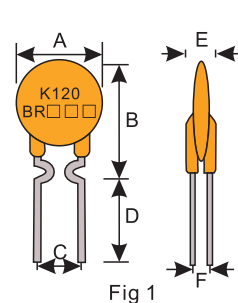
Current Rating 额定电流
Series 系列
Maximum impulse voltage 最大冲击电压(90V)
KaiLong logo 凯龙公司标志

Thermal Deration Chart-Ihold 工作电流/温度环境折减表

Product model	Max ambien operating temperature VS.Hold current(Ihold)								
	-40℃	-20℃	0℃	25℃	40℃	50℃	60℃	70℃	85℃
KBR120-150	0.22	0.20	0.18	0.15	0.13	0.12	0.11	0.09	0.08
KBR120-170	0.25	0.22	0.20	0.17	0.15	0.14	0.12	0.10	0.09
KBR120-200	0.29	0.26	0.24	0.20	0.18	0.16	0.14	0.12	0.11
KBR120-250	0.36	0.33	0.30	0.25	0.22	0.20	0.18	0.15	0.14
KBR120-300	0.44	0.39	0.36	0.30	0.26	0.24	0.21	0.18	0.17
KBR120-350	0.51	0.46	0.42	0.35	0.31	0.28	0.25	0.21	0.20
KBR120-400	0.58	0.52	0.48	0.40	0.35	0.32	0.28	0.24	0.22
KBR120-450	0.65	0.59	0.54	0.45	0.40	0.36	0.32	0.27	0.25
KBR120-500	0.73	0.65	0.60	0.50	0.44	0.40	0.36	0.31	0.28
KBR120-550	0.80	0.72	0.66	0.55	0.48	0.44	0.39	0.34	0.31
KBR120-650	0.94	0.85	0.78	0.65	0.57	0.52	0.46	0.40	0.36
KBR120-750	1.09	0.98	0.90	0.75	0.66	0.60	0.53	0.46	0.42
KBR120-800	1.16	1.04	0.96	0.80	0.70	0.64	0.56	0.48	0.45

KBR 120 Series 插件KBR 120系列

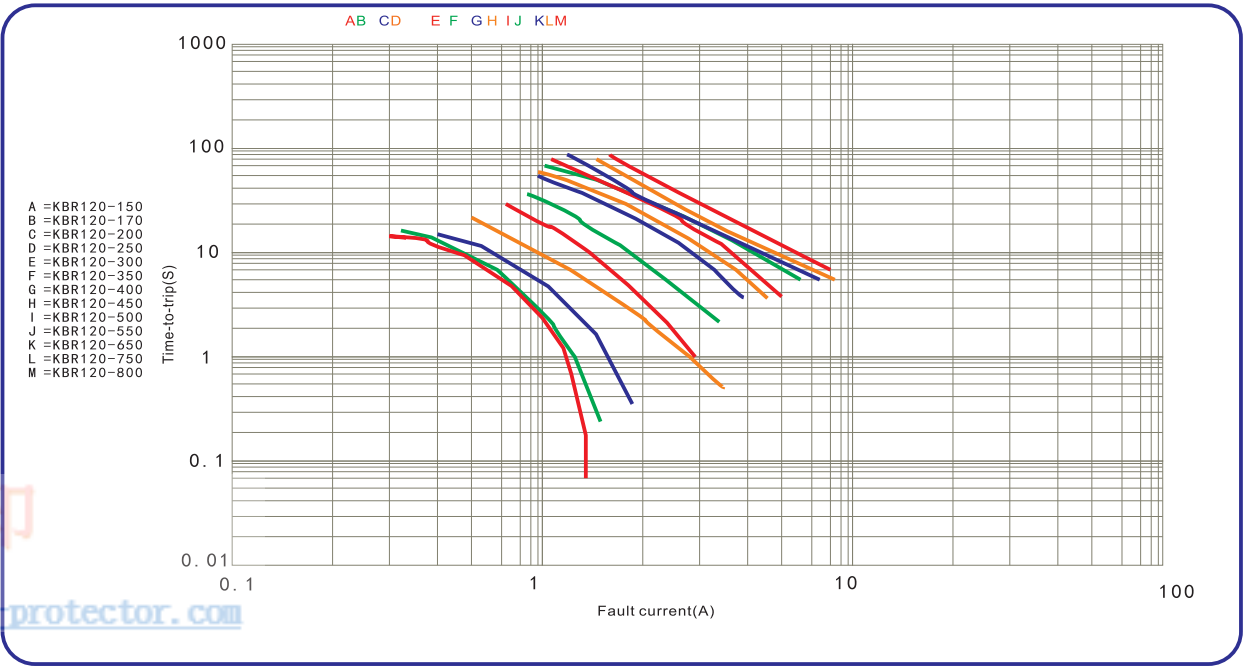
Dimensional parameters 尺寸参数(mm)

	Product model	A	B	C	D	E	F	Lead	Fig
		Max	Max	Typ	Min	Max	Typ	φ	
	KBR120-150	7.40	12.70	5.10	7.60	3.80	1.50	0.50	1
	KBR120-170	7.40	12.70	5.10	7.60	3.80	1.50	0.50	1
	KBR120-200	7.40	12.70	5.10	7.60	3.80	1.50	0.50	1
	KBR120-250	7.40	12.70	5.10	7.60	3.80	1.50	0.50	1
	KBR120-300	7.90	14.00	5.10	7.60	3.80	1.50	0.50	1
	KBR120-350	7.90	14.00	5.10	7.60	3.80	1.50	0.50	1
	KBR120-400	9.00	15.50	5.10	7.60	3.80	1.50	0.60	1
	KBR120-450	12.00	15.50	5.10	7.60	3.80	1.50	0.60	1
	KBR120-500	9.50	16.20	5.10	7.60	3.80	1.50	0.60	1
	KBR120-550	10.20	17.00	5.10	7.60	3.80	1.50	0.60	1
	KBR120-650	11.20	17.20	5.10	7.60	3.80	1.50	0.60	1
	KBR120-750	12.80	18.00	5.10	7.60	3.80	1.50	0.60	1
	KBR120-800	12.80	18.00	5.10	7.60	3.80	1.50	0.60	1

Electrical Characteristics 电气参数

Product model	Vmax (V)	Imax (A)	Ihold (A)	Itrip (A)	Pd Max (W)	Max Time to trip		Resistance	
						Current(A)	Time(S)	Rmin(Ω)	R1max(Ω)
KBR120-150	90	10	0.15	0.30	0.80	0.75	20.00	4.80	10.20
KBR120-170	90	10	0.17	0.34	1.00	0.85	20.00	4.20	10.20
KBR120-200	90	10	0.20	0.40	1.10	1.00	20.00	3.20	7.20
KBR120-250	90	10	0.25	0.50	1.20	1.20	20.00	2.00	4.95
KBR120-300	90	10	0.30	0.60	1.30	1.50	20.00	1.60	3.60
KBR120-350	90	10	0.35	0.70	1.50	1.75	20.00	1.30	3.00
KBR120-400	90	10	0.40	0.80	1.50	2.00	20.00	0.65	1.65
KBR120-450	90	10	0.45	0.90	1.50	2.25	20.00	1.05	3.45
KBR120-500	90	10	0.50	1.00	1.50	2.50	20.00	0.90	2.48
KBR120-550	90	15	0.55	1.10	1.50	2.75	20.00	0.70	2.10
KBR120-650	90	15	0.65	1.30	1.50	3.25	20.00	0.65	1.35
KBR120-750	90	15	0.75	1.50	1.50	3.75	20.00	0.30	1.50
KBR120-800	90	15	0.80	1.60	1.50	4.00	20.00	0.35	0.75

PPTC在25℃±2℃动作保护时间曲线表
Typical Time-To-Trip at 25℃±2℃



physical characteristics 物理特性

引线材料 lead material: KBR150-KBR800镀锡铜包钢线 KBR150-KBR800 Tin-plated Copper-clad Steel Wire
绝缘材料 Insulation material: 环氧树脂聚合物符合UL94-V-0要求 Epoxy resin polymers meet UL94-V-0 requirements



Warning:

1. 工作环境温度-40℃~85℃。
2. 超过本产品的适用条件或其它不适当的使用有可能导致损害，甚至可能引起电击穿或火苗。
3. PPTC组件是为电路中偶尔出现过流而设计，不建议用在连续且持续过流的电路中。
4. 避免PPTC组件接触化学溶剂，长时间的接触将损坏组件性能。
5. 在跳闸状态下，产品的表面最高温度为125℃。
1. Working environment temperature - 40-85 C.
2. Exceeding the applicable conditions or other inappropriate use of the product may cause damage or even electric breakdown or fire.
3. PPTC components are designed for occasional overcurrent in circuits, and are not recommended for continuous and continuous overcurrent circuits.
4. Avoid contact with chemical solvents for PPTC components. Long-term contact will damage the performance of components.
5. Under tripping condition, the highest surface temperature of the product is 125 C.

KR 240 Series 插件KR 240系列

Application
Line Voltage Power Supply,
Transformer and Appliances Product
Product Features
Solid State,Radial leaded product
ideal for up to 240V

产品应用
电源线路、变压器和各种消费电器
产品特点
高耐压, 适合240V电路

Operation Current
0.05A-2.00A
Maximum Voltage
240V

工作电流
0.05A-2.00A
最大耐压
240V

Temperature Range
-40°C to 85°C
Agency Recognition

工作温度
-40°C to 85°C
认证机构

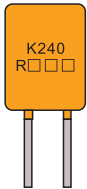
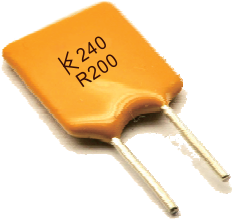
AGENCY	AGENCY FILE NUMBER
	E312438
	B0766790003



Part Numbering System 型号定义



Part Marking System 标识定义



嚴禁複印

全瑞昇電子有限公司 www.jrs-protect.com

● Dimensional parameters 尺寸参数(mm)

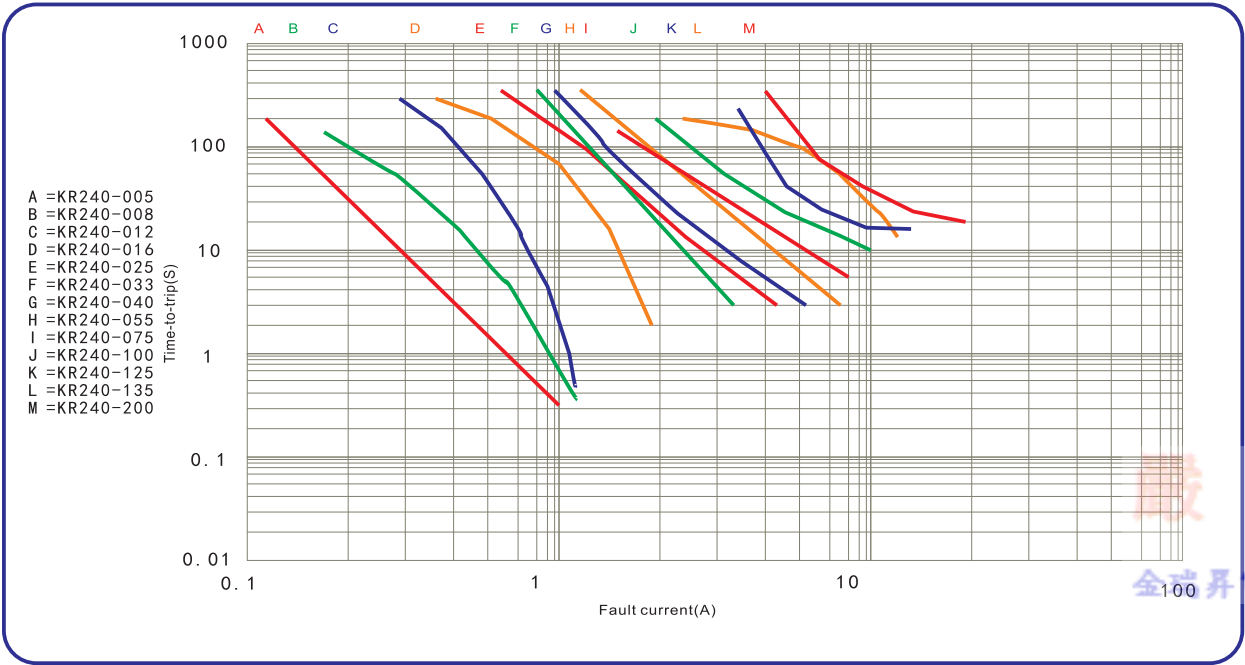
Product model	A	B	C	D	E	F	Lead	Fig
	Max	Max	Typ	Min	Max	Typ	φ	
KR240-005	8.30	10.70	5.10	7.60	3.80	1.20	0.50	1
KR240-008	8.30	10.70	5.10	7.60	3.80	1.20	0.50	1
KR240-012	8.30	10.70	5.10	7.60	3.80	1.20	0.50	1
KR240-016	9.90	13.80	5.10	7.60	3.80	1.20	0.60	1
KR240-025	9.60	18.80	5.10	7.60	3.80	3.40	0.60	2
KR240-033	12.50	19.00	5.10	7.60	3.80	3.40	0.80	2
KR240-040	11.50	20.90	5.10	7.60	3.80	3.40	0.80	2
KR240-055	14.00	21.70	5.10	7.60	4.10	3.40	0.80	2
KR240-075	12.00	22.00	5.10	7.60	4.10	3.40	0.80	2
KR240-100	14.50	20.10	5.10	7.60	4.10	3.40	0.80	2
KR240-125	14.00	21.70	5.10	7.60	4.10	3.40	0.80	2
KR240-135	16.30	21.70	5.10	7.60	4.10	3.40	0.80	2
KR240-200	23.50	31.80	10.20	7.60	4.10	3.40	0.80	2

● Electrical Characteristics 电气参数

Product model	Vmax (V)	Imax (A)	Ihold (A)	Itrip (A)	Pd Max (W)	Max Time to trip		Resistance	
						Current(A)	Time(S)	Rmin(Ω)	R1max(Ω)
KR240-005	240	3	0.05	0.12	1.00	0.25	15.00	18.00	46.500
KR240-008	240	3	0.08	0.19	1.00	0.40	15.00	7.40	18.000
KR240-012	240	3	0.12	0.30	1.00	0.60	15.00	3.00	9.750
KR240-016	240	3	0.16	0.37	1.50	0.80	15.00	2.50	6.150
KR240-025	240	3	0.25	0.56	1.50	1.25	18.50	1.30	3.150
KR240-033	240	3	0.33	0.74	1.50	1.65	21.00	1.20	3.000
KR240-040	240	5	0.40	0.90	1.50	2.00	24.00	0.81	2.250
KR240-055	240	5	0.55	1.25	1.50	2.75	26.00	0.45	1.095
KR240-075	240	5	0.75	1.50	1.50	3.75	14.00	0.40	1.020
KR240-100	120	10	1.00	2.00	1.70	5.00	13.60	0.20	0.501
KR240-125	120	10	1.25	2.50	1.70	6.25	18.00	0.12	0.270
KR240-135	120	10	1.35	2.70	1.70	6.75	20.00	0.10	0.225
KR240-200	240	10	2.00	4.20	1.70	10.00	36.00	0.089	0.196

KR 240 Series 插件KR 240系列

● PPTC在25°C±2°C动作保护时间曲线表
Typical Time-To-Trip at 25°C±2°C



● physical characteristics 物理特性

引线材料 lead material: KR005-KR200镀锡铜包钢线 KR005-KR200 Tin-plated Copper-clad Steel Wire
绝缘材料 Insulation material: 环氧树脂聚合物符合UL94-V-0要求 Epoxy resin polymers meet UL94-V-0 requirements

- Warning:**
1. 工作环境温度-40°C~85°C。
 2. 超过本产品的适用条件或其它不适当的使用有可能导致损害，甚至可能引起电击穿或火苗。
 3. PPTC组件是为电路中偶尔出现过流而设计，不建议用在连续且持续过流的电路中。
 4. 避免PPTC组件接触化学溶剂，长时间的接触将损坏组件性能。
 5. 在跳闸状态下，产品的表面最高温度为125°C。
1. Working environment temperature - 40-85 C.
2. Exceeding the applicable conditions or other inappropriate use of the product may cause damage or even electric breakdown or fire.
3. PPTC components are designed for occasional overcurrent in circuits, and are not recommended for continuous and continuous overcurrent circuits.
4. Avoid contact with chemical solvents for PPTC components. Long-term contact will damage the performance of components.
5. Under tripping condition, the highest surface temperature of the product is 125 C.

KR 250 Series 插件KR 250系列

Application
Telecommunication and data transmitting
Product Features
High Voltage Resistance, Suitable for 250V Circuit

产品应用
电信行业和数据传输
产品特点
耐高压, 适合250V电路

Operation Current
0.03A-1A
Maximum Voltage
250V

工作电流
0.03A-1A
最大耐压
250V

Temperature Range
-40°C to 85°C
Agency Recognition
认证机构

工作温度
-40°C to 85°C

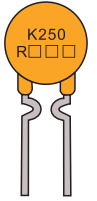
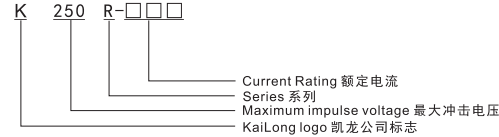
AGENCY	AGENCY FILE NUMBER
	E312438
	B0766790003



Part Numbering System 型号定义



Part Marking System 标识定义



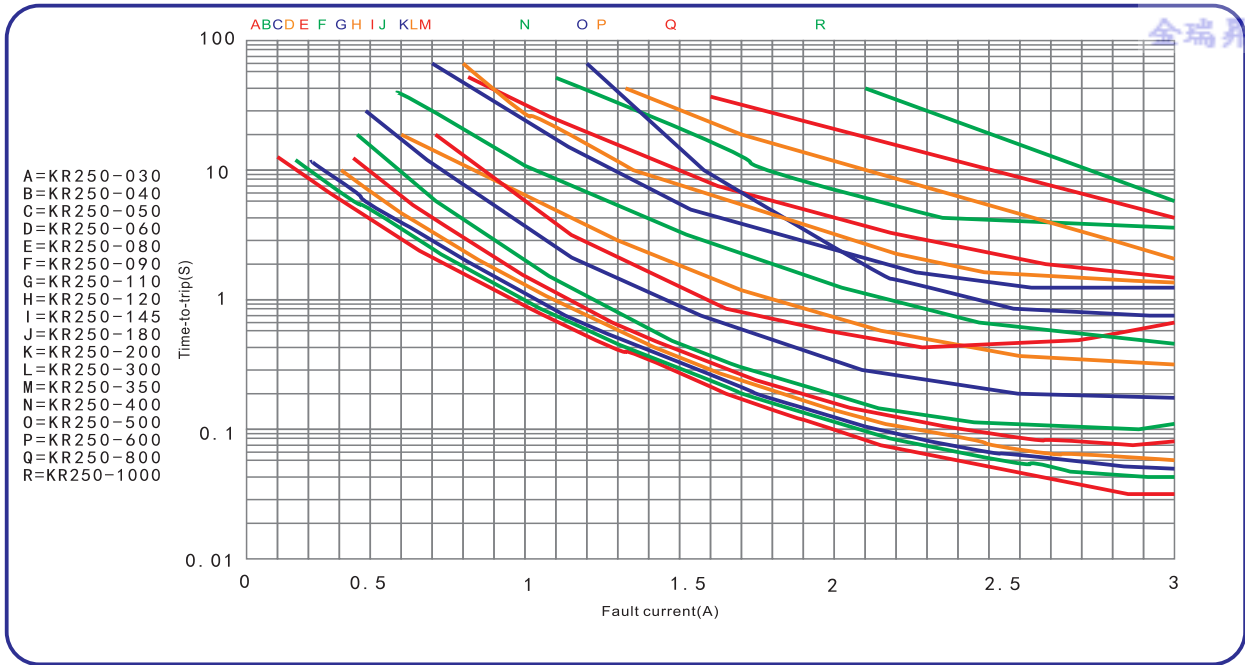
● Thermal Deration Chart-Ihold 工作电流/温度环境折减表

Product model	Max ambien operating temperature VS.Hold current(Ihold)								
	-40°C	-20°C	0°C	25°C	40°C	50°C	60°C	70°C	85°C
KR250-030	0.059	0.049	0.041	0.030	0.026	0.021	0.016	0.013	0.012
KR250-040	0.078	0.065	0.055	0.040	0.034	0.028	0.022	0.018	0.016
KR250-050	0.080	0.070	0.060	0.050	0.040	0.036	0.030	0.027	0.020
KR250-060	0.100	0.090	0.070	0.060	0.050	0.050	0.040	0.040	0.030
KR250-080	0.124	0.110	0.095	0.080	0.066	0.059	0.051	0.044	0.033
KR250-090	0.140	0.130	0.110	0.090	0.080	0.070	0.060	0.050	0.040
KR250-110	0.171	0.151	0.131	0.110	0.091	0.081	0.071	0.061	0.046
KR250-120	0.191	0.170	0.148	0.120	0.104	0.093	0.082	0.071	0.055
KR250-145	0.225	0.199	0.172	0.145	0.119	0.106	0.093	0.080	0.060
KR250-180	0.269	0.240	0.211	0.180	0.153	0.138	0.123	0.109	0.087
KR250-200	0.320	0.280	0.250	0.200	0.170	0.160	0.140	0.120	0.090
KR250-300	0.478	0.420	0.370	0.300	0.255	0.232	0.204	0.177	0.137

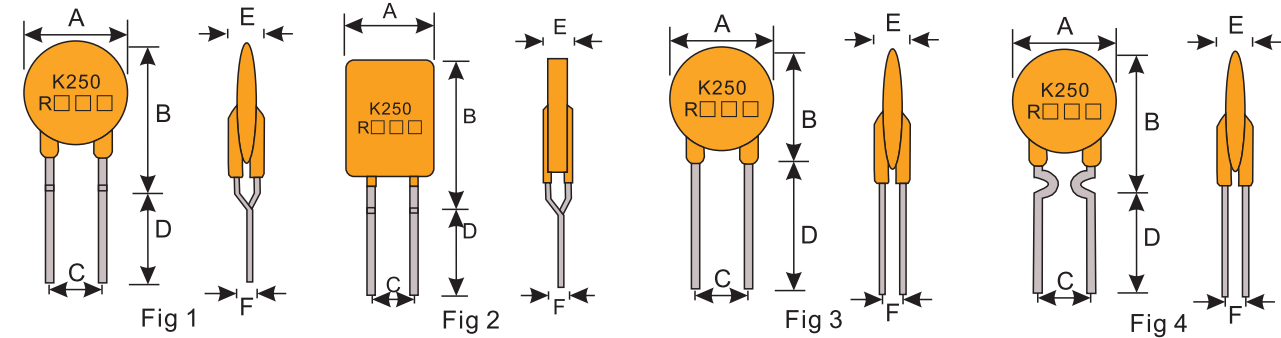
KR 250 Series 插件KR250系列

Product model	Max ambien operating temperature VS.Hold current(Ihold)								
	-40℃	-20℃	0℃	25℃	40℃	50℃	60℃	70℃	85℃
KR250-350	0.507	0.455	0.420	0.350	0.308	0.280	0.248	0.231	0.196
KR250-400	0.640	0.570	0.490	0.400	0.350	0.310	0.270	0.240	0.180
KR250-500	0.870	0.790	0.680	0.500	0.420	0.370	0.320	0.260	0.220
KR250-600	0.960	0.850	0.740	0.600	0.520	0.470	0.410	0.360	0.280
KR250-800	1.270	1.130	0.990	0.800	0.690	0.620	0.550	0.470	0.370
KR250-1000	1.590	1.420	1.230	1.000	0.870	0.780	0.680	0.590	0.460

● PPTC在25℃±2℃动作保护时间曲线表
Typical Time-To-Trip at 25℃±2℃



● Dimensional parameters 尺寸参数 (mm)



Product model	A	B	C	D	E	F	Lead	Fig
	Max	Max	Typ	Min	Max	Typ	φ	
KR250-030	5.80	9.90	5.10	7.60	3.80	/	0.60	1
KR250-040	5.80	9.90	5.10	7.60	3.80	/	0.60	1
KR250-050	5.80	9.90	5.10	7.60	3.80	/	0.60	1
KR250-060	5.80	9.90	5.10	7.60	3.80	/	0.60	1
KR250-080	5.80	9.90	5.10	7.60	3.80	/	0.60	1
KR250-090	5.80	9.90	5.10	7.60	3.80	/	0.60	1
KR250-110	7.00	11.50	5.10	7.60	3.80	/	0.60	2
KR250-120	7.00	11.50	5.10	7.60	3.80	/	0.60	2
KR250-145	7.00	11.50	5.10	7.60	3.80	/	0.60	2
KR250-180	9.00	13.00	5.10	7.60	3.50	/	0.60	1
KR250-200	9.00	13.00	5.10	7.60	3.50	/	0.60	1
KR250-300	9.00	13.00	5.10	7.60	3.50	/	0.60	1
KR250-350	9.50	13.10	5.10	7.60	3.50	1.50	0.60	1
KR250-400	9.50	16.00	5.10	7.60	3.50	1.50	0.60	4
KR250-500	11.00	15.80	5.10	7.60	3.50	1.50	0.80	3
KR250-600	11.00	15.80	5.10	7.60	3.50	1.50	0.80	3
KR250-800	11.00	15.80	5.10	7.60	3.50	1.50	0.80	3
KR250-1000	14.00	19.10	5.10	7.60	3.50	1.50	0.80	3

● physical characteristics 物理特性

引线材料 lead material: KR030-KR1000镀锡铜包钢线 KR030-KR1000 Tin-plated Copper-clad Steel Wire
绝缘材料 Insulation material: 环氧树脂聚合物符合UL94-V-0要求 Epoxy resin polymers meet UL94-V-0 requirements

KR 250 Series 插件KR 250系列

Electrical Characteristics 电气参数

Product model	Vmax (V)	Imax (A)	Ihold (A)	Itrip (A)	Pd Max (W)	Max Time to trip		Resistance	
						Current(A)	Time(S)	Rmin(Ω)	R1max(Ω)
KR250-030	220	1	0.03	0.06	1.00	0.15	7.20	40.00	135.000
KR250-040	220	1	0.04	0.08	1.00	0.20	8.50	33.00	97.500
KR250-050	220	1	0.05	0.10	1.00	0.25	5.00	24.00	90.000
KR250-060	220	3	0.06	0.12	1.00	0.30	3.00	22.00	48.000
KR250-080	220	3	0.08	0.16	1.00	0.40	3.00	14.00	33.000
KR250-090	220	3	0.09	0.18	1.00	0.45	3.00	10.00	30.000
KR250-110	220	3	0.11	0.22	1.00	0.55	0.75	7.00	16.500
KR250-120	220	3	0.12	0.24	1.00	0.60	0.75	8.00	18.000
KR250-145	220	3	0.145	0.29	1.00	0.725	2.50	3.50	9.750
KR250-180	220	3	0.18	0.50	1.00	0.90	15.00	0.80	3.000
KR250-200	220	3	0.20	0.40	1.50	1.00	15.00	1.50	4.500
KR250-300	220	3	0.30	0.60	1.50	1.50	15.00	1.00	3.600
KR250-350	220	3	0.35	0.70	1.50	1.75	10.00	0.80	2.250
KR250-400	220	3	0.40	0.80	2.50	2.00	10.00	0.75	1.650
KR250-500	220	5	0.50	1.00	2.50	2.50	15.00	0.50	1.200
KR250-600	220	5	0.60	1.20	3.00	3.00	10.00	0.50	1.125
KR250-800	220	5	0.80	1.60	3.50	4.00	8.00	0.45	1.050
KR250-1000	220	5	1.00	2.00	4.00	5.00	10.00	0.28	0.765

Warning:

1. 工作环境温度-40℃~85℃。

2. 超过本产品的适用条件或其它不适当的使用有可能导致损害，甚至可能引起电击穿或火苗。

3. PPTC组件是为电路中偶尔出现过流而设计，不建议用在连续且持续过流的电路中。

4. 避免PPTC组件接触化学溶剂，长时间的接触将损坏组件性能。

5. 在跳闸状态下，产品的表面最高温度为125℃。

1. Working environment temperature - 40-85 C.

2. Exceeding the applicable conditions or other inappropriate use of the product may cause damage or even electric breakdown or fire.

3. PPTC components are designed for occasional overcurrent in circuits, and are not recommended for continuous and continuous overcurrent circuits.

4. Avoid contact with chemical solvents for PPTC components. Long-term contact will damage the performance of components.

5. Under tripping condition, the highest surface temperature of the product is 125 C.

Polymeric Positive Temperature Coefficient 自恢复保险丝

KR 265 Series 插件KR265系列

Application
Line Voltage Power Supply,
Transformer and Appliances Product

Product Features
Solid State,Radial leaded product
ideal for up to 265V

产品应用
电源线路,变压器和各种消费电器

产品特点
高耐压,适合265V电路

Operation Current
0.2A-0.9A

MaxIMUM Voltage
265V

工作电流
0.2A-0.9A

最大耐压
265V

Temperature Range
-40℃to85℃

Agency Recognition

工作温度
-40℃to85℃

认证机构

AGENCY	AGENCY FILE NUMBER
	E312438
	B0766790003

Part Numbering System 型号定义

Part Marking System 标识定义

Thermal Deration Chart-Ihold 工作电流/温度环境折减表

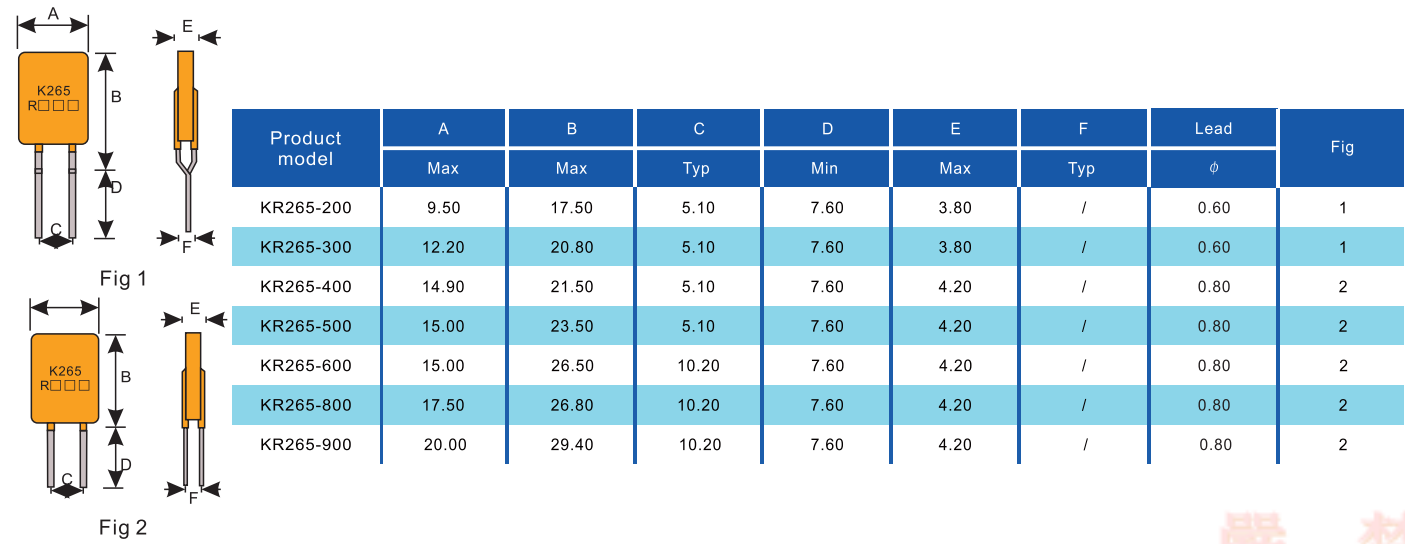
Product model	Max ambien operating temperature VS.Hold current(Ihold)								
	-40℃	-20℃	0℃	25℃	40℃	50℃	60℃	70℃	85℃
KR265-200	0.29	0.26	0.24	0.20	0.18	0.16	0.14	0.13	0.15
KR265-300	0.43	0.39	0.36	0.30	0.26	0.24	0.21	0.20	0.17
KR265-400	0.58	0.52	0.48	0.40	0.35	0.32	0.28	0.26	0.22
KR265-500	0.73	0.65	0.60	0.50	0.44	0.40	0.36	0.33	0.28
KR265-600	0.87	0.78	0.72	0.60	0.53	0.48	0.43	0.40	0.34
KR265-800	1.16	1.04	0.96	0.80	0.70	0.64	0.56	0.53	0.45
KR265-900	1.30	1.20	1.08	0.90	0.79	0.72	0.64	0.59	0.50

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40

KR 265 Series 插件KR 265系列

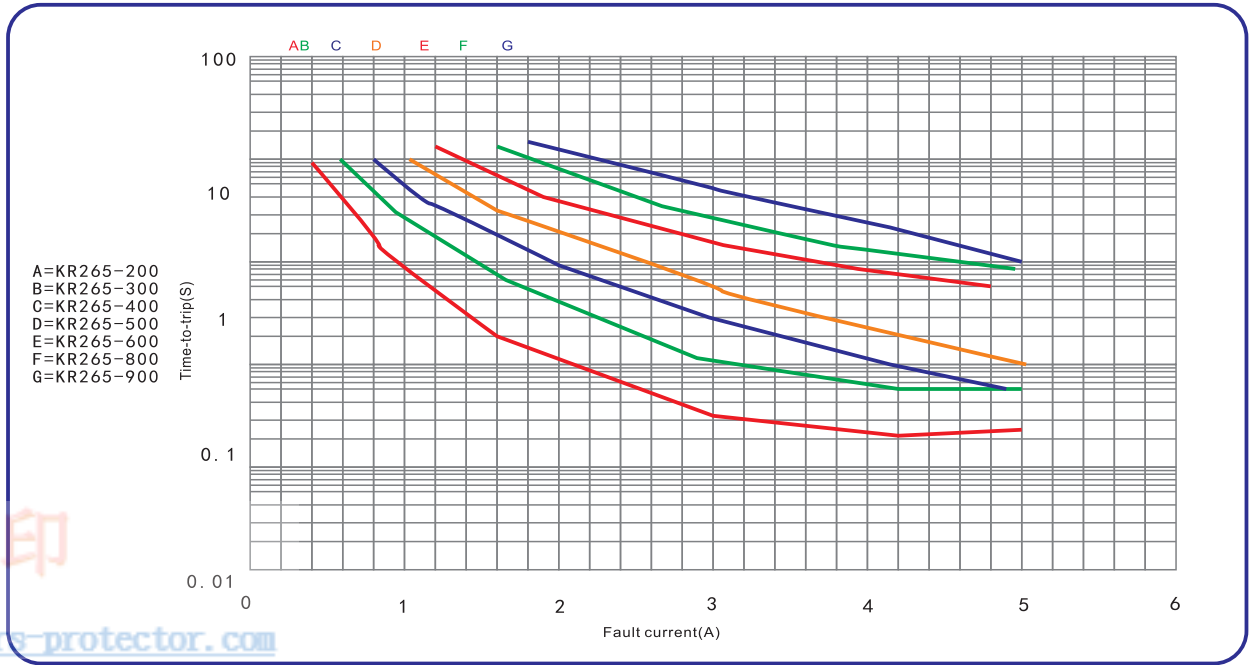
Dimensional parameters 尺寸参数 (mm)



Electrical Characteristics 电气参数

Product model	Vmax (V)	Imax (A)	Ihold (A)	Itrip (A)	Pd Max (W)	Max Time to trip		Resistance	
						Current(A)	Time(S)	Rmin(Ω)	R1max(Ω)
KR265-200	265	5	0.20	0.40	2.50	1.00	10.00	4.30	9.15
KR265-300	265	5	0.30	0.60	3.00	1.50	10.00	2.00	4.50
KR265-400	265	5	0.40	0.80	3.00	2.00	10.00	1.30	3.00
KR265-500	265	5	0.50	1.00	3.50	2.50	10.00	0.50	1.50
KR265-600	265	5	0.60	1.20	3.50	3.00	10.00	0.60	1.80
KR265-800	265	5	0.80	1.60	4.00	4.00	10.00	0.50	1.50
KR265-900	265	5	0.90	1.80	4.00	4.50	10.00	0.60	1.50

PPTC在25℃±2℃动作保护时间曲线表
Typical Time-To-Trip at 25℃±2℃



physical characteristics 物理特性

引线材料 **lead material**: KR200-KR900镀锡铜包钢线 KR200-KR900 Tin-plated Copper-clad Steel Wire
绝缘材料 **Insulation material**: 环氧树脂聚合物符合UL94-V-0要求 Epoxy resin polymers meet UL94-V-0 requirements

 Warning:

1. 工作环境温度-40℃~85℃。

2. 超过本产品的适用条件或其它不适当的使用有可能导致损害，甚至可能引起电击穿或火灾。

3. PPTC组件是为电路中偶尔出现过流而设计，不建议用在连续且持续过流的电路中。

4. 避免PPTC组件接触化学溶剂，长时间的接触将损坏组件性能。

5. 在跳闸状态下，产品的表面最高温度为125℃。
1. Working environment temperature - 40-85 C.

2. Exceeding the applicable conditions or other inappropriate use of the product may cause damage or even electric breakdown or fire.

3. PPTC components are designed for occasional overcurrent in circuits, and are not recommended for continuous and continuous overcurrent circuits.

4. Avoid contact with chemical solvents for PPTC components. Long-term contact will damage the performance of components.

5. Under tripping condition, the highest surface temperature of the product is 125 C.

KR 600 Series 插件KR 600系列

Application
Line Voltage Power Supply,
Transformer and Appliances Product
Product Features
Solid State,Radial leaded product
ideal for up to 220V

产品应用
电源线路, 变压器和各种消费电器
产品特点
高耐压, 适合220V电路

Operation Current
0.03A-0.5A
Maximum Voltage
220V

工作电流
0.03A-0.5A
最大耐压
220V

Temperature Range
-40°C to 85°C
Agency Recognition

工作温度
-40°C to 85°C
认证机构

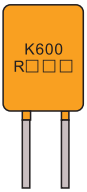
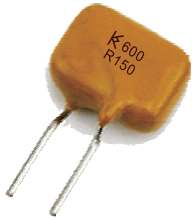
AGENCY	AGENCY FILE NUMBER
	E312438
	B0766790003



Part Numbering System 型号定义



Part Marking System 标识定义



嚴禁複印

金瑞昇電子有限公司 www.jrs-protector.com

Thermal Deration Chart-Ihold 工作电流/温度环境折减表

Product model	Max ambien operating temperature VS.Hold current(Ihold)								
	-40°C	-20°C	0°C	25°C	40°C	50°C	60°C	70°C	85°C
KR600-030	0.059	0.049	0.041	0.030	0.026	0.021	0.016	0.013	0.012
KR600-050	0.080	0.070	0.060	0.050	0.040	0.036	0.030	0.027	0.020
KR600-060	0.100	0.090	0.070	0.060	0.050	0.050	0.040	0.040	0.030
KR600-080	0.124	0.110	0.095	0.080	0.066	0.059	0.051	0.044	0.033
KR600-110	0.171	0.151	0.131	0.110	0.091	0.081	0.071	0.061	0.046
KR600-150	0.220	0.200	0.180	0.150	0.130	0.120	0.110	0.090	0.080
KR600-160	0.230	0.210	0.190	0.160	0.140	0.130	0.110	0.100	0.090
KR600-180	0.269	0.240	0.211	0.180	0.153	0.138	0.123	0.109	0.087
KR600-200	0.320	0.280	0.250	0.200	0.170	0.160	0.140	0.120	0.090
KR600-300	0.478	0.420	0.370	0.300	0.255	0.232	0.204	0.177	0.137
KR600-400	0.58	0.52	0.48	0.40	0.35	0.32	0.28	0.26	0.22
KR600-500	0.73	0.65	0.60	0.50	0.44	0.40	0.36	0.33	0.28

Dimensional parameters 尺寸参数(mm)

Product model	A	B	C	D	E	F	Lead	Fig
	Max	Max	Typ	Min	Max	Typ	φ	
KR600-030	7.00	11.50	5.10	7.60	6.50	\	0.60	1
KR600-050	7.00	11.50	5.10	7.60	6.50	\	0.60	1
KR600-060	11.00	16.00	5.10	7.60	6.50	\	0.60	2
KR600-080	11.00	16.00	5.10	7.60	6.50	\	0.60	2
KR600-110	7.00	11.50	5.10	7.60	6.50	\	0.60	1
KR600-150	14.50	12.60	5.10	7.60	6.50	\	0.80	1
KR600-160	14.50	12.60	5.10	7.60	6.50	\	0.80	1
KR600-180	14.50	12.60	5.10	7.60	6.50	\	0.80	1
KR600-200	19.50	9.50	5.10	7.60	6.50	\	0.80	1
KR600-300	18.50	23.00	10.20	7.60	6.50	\	0.80	1
KR600-400	18.50	23.00	10.20	7.60	6.50	\	0.80	1
KR600-500	20.50	32.00	10.20	7.60	6.50	\	0.80	1

Fig 1

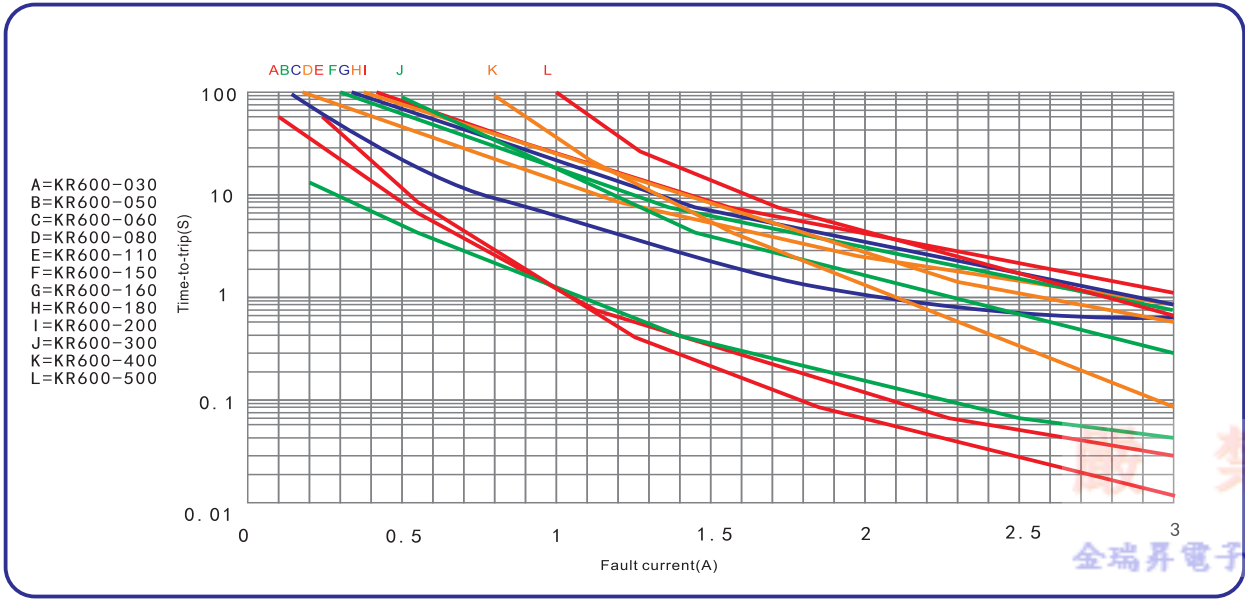
Fig 2

Electrical Characteristics 电气参数

Product model	Vmax (V)	Imax (A)	Ihold (A)	Itrip (A)	Pd Max (W)	Max Time to trip		Resistance	
						Current(A)	Time(S)	Rmin(Ω)	R1max(Ω)
KR600-030	220	3	0.03	0.06	1.00	0.50	5.00	90.00	330.00
KR600-050	220	3	0.05	0.10	1.00	0.50	5.00	50.00	135.00
KR600-060	220	3	0.06	0.12	1.00	0.50	10.00	30.00	90.00
KR600-080	220	3	0.08	0.16	1.00	0.50	8.00	20.00	49.50
KR600-110	220	3	0.11	0.22	1.50	0.55	5.00	10.00	28.50
KR600-150	220	3	0.15	0.30	1.50	1.00	5.00	6.00	18.00
KR600-160	220	3	0.16	0.32	1.50	1.00	5.00	4.00	15.00
KR600-180	220	3	0.18	0.36	1.50	0.90	8.00	3.00	12.00
KR600-200	220	3	0.20	0.40	1.50	1.00	10.00	5.00	13.50
KR600-300	220	3	0.30	0.60	1.50	1.50	15.00	3.10	8.10
KR600-400	220	3	0.40	0.80	1.50	2.00	15.00	2.80	6.00
KR600-500	220	3	0.50	1.00	1.50	2.50	15.00	0.60	1.50

KR 600 Series 插件KR 600系列

● PPTC在25℃±2℃动作保护时间曲线表
Typical Time-To-Trip at 25℃±2℃



● physical characteristics 物理特性

引线材料 lead material: KR030-KR500镀锡铜线 KR030-KR500Tin-plated copper wire
绝缘材料Insulation material: 环氧树脂聚合物符合UL94-V-0要求 Epoxy resin polymers meet UL94-V-0 requirements

Warning:

1. 工作环境温度-40℃~85℃。
2. 超过本产品的适用条件或其它不适当的使用有可能导致损害，甚至可能引起电击穿或火苗。
3. PPTC组件是为电路中偶尔出现过流而设计，不建议用在连续且持续过流的电路中。
4. 避免PPTC组件接触化学溶剂，长时间的接触将损坏组件性能。
5. 在跳闸状态下，产品的表面最高温度为125℃。
1. Working environment temperature - 40-85 C.
2. Exceeding the applicable conditions or other inappropriate use of the product may cause damage or even electric breakdown or fire.
3. PPTC components are designed for occasional overcurrent in circuits, and are not recommended for continuous and continuous overcurrent circuits.
4. Avoid contact with chemical solvents for PPTC components. Long-term contact will damage the performance of components.
5. Under tripping condition, the highest surface temperature of the product is 125 C.

KN Series 光片KN系列

Application
Wide variety of electronic equipment
Product Features
Fast movement, small size, fast heat dissipation

产品应用
适用于各种各样电器线路
产品特点
动作快，体积小，散热快



Operation Current
0.65A-1.75A
MaxIMUM Voltage
30V

工作电流
0.65A-1.75A
最大耐压
30V

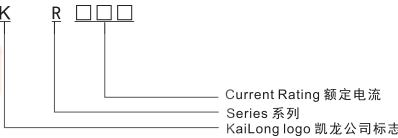
Temperature Range
-40℃to85℃
Agency Recognition

工作温度
-40℃to85℃
认证机构

AGENCY	AGENCY FILE NUMBER
	E312438



Part Numbering System 型号定义



可定制产品
Customizable products

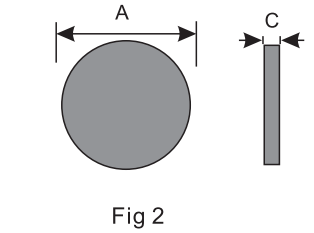
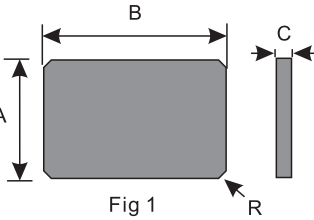
接受来图样定制
Accept customized drawings

● Thermal Deration Chart-Ihold 工作电流/温度环境折减表

Product model	Max ambien operating temperature VS.Hold current(Ihold)								
	-40℃	-20℃	0℃	25℃	40℃	50℃	60℃	70℃	85℃
KN-065	0.94	0.85	0.78	0.65	0.57	0.52	0.46	0.43	0.36
KN-070F1	1.01	0.90	0.84	0.70	0.62	0.56	0.50	0.46	0.39
KN-070F2	1.01	0.90	0.84	0.70	0.62	0.56	0.50	0.46	0.39
KN-070F3	1.01	0.90	0.84	0.70	0.62	0.56	0.50	0.46	0.39
KN-070F4	1.01	0.90	0.84	0.70	0.62	0.56	0.50	0.46	0.39
KN-075	1.09	0.98	0.90	0.75	0.66	0.60	0.53	0.50	0.42
KN-090	1.31	1.17	1.08	0.90	0.79	0.72	0.64	0.59	0.50
KN-110	1.60	1.43	1.32	1.10	0.97	0.88	0.78	0.73	0.62
KN-120	1.74	1.56	1.44	1.20	1.06	0.96	0.85	0.79	0.67
KN-135	1.96	1.76	1.62	1.35	1.19	1.08	0.96	0.89	0.76
KN-160	2.32	2.08	1.92	1.60	1.41	1.28	1.14	1.06	0.90
KN-175	2.54	2.28	2.10	1.75	1.54	1.40	1.24	1.16	0.98

KN Series 光片KN系列

Dimensional parameters 尺寸参数 (mm)



Product model	A	B	C	R	Fig
	Typ	Typ	Typ	Typ	
KN-065	7.50±0.1	7.50±0.1	1.10±0.1	1.00	1
KN-070F1	11.00±0.1	5.00±0.1	1.10±0.1	1.00	1
KN-070F2	11.00±0.1	8.00±0.1	1.10±0.1	1.00	1
KN-070F3	14.00±0.1	4.00±0.1	1.10±0.1	1.00	1
KN-070F4	6.80±0.1	/	1.10±0.1	/	2
KN-075	7.50±0.1	7.50±0.1	1.10±0.1	1.00	1
KN-090	11.00±0.1	8.00±0.1	1.10±0.1	1.00	
KN-110	11.00±0.2	8.00±0.2	1.10±0.1	1.00	1
KN-120	11.00±0.2	8.00±0.2	1.10±0.1	1.00	1
KN-135	11.00±0.2	8.00±0.2	1.10±0.1	1.00	1
KN-160	10.20±0.1	8.60±0.2	1.10±0.1	1.00	1
KN-175	10.20±0.1	8.60±0.2	1.10±0.1	1.00	1

Electrical Characteristics 电气参数

Product model	Vmax (V)	Imax (A)	Ihold (A)	Itrip (A)	Pd Max (W)	Max Time to trip		Resistance	
						Current(A)	Time(S)	Rmin(Ω)	R1max(Ω)
KN-065	16	20	0.65	1.30	2.50	3.25	5.00	0.22	0.42
KN-070F1	30	20	0.70	1.50	2.60	3.50	5.00	0.20	0.45
KN-070F2	30	20	0.70	1.50	2.60	3.50	5.00	0.50	0.85
KN-070F3	30	20	0.70	1.50	2.50	3.50	5.00	0.15	0.30
KN-070F4	30	20	0.70	1.50	2.50	3.50	5.00	0.40	0.75
KN-075	16	20	0.75	1.50	2.60	3.75	5.00	0.20	0.40
KN-090	16	20	0.90	1.80	3.00	4.50	5.00	0.24	0.60
KN-110	16	20	1.10	2.20	3.50	5.50	5.00	0.22	0.51
KN-120	16	20	1.20	2.40	3.50	6.00	4.00	0.14	0.35
KN-135	16	20	1.35	2.70	3.50	6.75	5.00	0.12	0.33
KN-160	16	20	1.60	3.20	3.50	8.00	5.00	0.08	0.18
KN-175	16	20	1.75	2.50	3.50	8.75	4.00	0.06	0.15

KPS Series 电池片KPS系列

Application
Rechargeable battery packs,
Lithium cell and battery packs
Product Features
Low profile, Solid state

产品应用
可充电电池组、锂电池和电池组
产品特点
体积小, 固态

Operation Current
1.0A-2.0A
MAXIMUM Voltage
6V

工作电流
1.0A-2.0A
最大耐压
6V

Temperature Range
-40°C to 85°C
Agency Recognition

工作温度
-40°C to 85°C
认证机构

AGENCY	AGENCY FILE NUMBER
	E312438



Part Numbering System 型号定义



可定制产品
Customizable products

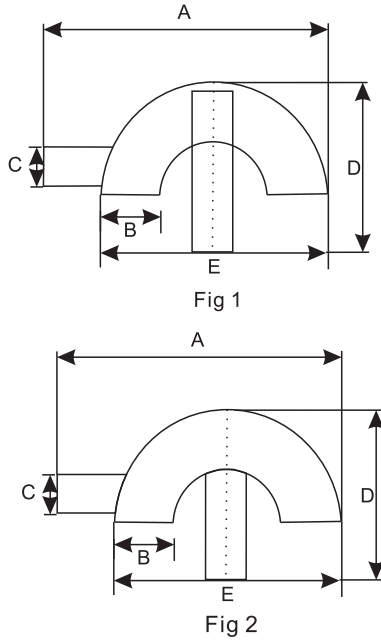
接受来图样定制
Accept customized drawings

Thermal Deration Chart-Ihold 工作电流/温度环境折减表

Product model	Max ambien operating temperature VS.Hold current(Ihold)								
	-40°C	-20°C	0°C	25°C	40°C	50°C	60°C	70°C	85°C
KPS-10(14)	1.45	1.30	1.20	1.00	0.88	0.80	0.71	0.66	0.56
KPS-12(18)	1.74	1.56	1.44	1.20	1.06	0.96	0.85	0.79	0.67
KPS-15(100)	1.45	1.30	1.20	1.00	0.88	0.80	0.71	0.66	0.56
KPS-100C	1.45	1.30	1.20	1.00	0.88	0.80	0.71	0.66	0.56
KPS-100D	1.45	1.30	1.20	1.00	0.88	0.80	0.71	0.66	0.56
KPS-100H	1.45	1.30	1.20	1.00	0.88	0.80	0.71	0.66	0.56
KPS-130C	2.18	1.95	1.80	1.50	1.32	1.20	1.07	0.99	0.84
KPS-20(210)	2.90	2.60	2.40	2.00	1.76	1.60	1.42	1.32	1.12

KPS Series 电池片KPS系列

● Dimensional parameters 尺寸参数(mm)



Product model	A	B	C	D	E	F	G	Fig
	Max	Max	Max	Max	Max	Max	Max	
KPS-10(14)	11.50	2.60	2.20	6.50	9.50	0.60	0.20	1
KPS-12(18)	15.00	3.50	2.20	8.50	12.50	0.60	0.20	1
KPS-15(100)	14.00	2.60	2.20	8.50	12.00	0.60	0.20	1
KPS-100C	15.50	2.60	2.20	9.00	12.50	0.60	0.20	2
KPS-100D	14.00	2.60	2.20	9.00	12.50	0.60	0.20	2
KPS-100H	18.00	3.50	2.20	8.50	12.50	0.60	0.20	1
KPS-130C	24.00	4.00	2.20	13.00	16.50	0.60	0.20	2
KPS-20(210)	23.50	3.50	3.00	12.00	16.50	0.60	0.20	1

● Electrical Characteristics 电气参数

Product model	Vmax (V)	Imax (A)	Ihold (A)	Itrip (A)	Pd Max (W)	Max Time to trip		Resistance	
						Current(A)	Time(S)	Rmin(Ω)	R1max(Ω)
KPS-10(14)	6	40	1.00	3.40	1.50	5.00	15.00	0.04	0.135
KPS-12(18)	6	40	1.20	3.40	1.50	6.00	15.00	0.04	0.150
KPS-15(100)	6	40	1.00	3.40	1.50	5.00	15.00	0.03	0.105
KPS-100C	6	40	1.00	3.40	1.50	5.00	15.00	0.04	0.105
KPS-100D	6	40	1.00	3.40	1.50	5.00	15.00	0.04	0.105
KPS-100H	6	40	1.00	3.40	1.50	5.00	15.00	0.04	0.0975
KPS-130C	6	40	1.50	3.40	2.00	7.50	15.00	0.02	0.075
KPS-20(210)	6	40	2.00	4.00	2.00	10.00	15.00	0.05	0.150

KPT Series 电池片KPT系列

Application
Rechargeable battery packs,
Lithium cell and battery packs
Product Features
Low profile, Solid state

产品应用
可充电电池组、锂电池和电池组
产品特点
体积小, 固态

Operation Current
0.5A-8.0A
MaxIMUM Voltage
16V

工作电流
0.5A-8.0A
最大耐压
16V

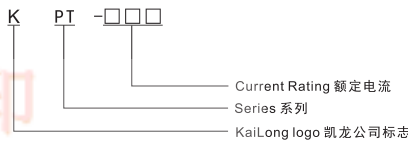
Temperature Range
-40°C to 85°C
Agency Recognition

工作温度
-40°C to 85°C
认证机构

AGENCY	AGENCY FILE NUMBER
	E312438
	B0766790003



Part Numbering System 型号定义



可定制产品
Customizable products

接受来图样定制
Accept customized drawings

● Thermal Deration Chart-Ihold 工作电流/温度环境折减表

Product model	Max ambien operating temperature VS.Hold current(Ihold)								
	-40°C	-20°C	0°C	25°C	40°C	50°C	60°C	70°C	85°C
KPT-050	0.73	0.65	0.60	0.50	0.44	0.40	0.36	0.31	0.28
KPT-050L	0.73	0.65	0.60	0.50	0.44	0.40	0.36	0.31	0.28
KPT-070	1.01	0.90	0.84	0.70	0.62	0.56	0.50	0.46	0.39
KPT-100	1.45	1.30	1.20	1.00	0.88	0.80	0.71	0.66	0.56
KPT-120	1.74	1.56	1.44	1.20	1.06	0.96	0.85	0.79	0.67
KPT-170	2.47	2.21	2.04	1.70	1.50	1.40	1.20	1.12	0.95
KPT-175	2.54	2.28	2.10	1.75	1.54	1.40	1.24	1.16	0.98
KPT-175N	2.54	2.28	2.10	1.75	1.54	1.40	1.24	1.16	0.98
KPT-175L	2.54	2.28	2.10	1.75	1.54	1.40	1.24	1.16	0.98
KPT-175LU	2.54	2.28	2.10	1.75	1.54	1.40	1.24	1.16	0.98
KPT-180	2.61	2.34	2.16	1.80	1.58	1.44	1.28	1.19	1.01
KPT-180L	2.61	2.34	2.16	1.80	1.58	1.44	1.28	1.19	1.01
KPT-190	2.76	2.47	2.28	1.90	1.67	1.52	1.35	1.25	1.06

KPT Series 电池片KPT系列

Product model	Max ambien operating temperature VS.Hold current(Ihold)								
	-40℃	-20℃	0℃	25℃	40℃	50℃	60℃	70℃	85℃
KPT-190N	4.40	4.00	3.60	3.00	2.60	2.40	2.10	1.90	1.40
KPT-190LU	4.40	4.00	3.60	3.00	2.60	2.40	2.10	1.90	1.40
KPT-200	2.90	2.60	2.40	2.00	1.76	1.60	1.42	1.32	1.12
KPT-200L	2.90	2.60	2.40	2.00	1.76	1.60	1.42	1.32	1.12
KPT-210	3.05	2.73	2.52	2.10	1.85	1.68	1.49	1.39	1.18
KPT-240	3.48	3.12	2.88	2.40	2.11	1.92	1.70	1.58	1.34
KPT-260	3.77	3.38	3.12	2.60	2.29	2.08	1.85	1.72	1.46
KPT-260N	3.77	3.38	3.12	2.60	2.29	2.08	1.85	1.72	1.46
KPT-300	4.35	3.90	3.60	3.00	2.64	2.40	2.13	1.98	1.68
KPT-350	5.07	4.55	4.20	3.50	3.08	2.80	2.49	2.31	1.96
KPT-420	6.09	5.46	5.04	4.20	3.54	3.36	2.98	2.77	2.35
KPT-450	6.52	5.85	5.40	4.50	3.96	3.60	3.19	2.97	2.52
KPT-550	7.98	7.15	6.60	5.50	4.84	4.40	3.91	3.63	3.08
KPT-730	10.59	9.49	8.76	7.30	6.42	5.84	5.18	4.82	4.09
KPT-800	11.60	10.40	9.60	8.00	7.04	6.40	5.68	5.28	4.48

● Dimensional parameters 尺寸参数(mm)

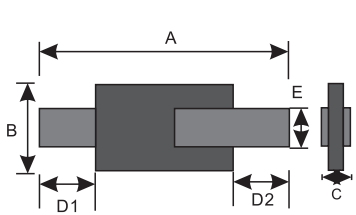


Fig 1

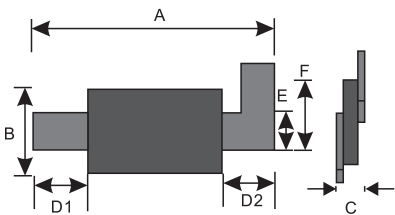


Fig 2

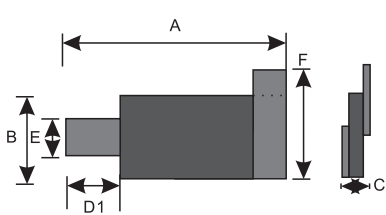


Fig 3

Product model	A	B	C	D1	D2	E	F	Fig
	Max	Max	Typ	Min	Max	Max	Typ	
KPT-050	26.00	4.00	1.00	7.00	7.00	3.00	/	1
KPT-050L	55.00	4.00	1.00	7.00	35.00	3.00	/	1
KPT-070	25.00	6.00	1.00	8.00	8.00	3.00	/	1
KPT-100	25.00	6.00	1.00	8.00	8.00	3.00	/	1

Product model	A	B	C	D1	D2	E	F	Fig
	Max	Max	Typ	Min	Max	Max	Typ	
KPT-120	25.00	6.00	1.00	8.00	8.00	5.00	/	1
KPT-170	22.00	6.00	1.00	7.00	7.00	5.00	/	1
KPT-175	25.00	6.00	1.00	7.00	7.00	5.00	/	1
KPT-175N	20.00	4.00	1.00	5.00	5.00	3.00	/	1
KPT-175L	38.00	6.00	1.00	7.00	20.00	5.00	/	1
KPT-175LU	15.00	4.00	1.00	7.00	/	3.00	7.0	3
KPT-180	25.00	6.00	1.00	7.00	7.00	5.00	/	1
KPT-180L	51.00	6.00	1.00	7.00	35.00	5.00	/	1
KPT-190	25.00	6.00	1.00	7.00	7.00	5.00	/	1
KPT-190N	10.00	4.00	1.00	4.00	4.00	3.00	/	1
KPT-190LU	15.00	4.00	1.00	6.00	6.00	3.00	/	2
KPT-200	28.00	6.00	1.00	7.00	7.00	5.00	/	1
KPT-200L	33.00	6.00	1.00	10.00	10.00	5.00	/	1
KPT-210	28.00	6.00	1.00	7.00	7.00	5.00	/	1
KPT-240	28.00	6.00	1.00	7.00	7.00	5.00	/	1
KPT-260	28.00	6.00	1.00	7.00	7.00	6.00	/	1
KPT-260N	28.00	12.00	1.00	7.00	7.00	6.00	/	1
KPT-300	28.00	15.00	1.00	8.00	8.00	7.00	/	1
KPT-350	30.00	15.00	1.00	8.00	8.00	7.00	/	1
KPT-420	33.00	15.00	1.00	9.00	9.00	7.00	/	1
KPT-450	35.00	15.00	1.00	9.00	9.00	7.00	/	1
KPT-550	38.00	15.00	1.00	9.00	9.00	7.00	/	1
KPT-730	38.00	15.00	1.00	9.00	9.00	7.00	/	1
KPT-800	38.00	15.00	1.00	9.00	9.00	7.00	/	1

● Electrical Characteristics 电气参数

Product model	Vmax (V)	Imax (A)	Ihold (A)	Itrip (A)	Pd Max (W)	Max Time to trip		Resistance	
						Current(A)	Time(S)	Rmin(Ω)	R1max(Ω)
KPT-050	16	40	0.50	1.00	1.50	2.50	5.00	0.39	0.945
KPT-050L	16	40	0.50	1.00	1.60	2.50	5.00	0.39	0.945
KPT-070	16	40	0.70	1.50	1.70	3.50	5.00	0.10	0.300
KPT-100	16	40	1.00	2.00	1.70	5.00	7.00	0.70	0.270

KPT Series 电池片KPT系列

Product model	Vmax (V)	Imax (A)	Ihold (A)	Itrip (A)	Pd Max (W)	Max Time to trip		Resistance	
						Current(A)	Time(S)	Rmin(Ω)	R1max(Ω)
KPT-120	16	40	1.20	2.40	1.70	6.00	5.00	0.05	0.240
KPT-170	16	40	1.70	3.40	1.80	8.50	5.00	0.06	0.180
KPT-175	16	40	1.75	3.50	1.80	8.75	5.00	0.05	0.150
KPT-175N	16	40	1.75	3.50	1.80	8.75	5.00	0.03	0.090
KPT-175L	16	40	1.75	3.50	1.80	8.75	5.00	0.03	0.090
KPT-175LU	16	40	1.75	3.50	1.80	8.75	5.00	0.03	0.090
KPT-180	16	40	1.80	3.60	1.80	9.00	4.00	0.04	0.102
KPT-180L	16	40	1.80	3.60	1.80	9.00	4.00	0.04	0.102
KPT-190	16	40	1.90	3.80	1.80	9.00	4.00	0.03	0.085
KPT-190N	16	40	1.90	3.80	1.80	9.50	4.00	0.03	0.085
KPT-190LU	16	40	1.90	3.80	1.80	9.50	4.00	0.03	0.085
KPT-200	16	40	2.00	4.00	1.90	10.00	4.00	0.025	0.090
KPT-200L	16	40	2.00	4.00	1.90	10.00	4.00	0.025	0.090
KPT-210	16	40	2.10	4.20	1.90	10.50	5.00	0.016	0.090
KPT-240	16	40	2.40	4.80	2.00	12.00	5.00	0.020	0.090
KPT-260	16	40	2.60	5.20	2.00	13.00	5.00	0.025	0.075
KPT-260N	16	40	2.60	5.20	2.00	13.00	4.00	0.025	0.075
KPT-300	16	100	3.00	6.00	2.10	15.00	5.00	0.025	0.075
KPT-350	16	100	3.50	7.00	2.20	17.50	5.00	0.017	0.0465
KPT-420	16	100	4.20	8.40	2.30	21.00	6.00	0.011	0.0345
KPT-450	16	100	4.50	9.00	2.40	22.50	5.00	0.010	0.030
KPT-550	16	100	5.50	11.00	2.50	27.50	6.00	0.009	0.024
KPT-730	16	100	7.30	14.60	2.60	36.50	6.00	0.0066	0.018
KPT-800	16	100	8.00	16.00	3.00	40.00	6.00	0.004	0.012

1. 工作环境温度-40℃~85℃。

2. 超过本产品的适用条件或其它不适当的使用有可能导致损害，甚至可能引起电击穿或火苗。

3. PPTC组件是为电路中偶尔出现过流而设计，不建议用在连续且持续过流的电路中。

4. 避免PPTC组件接触化学溶剂，长时间的接触将损坏组件性能。

5. 在跳闸状态下，产品的表面最高温度为125℃。
1. Working environment temperature - 40-85 C.

2. Exceeding the applicable conditions or other inappropriate use of the product may cause damage or even electric breakdown or fire.

3. PPTC components are designed for occasional overcurrent in circuits, and are not recommended for continuous and continuous overcurrent circuits.

4. Avoid contact with chemical solvents for PPTC components. Long-term contact will damage the performance of components.

5. Under tripping condition, the highest surface temperature of the product is 125 C.



Warning:

KH Series 环形电池片KH系列

Application
Rechargeable battery packs,
Lithium cell and battery packs

Product Features
Low profile,Solid state

产品应用
可充电电池组、锂电池和电池组

产品特点
体积小, 固态

Operation Current
2.0A-4.5A

Maximum Voltage
15V

工作电流
2.0A-4. 5A

最大耐压
15V

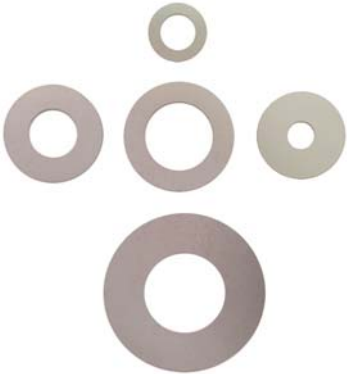
Temperature Range
-40℃to85℃

Agency Recognition

工作温度
-40℃to85℃

认证机构

AGENCY	AGENCY FILE NUMBER
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	B0766790003



Part Numbering System 型号定义



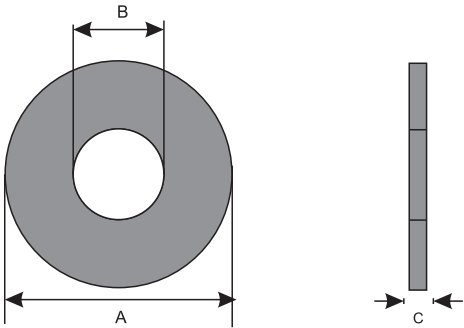
可定制产品
Customizable products

接受来图样定制
Accept customized drawings

Thermal Deration Chart-Ihold 工作电流/温度环境折减表

Product model	Max ambien operating temperature VS.Hold current(Ihold)								
	-40℃	-20℃	0℃	25℃	40℃	50℃	60℃	70℃	85℃
KH-1020	1.45	1.30	1.20	1.00	0.88	0.80	0.71	0.66	0.56
KH-1420	2.90	2.60	2.40	2.00	1.76	1.60	1.42	1.32	1.12
KH-1520	2.90	2.60	2.40	2.00	1.76	1.60	1.42	1.32	1.12
KH-1620	2.90	2.60	2.40	2.00	1.76	1.60	1.42	1.32	1.12
KH-1720	2.90	2.60	2.40	2.00	1.76	1.60	1.42	1.32	1.12
KH-1820	2.90	2.60	2.40	2.00	1.76	1.60	1.42	1.32	1.12
KH-1840	3.63	3.25	3.00	2.50	2.20	2.00	1.77	1.65	1.40
KH-14(1,2,3)	2.90	2.60	2.40	2.00	1.76	1.60	1.42	1.32	1.12
KH-15	2.90	2.60	2.40	2.00	1.76	1.60	1.42	1.32	1.12
KH-16(1,2,3)	2.90	2.60	2.40	2.00	1.76	1.60	1.42	1.32	1.12
KH-17	2.90	2.60	2.40	2.00	1.76	1.60	1.42	1.32	1.12
KH-18(1,2,3)	3.63	3.25	3.00	2.50	2.20	2.00	1.77	1.65	1.40
KH-20	3.63	3.25	3.00	2.50	2.20	2.00	1.77	1.65	1.40
KH-22	5.80	5.20	4.80	4.00	3.52	3.20	2.84	2.64	2.24
KH-26	6.52	5.85	5.40	4.50	3.96	3.60	3.20	2.97	2.52

● Dimensional parameters 尺寸参数(mm)



Product model	A	B	C
	Max	Max	Max
KH-1020	8.55	4.45	0.35
KH-1420	12.50	8.00	0.33
KH-1520	13.10	5.00	0.33
KH-1620	14.80	9.50	0.33
KH-1720	15.50	11.00	0.33
KH-1820	16.40	10.00	0.33
KH-1840	16.50	10.00	0.33
KH-14-1	12.18	7.33	0.33
KH-14-2	12.43	7.53	0.33
KH-14-3	11.98	4.03	0.33
KH-14-4	11.98	6.03	0.33
KH-15	13.09	4.03	0.38
KH-16-1	14.43	6.33	0.33
KH-16-2	14.43	7.03	0.36
KH-16-3	14.13	6.33	0.33
KH-17	14.73	9.63	0.33
KH-18-1	16.33	10.03	0.33
KH-18-2	16.53	10.03	0.33
KH-18-3	16.63	10.03	0.33
KH-20	18.69	10.83	0.33
KH-22	20.05	12.03	0.33
KH-26	24.13	12.13	0.33

● Electrical Characteristics 电气参数

Product model	Vmax (V)	Imax (A)	Ihold (A)	Itrip (A)	Pd Max (W)	Max Time to trip		Resistance	
						Current(A)	Time(S)	Rmin(Ω)	R1max(Ω)
KH-1020	6	40	2.00	4.50	1.50	5.00	15.00	0.03	0.075
KH-1420	15	40	2.00	4.50	1.50	6.00	14.00	0.017	0.0525
KH-1520	15	40	2.00	4.50	1.70	6.00	12.00	0.016	0.048
KH-1620	15	40	2.00	4.50	1.70	6.00	16.00	0.015	0.045
KH-1720	15	40	2.00	5.50	2.00	6.00	18.00	0.015	0.045
KH-1820	15	40	2.50	5.50	2.00	10.00	6.00	0.013	0.0375
KH-1840	15	40	2.00	5.50	2.00	10.00	6.00	0.015	0.0405
KH-14-1	15	40	2.00	4.50	1.50	10.00	5.00	0.010	0.0525
KH-14-2	15	40	2.00	4.50	1.50	10.00	5.00	0.010	0.0525
KH-14-3	15	40	2.00	4.50	1.50	10.00	5.00	0.010	0.0525
KH-14-4	15	40	2.00	4.50	1.50	10.00	5.00	0.010	0.0525
KH-15	15	40	2.00	4.50	1.70	10.00	5.00	0.015	0.0525
KH-16-1	15	40	2.00	4.50	1.70	10.00	5.00	0.015	0.0525
KH-16-2	15	40	2.00	4.50	1.70	10.00	5.00	0.015	0.0525
KH-16-3	15	40	2.00	4.50	1.70	10.00	5.00	0.015	0.0525
KH-17	15	40	2.50	4.50	2.00	10.00	5.00	0.015	0.0525
KH-18-1	15	40	2.50	5.50	2.00	12.50	5.00	0.010	0.030
KH-18-2	15	40	2.50	5.50	2.00	12.50	5.00	0.010	0.030
KH-18-3	15	40	2.50	5.50	2.00	12.50	5.00	0.010	0.030
KH-20	15	40	2.50	6.00	3.00	12.50	8.00	0.010	0.030
KH-22	15	40	4.00	8.00	4.00	20.00	5.00	0.011	0.024
KH-26	15	40	4.50	10.00	3.00	20.00	5.00	0.009	0.021



Warning:

- 工作环境温度-40℃~85℃。
- 超过本产品的适用条件或其它不适当的使用有可能导致损坏，甚至可能引起电击穿或火苗。
- PPTC组件是为电路中偶尔出现过流而设计，不建议用在连续且持续过流的电路中。
- 避免PPTC组件接触化学溶剂，长时间的接触将损坏组件性能。
- 在跳闸状态下，产品的表面最高温度为125℃。
- Working environment temperature - 40-85 C.
- Exceeding the applicable conditions or other inappropriate use of the product may cause damage or even electric breakdown or fire.
- PPTC components are designed for occasional overcurrent in circuits, and are not recommended for continuous and continuous overcurrent circuits.
- Avoid contact with chemical solvents for PPTC components. Long-term contact will damage the performance of components.
- Under tripping condition, the highest surface temperature of the product is 125 C.

SMD0603 Series 贴片0603系列

Application
All high-density boards
Product Features
Small surface mountable, Solid state,
Faster time to trip than standard SMD
devices, Lower resistance than standard
SMD devices

产品应用
所有高密度板
产品特点
体积小, 动作快, 低阻值

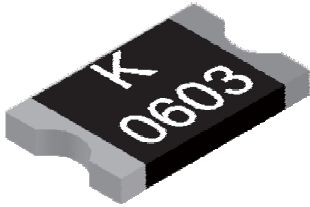
Operation Current
0.10A-1.00A
MaxIMUM Voltage
6V-15V_{DC}

工作电流
0.10A-1.00A
最大耐压
6V-15V_{DC}

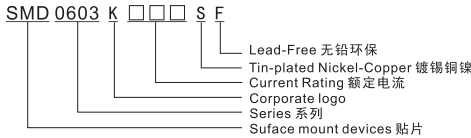
Temperature Range
-40°C to 85°C
Agency Recognition

工作温度
-40°C to 85°C
认证单位

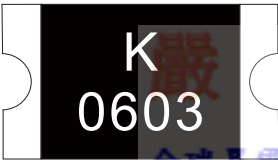
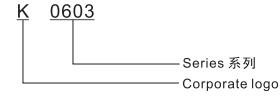
AGENCY	AGENCY FILE NUMBER
	E486890



Part Numbering System 型号定义



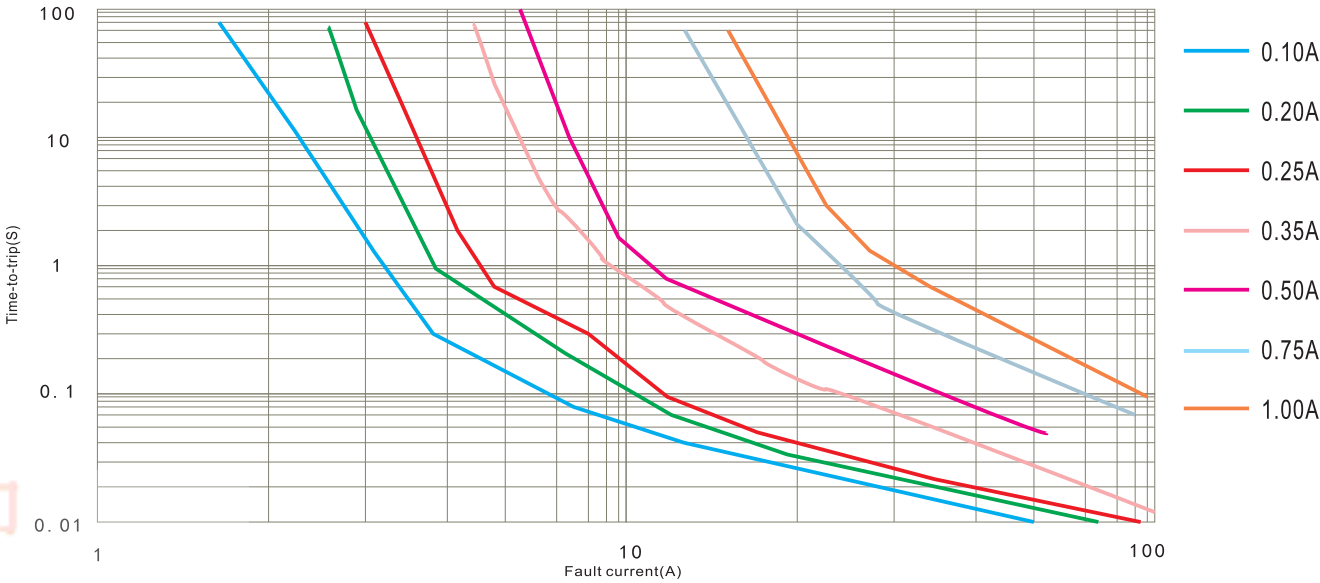
Part Marking System 标识定义



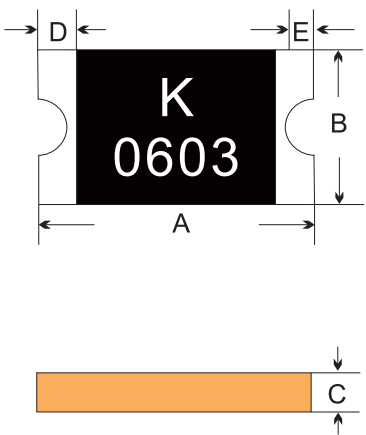
Thermal Deration Chart-Ihold 工作电流/温度环境折减表

Product model	Max ambien operating temperature VS.Hold current(Ihold)								
	-40°C	-20°C	0°C	25°C	40°C	50°C	60°C	70°C	85°C
SMD0603K010SF	0.13	0.12	0.11	0.10	0.08	0.07	0.06	0.05	0.03
SMD0603K020SF	0.27	0.25	0.23	0.20	0.17	0.14	0.12	0.10	0.07
SMD0603K025SF	0.32	0.29	0.27	0.25	0.21	0.18	0.16	0.14	0.10
SMD0603K035SF	0.47	0.41	0.38	0.35	0.29	0.26	0.24	0.20	0.14
SMD0603K050SF	0.67	0.59	0.54	0.50	0.41	0.37	0.34	0.29	0.20
SMD0603K075SF	0.98	0.86	0.81	0.75	0.62	0.51	0.46	0.39	0.27
SMD0603K100SF	1.33	1.18	1.08	1.00	0.80	0.74	0.68	0.57	0.40

PPTC在25°C±2°C动作保护时间曲线表
Typical Time-To-Trip at 25°C±2°C



Dimensional parameters 尺寸参数



Product model	A	B	C	D	E
	Max	Max	Max	Min	Min
SMD0603K010SF	1.85	1.05	1.00	0.15	0.10
SMD0603K020SF	1.85	1.05	1.00	0.15	0.10
SMD0603K025SF	1.85	1.05	1.00	0.15	0.10
SMD0603K035SF	1.85	1.05	1.00	0.15	0.10
SMD0603K050SF	1.85	1.05	1.00	0.15	0.10
SMD0603K075SF	1.85	1.05	1.00	0.15	0.10
SMD0603K100SF	1.85	1.05	1.00	0.15	0.10

SMD0603 Series贴片0603系列

Electrical Characteristics 电气参数

Product model	Vmax (V)	Imax (A)	Ihold (A)	Itrip (A)	Pd Max (W)	Max Time to trip		Resistance	
						Current(A)	Time(S)	Rmin(Ω)	R1max(Ω)
SMD0603K010SF	15	40	0.10	0.30	0.50	0.50	1.00	0.90	6.00
SMD0603K020SF	9	40	0.20	0.50	0.50	1.00	0.60	0.55	3.50
SMD0603K025SF	9	40	0.25	0.55	0.50	8.00	0.08	0.50	3.00
SMD0603K035SF	6	40	0.35	0.75	0.50	8.00	0.10	0.20	1.40
SMD0603K050SF	6	40	0.50	1.00	0.50	8.00	0.10	0.10	0.80
SMD0603K075SF	6	40	0.75	1.40	0.50	8.00	0.10	0.06	0.45
SMD0603K100SF	6	40	1.00	2.00	0.50	8.00	0.10	0.04	0.30

Package Information 包装数量

型号Model	包装数量Standard Package
SMD0603 HF Series	5, 000PCS/REEL

8毫米磁带，7英寸卷轴每EIA-481-1
8 mm tape, 7 inch reel per EIA-481-1

Warning:

1. 工作环境温度-40℃~85℃。
2. 超过本产品的适用条件或其它不适当的使用有可能导致损害，甚至可能引起电击穿或火苗。
3. PPTC组件是为电路中偶尔出现过流而设计，不建议用在连续且持续过流的电路中。
4. 避免PPTC组件接触化学溶剂，长时间的接触将损坏组件性能。
5. 在跳闸状态下，产品的表面最高温度为125℃。
1. Working environment temperature - 40 -85 C.
2. Exceeding the applicable conditions or other inappropriate use of the product may cause damage or even electric breakdown or fire.
3. PPTC components are designed for occasional overcurrent in circuits, and are not recommended for continuous and continuous overcurrent circuits.
4. Avoid contact with chemical solvents for PPTC components. Long-term contact will damage the performance of components.
5. Under tripping condition, the highest surface temperature of the product is 125 C.

SMD0805 Series贴片0805系列

Application
All high-density boards
Product Features
Small surface mountable,Solid state,
Faster time to trip than standard SMD
devices,Lower resistance than standard
SMD devices

产品应用
所有高密度板
产品特点
体积小，动作快,低阻值

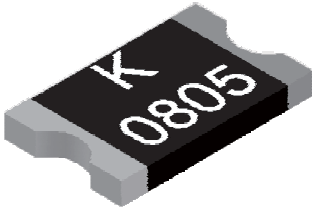
Operation Current
0.1A-1.25A
MaxIMUM Voltage
6V-15V

工作电流
0. 1A-1. 25A
最大耐压
6V-15V

Temperature Range
-40℃to85℃
Agency Recognition

工作温度
-40℃to85℃
认证单位

AGENCY	AGENCY FILE NUMBER
	E486890



Part Numbering System 型号定义

SMD 0805 K □ □ □ S F

Lead-Free 无铅环保
Tin-plated Nickel-Copper 镀锡铜镍
Current Rating 额定电流
Corporate logo
Series 系列
Surface mount devices 贴片

Part Marking System 标识定义

K 0805

Series 系列
Corporate logo

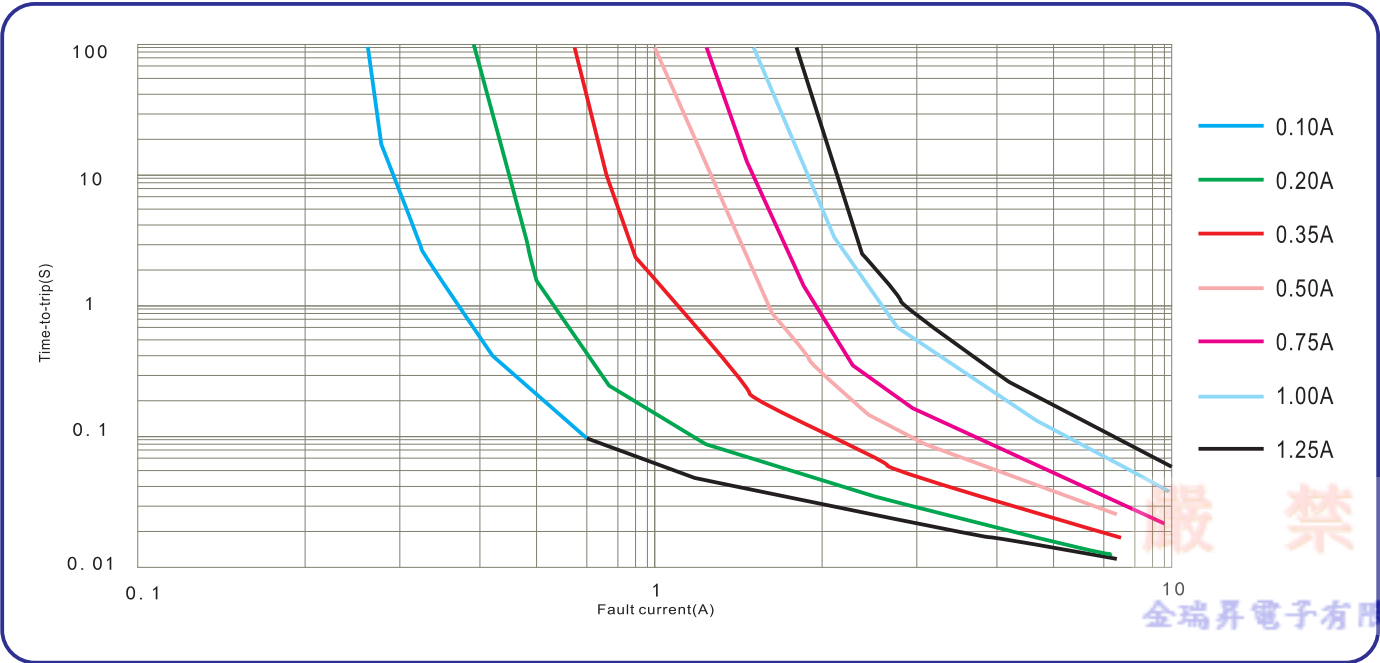


Thermal Deration Chart-Ihold 工作电流/温度环境折减表

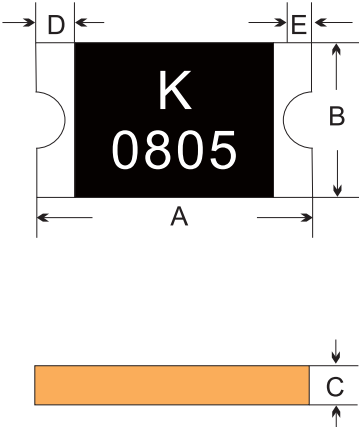
Product model	Max ambien operating temperature VS.Hold current(Ihold)								
	-40℃	-20℃	0℃	25℃	40℃	50℃	60℃	70℃	85℃
SMD0805K010SF	0.13	0.12	0.11	0.10	0.08	0.07	0.06	0.05	0.03
SMD0805K020SF	0.27	0.25	0.23	0.20	0.17	0.14	0.12	0.10	0.07
SMD0805K035SF	0.47	0.41	0.38	0.35	0.29	0.26	0.24	0.20	0.14
SMD0805K050SF	0.67	0.59	0.54	0.50	0.41	0.37	0.34	0.29	0.20
SMD0805K075SF	0.98	0.86	0.81	0.75	0.62	0.51	0.46	0.39	0.27
SMD0805K100SF	1.33	1.18	1.08	1.00	0.80	0.74	0.68	0.57	0.40
SMD0805K110SF	1.50	1.37	1.27	1.10	0.90	0.81	0.72	0.60	0.42
SMD0805K125SF	1.70	1.56	1.42	1.25	1.02	0.93	0.81	0.69	0.52

SMD0805 Series 贴片0603系列

● PPTC在25°C ±2°C动作保护时间曲线表
Typical Time-To-Trip at 25°C ±2°C



● Dimensional parameters 尺寸参数

	Product model	A	B	C	D	E
		Max	Max	Max	Min	Min
	SMD0805K010SF	2.20	1.50	1.00	0.20	0.10
	SMD0805K020SF	2.20	1.50	1.00	0.20	0.10
	SMD0805K035SF	2.20	1.50	1.00	0.20	0.10
	SMD0805K050SF	2.20	1.50	1.00	0.20	0.10
	SMD0805K075SF	2.20	1.50	1.00	0.20	0.10
	SMD0805K100SF	2.20	1.50	1.00	0.20	0.10
	SMD0805K110SF	2.20	1.50	1.00	0.20	0.10
	SMD0805K125SF	2.20	1.50	1.00	0.20	0.10

● Electrical Characteristics 电气参数

Product model	Vmax (V)	Imax (A)	Ihold (A)	Itrip (A)	Pd Max (W)	Max Time to trip		Resistance	
						Current(A)	Time(S)	Rmin(Ω)	R1max(Ω)
SMD0805K010SF	15	100	0.10	0.30	0.50	0.50	1.50	1.00	6.00
SMD0805K020SF	9	100	0.20	0.50	0.50	8.00	0.02	0.65	3.50
SMD0805K035SF	6	100	0.35	0.75	0.50	8.00	0.10	0.25	1.20
SMD0805K050SF	6	100	0.50	1.00	0.50	8.00	0.10	0.15	0.85
SMD0805K075SF	6	40	0.75	1.50	0.60	8.00	0.20	0.090	0.385
SMD0805K100SF	6	100	1.00	1.95	0.60	8.00	0.30	0.06	0.23
SMD0805K110SF	6	100	1.10	2.20	0.60	8.00	0.30	0.06	0.21
SMD0805K125SF	6	100	1.25	2.50	1.50	8.00	0.60	0.03	0.14

● Package Information 包装数量

型号Model	包装数量Standard Package
SMD0805K010.020.035.050.SF	5, 000PCS/REEL
SMD0805K075.100.110.125.SF	4, 000PCS/REEL

8毫米磁带，7英寸卷轴每EIA-481-1
8 mm tape, 7 inch reel per EIA-481-1



Warning:

1. 工作环境温度-40°C~85°C。
2. 超过本产品的适用条件或其它不适当的使用有可能导致损害，甚至可能引起电击穿或火苗。
3. PPTC组件是为电路中偶尔出现过流而设计，不建议用在连续且持续过流的电路中。
4. 避免PPTC组件接触化学溶剂，长时间的接触将损坏组件性能。
5. 在跳闸状态下，产品的表面最高温度为125°C。
1. Working environment temperature - 40-85 C.
2. Exceeding the applicable conditions or other inappropriate use of the product may cause damage or even electric breakdown or fire.
3. PPTC components are designed for occasional overcurrent in circuits, and are not recommended for continuous and continuous overcurrent circuits.
4. Avoid contact with chemical solvents for PPTC components. Long-term contact will damage the performance of components.
5. Under tripping condition, the highest surface temperature of the product is 125 C.

自恢复保险丝 Polymeric Positive Temperature Coefficient

SMD1206 Series 贴片1206系列

Application
All high-density boards
Product Features
Small surface mountable, Solid state,
Faster time to trip than standard SMD
devices, Lower resistance than standard
SMD devices

产品应用
所有高密度板
产品特点
体积小, 动作快, 低阻值

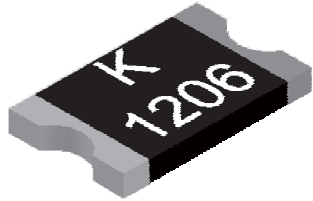
Operation Current
0.05A-3.00A
MaxIMUM Voltage
6V-60V

工作电流
0.05A-3.00A
最大耐压
6V-60V

Temperature Range
-40°C to 85°C
Agency Recognition

工作温度
-40°C to 85°C
认证单位

AGENCY	AGENCY FILE NUMBER
	E486890

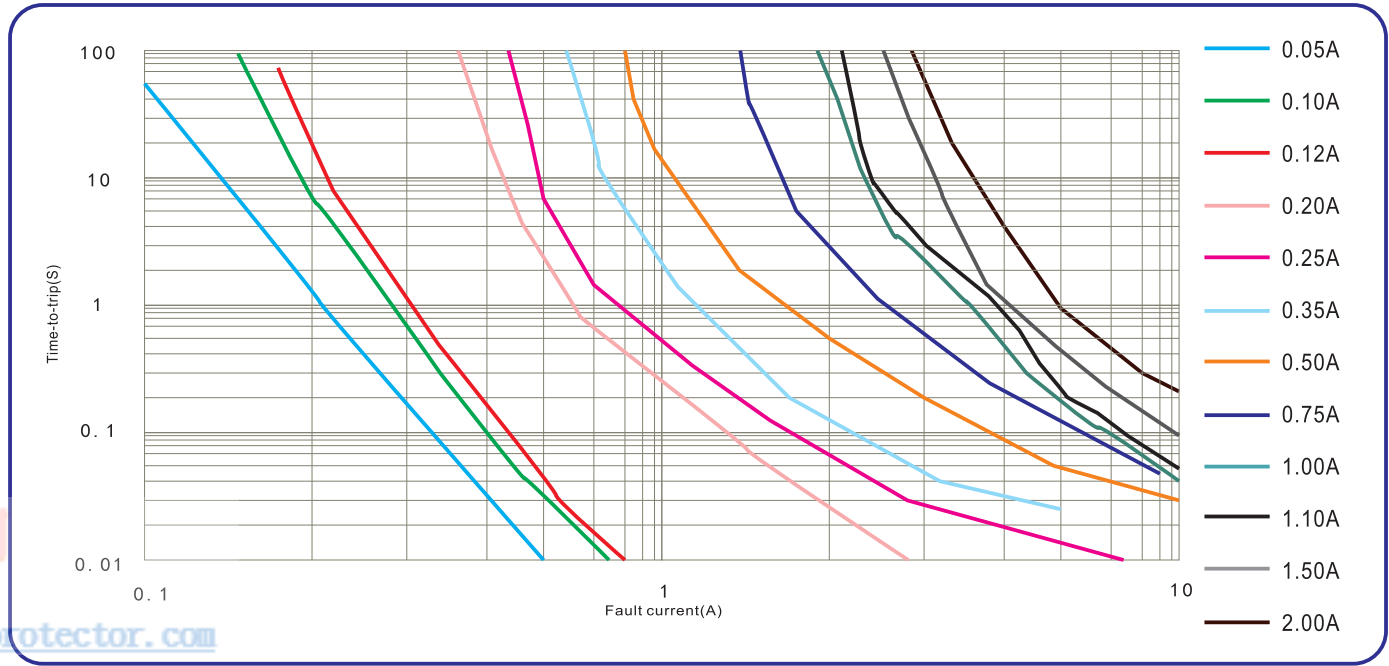


Thermal Deration Chart-Ihold 工作电流/温度环境折减表

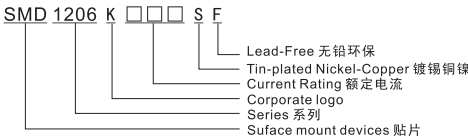
Product model	Max ambien operating temperature VS.Hold current(Ihold)								
	-40°C	-20°C	0°C	25°C	40°C	50°C	60°C	70°C	85°C
SMD1206K005SF	0.074	0.066	0.058	0.05	0.0425	0.0375	0.035	0.03	0.0275
SMD1206K010SF	0.48	0.132	0.116	0.10	0.085	0.075	0.07	0.06	0.055
SMD1206K012SF	0.18	0.16	0.14	0.12	0.10	0.09	0.08	0.07	0.07
SMD1206K020SF	0.30	0.26	0.23	0.20	0.17	0.15	0.14	0.12	0.11
SMD1206K025SF	0.37	0.33	0.29	0.25	0.22	0.20	0.17	0.15	0.12
SMD1206K035SF	0.50	0.45	0.40	0.35	0.30	0.27	0.24	0.21	0.15
SMD1206K050SF	0.71	0.64	0.57	0.50	0.42	0.39	0.35	0.31	0.25
SMD1206K075SF	1.14	1.01	0.88	0.75	0.65	0.59	0.54	0.49	0.41
SMD1206K100SF	1.45	1.31	1.15	1.00	0.84	0.77	0.69	0.61	0.48
SMD1206K110SF	1.60	1.45	1.30	1.10	0.95	0.80	0.72	0.66	0.55
SMD1206K150SF	2.18	1.94	1.72	1.50	1.28	1.17	1.06	0.96	0.77
SMD1206K200SF	2.88	2.63	2.34	2.00	1.74	1.58	1.42	1.17	0.93
SMD1206K250SF	3.43	3.22	2.93	2.50	2.23	2.03	1.87	1.57	1.35
SMD1206K260SF	3.56	3.35	3.05	2.60	2.31	2.11	1.94	1.63	1.40
SMD1206K300SF	4.11	3.86	3.52	3.00	2.68	2.44	2.24	1.88	1.62

Polymeric Positive Temperature Coefficient 自恢复保险丝

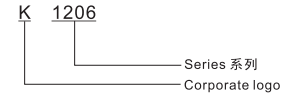
PPTC在25°C±2°C动作保护时间曲线表
Typical Time-To-Trip at 25°C±2°C



Part Numbering System 型号定义



Part Marking System 标识定义



Package Information 包装数量

型号Model	包装数量Standard Package
SMD1206K005.010.012.150.200.260.300SF	3, 500PCS/REEL
SMD1206K020.025.035.050.075.100.110SF	4, 500PCS/REEL

8毫米磁带, 7英寸卷轴每EIA-481-1
8 mm tape, 7 inch reel per EIA-481-1

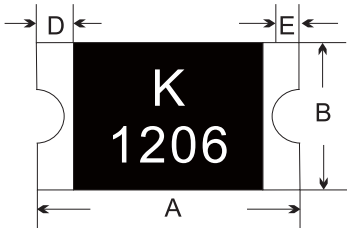
SMD1206 Series

贴片1206系列

●

Dimensional parameters 尺寸参数

Product model	A	B	C	D	E
	Max	Max	Max	Min	Min
SMD1206K005SF	3.50	1.80	1.30	0.15	0.10
SMD1206K010SF	3.50	1.80	1.30	0.15	0.10
SMD1206K012SF	3.50	1.80	1.30	0.15	0.10
SMD1206K020SF	3.50	1.80	1.00	0.15	0.10
SMD1206K025SF	3.50	1.80	1.00	0.15	0.10
SMD1206K035SF	3.50	1.80	1.00	0.15	0.10
SMD1206K035SF30V	3.50	1.80	1.60	0.15	0.10
SMD1206K050SF	3.50	1.80	1.00	0.15	0.10
SMD1206K050SF13.2V	3.50	1.80	1.00	0.15	0.10
SMD1206K050SF16V	3.50	1.80	1.40	0.15	0.10
SMD1206K050SF30V	3.50	1.80	1.60	0.15	0.10
SMD1206K075SF	3.50	1.80	0.80	0.15	0.10
SMD1206K075SF16V	3.50	1.80	1.40	0.15	0.10
SMD1206K075SF30V	3.50	1.80	1.60	0.15	0.10
SMD1206K100SF	3.50	1.80	0.80	0.15	0.10
SMD1206K100SF16V	3.50	1.80	1.10	0.15	0.10
SMD1206K110SF	3.50	1.80	0.80	0.15	0.10
SMD1206K150SF	3.50	1.80	1.20	0.15	0.10
SMD1206K150SF13.2V	3.50	1.80	1.40	0.15	0.10
SMD1206K200SF	3.50	1.80	1.40	0.15	0.10
SMD1206K200SF12V	3.50	1.80	1.60	0.15	0.10
SMD1206K250SF	3.60	1.90	1.60	0.15	0.10
SMD1206K260SF	3.50	1.80	1.60	0.15	0.10
SMD1206K300SF	3.50	1.80	1.60	0.15	0.10



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●

Electrical Characteristics 电气参数

Product model	Vmax (V)	Imax (A)	Ihold (A)	Itrip (A)	Pd Max (W)	Max Time to trip		Resistance	
						Current(A)	Time(S)	Rmin(Ω)	R1max(Ω)
SMD1206K005SF	60	100	0.05	0.15	0.40	0.25	1.50	3.60	50.00
SMD1206K010SF	60	100	0.10	0.25	0.40	0.50	1.00	1.60	15.00
SMD1206K012SF	60	100	0.12	0.29	0.40	0.50	1.00	1.60	15.00
SMD1206K020SF	30	100	0.20	0.46	0.60	1.00	0.60	0.60	2.60
SMD1206K025SF	16	100	0.25	0.50	0.60	8.00	0.08	0.35	2.50
SMD1206K035SF	6/30	100	0.35	0.75	0.60	8.00	0.10	0.25	1.30
SMD1206K050SF	6/13.2/16/30	100	0.50	1.00	0.60	8.00	0.10	0.15	0.70
SMD1206K075SF	6/16/30	100	0.75	1.50	0.60	8.00	0.20	0.09	0.50
SMD1206K100SF	6/16	100	1.00	1.80	0.60	8.00	0.30	0.055	0.27
SMD1206K110SF	6	100	1.10	2.20	0.60	8.00	0.30	0.05	0.25
SMD1206K150SF	6/13.2	100	1.50	3.00	0.80	8.00	0.30	0.04	0.13
SMD1206K200SF	6/12	100	2.00	3.50	0.80	8.00	1.50	0.018	0.08
SMD1206K250SF	6	35	2.50	5.20	0.80	8.00	2.00	0.01	0.06
SMD1206K260SF	6	100	2.60	5.20	0.80	8.00	2.00	0.015	0.07
SMD1206K300SF	6	100	3.00	6.00	0.80	8.00	4.00	0.01	0.055



Warning:

1. 工作环境温度-40℃~85℃。
2. 超过本产品的适用条件或其它不适当的使用有可能导致损害，甚至可能引起电击穿或火苗。
3. PPTC组件是为电路中偶尔出现过流而设计，不建议用在连续且持续过流的电路中。
4. 避免PPTC组件接触化学溶剂，长时间的接触将损坏组件性能。
5. 在跳闸状态下，产品的表面最高温度为125℃。
1. Working environment temperature - 40-85 C.
2. Exceeding the applicable conditions or other inappropriate use of the product may cause damage or even electric breakdown or fire.
3. PPTC components are designed for occasional overcurrent in circuits, and are not recommended for continuous and continuous overcurrent circuits.
4. Avoid contact with chemical solvents for PPTC components. Long-term contact will damage the performance of components.
5. Under tripping condition, the highest surface temperature of the product is 125 C.

SMD1210 Series 贴片1210系列

Application
All high-density boards
Product Features
Small surface mountable, Solid state,
Faster time to trip than standard SMD
devices, Lower resistance than standard
SMD devices

产品应用
所有高密度板
产品特点
体积小, 动作快, 低阻值

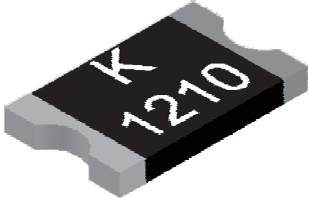
Operation Current
0.03A-2.6A
MaxIMUM Voltage
6V-30V

工作电流
0.03A-2.6A
最大耐压
6V-30V

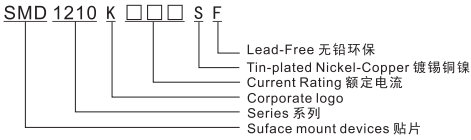
Temperature Range
-40°C to 85°C
Agency Recognition

工作温度
-40°C to 85°C
认证单位

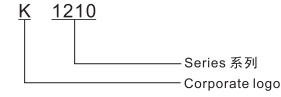
AGENCY	AGENCY FILE NUMBER
	E486890



Part Numbering System 型号定义



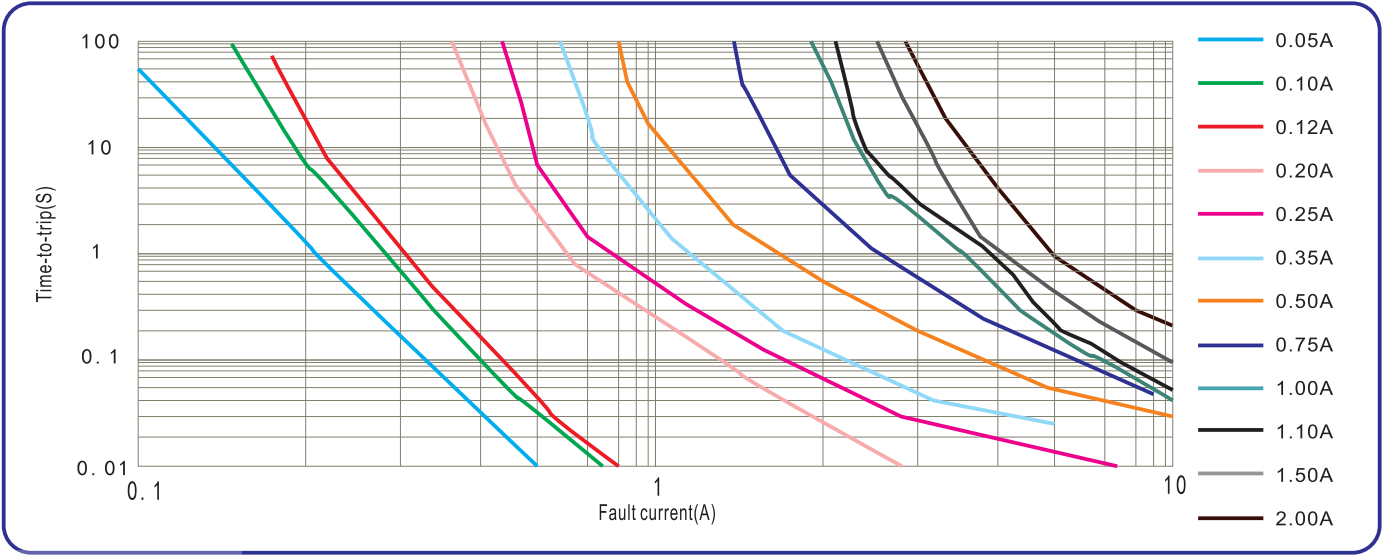
Part Marking System 标识定义



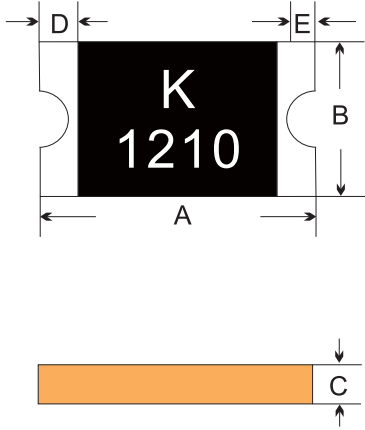
Thermal Deration Chart-Ihold 工作电流/温度环境折减表

Product model	Max ambient operating temperature VS. Hold current(Ihold)								
	-40°C	-20°C	0°C	25°C	40°C	50°C	60°C	70°C	85°C
SMD1210K003SF	0.048	0.042	0.036	0.030	0.024	0.021	0.018	0.015	0.009
SMD1210K005SF	0.08	0.07	0.06	0.05	0.04	0.035	0.03	0.025	0.02
SMD1210K010SF	0.16	0.14	0.12	0.10	0.08	0.07	0.06	0.05	0.03
SMD1210K020SF	0.29	0.26	0.22	0.20	0.16	0.14	0.13	0.11	0.08
SMD1210K035SF	0.47	0.45	0.40	0.35	0.33	0.28	0.24	0.21	0.18
SMD1210K050SF	0.76	0.67	0.58	0.50	0.43	0.40	0.36	0.32	0.28
SMD1210K075SF	1.00	0.97	0.86	0.75	0.64	0.59	0.54	0.48	0.40
SMD1210K110SF	1.69	1.48	1.29	1.10	0.88	0.76	0.65	0.57	0.43
SMD1210K150SF	2.13	1.92	1.71	1.50	1.26	1.14	1.01	0.89	0.71
SMD1210K175SF	2.54	2.30	2.02	1.75	1.47	1.33	1.18	1.05	0.86
SMD1210K200SF	2.90	2.63	2.31	2.00	1.68	1.52	1.35	1.20	0.98
SMD1210K260SF	3.43	3.22	2.93	2.60	2.23	2.03	1.87	1.57	1.35

PPTC在25°C±2°C动作保护时间曲线表
Typical Time-To-Trip at 25°C±2°C



Dimensional parameters 尺寸参数



Product model	A	B	C	D	E
	Max	Max	Max	Min	Min
SMD1210K003SF	3.43	2.80	0.80	0.30	0.10
SMD1210K005SF	3.43	2.80	0.80	0.30	0.10
SMD1210K010SF	3.43	2.80	0.80	0.30	0.10
SMD1210K020SF	3.43	2.80	0.80	0.30	0.10
SMD1210K035SF	3.43	2.80	0.80	0.30	0.10
SMD1210K050SF	3.43	2.80	0.80	0.30	0.10
SMD1210K075SF	3.43	2.80	0.80	0.30	0.10
SMD1210K110SF	3.43	2.80	0.80	0.30	0.10
SMD1210K150SF	3.43	2.80	0.80	0.30	0.10
SMD1210K175SF	3.43	2.80	1.20	0.30	0.10
SMD1210K200SF	3.43	2.80	1.20	0.30	0.10
SMD1210K260SF	3.43	2.80	1.20	0.30	0.10

SMD1210 Series 贴片1210系列

Electrical Characteristics 电气参数

Product model	Vmax (V)	Imax (A)	Ihold (A)	Itrip (A)	Pd Max (W)	Max Time to trip		Resistance	
						Current(A)	Time(S)	Rmin(Ω)	R1max(Ω)
SMD1210K003SF	30	100	0.03	0.09	0.60	0.15	1.50	5.00	75.00
SMD1210K005SF	30	100	0.05	0.15	0.60	0.25	1.50	2.80	50.00
SMD1210K010SF	30	100	0.10	0.30	0.60	0.50	0.60	1.60	15.00
SMD1210K020SF	30	100	0.20	0.40	0.60	8.00	0.02	0.40	5.00
SMD1210K035SF	6	100	0.35	0.75	0.60	8.00	0.20	0.20	1.30
SMD1210K050SF	13.2	100	0.50	1.00	0.60	8.00	0.10	0.18	0.90
SMD1210K075SF	6	100	0.75	1.50	0.60	8.00	0.10	0.07	0.40
SMD1210K110SF	6	100	1.10	2.20	0.60	8.00	0.30	0.05	0.21
SMD1210K150SF	6	100	1.50	3.00	0.60	8.00	0.50	0.03	0.11
SMD1210K175SF	6	100	1.75	3.50	0.80	8.00	0.60	0.02	0.08
SMD1210K200SF	6	100	2.00	4.00	0.80	8.00	1.00	0.15	0.07
SMD1210K260SF	6	100	2.60	5.20	0.80	8.00	2.00	0.01	0.06

Package Information 包装数量

型号Model	包装数量Standard Package
SMD1210 HF Series	4,000PCS/REEL

8毫米磁带，7英寸卷轴每EIA-481-1
8 mm tape, 7 inch reel per EIA-481-1



Warning:

1. 工作环境温度-40℃~85℃。
2. 超过本产品的适用条件或其它不适当的使用有可能导致损害，甚至可能引起电击穿或火苗。
3. PPTC组件是为电路中偶尔出现过流而设计，不建议用在连续且持续过流的电路中。
4. 避免PPTC组件接触化学溶剂，长时间的接触将损坏组件性能。
5. 在跳闸状态下，产品的表面最高温度为125℃。
1. Working environment temperature - 40-85 C.
2. Exceeding the applicable conditions or other inappropriate use of the product may cause damage or even electric breakdown or fire.
3. PPTC components are designed for occasional overcurrent in circuits, and are not recommended for continuous and continuous overcurrent circuits.
4. Avoid contact with chemical solvents for PPTC components. Long-term contact will damage the performance of components.
5. Under tripping condition, the highest surface temperature of the product is 125 C.

SMD1812 Series 贴片1812系列

Application
All high-density boards
Product Features
Small surface mountable, Solid state,
Faster time to trip than standard SMD
devices, Lower resistance than standard
SMD devices

产品应用
所有高密度板
产品特点
体积小，动作快. 低阻值

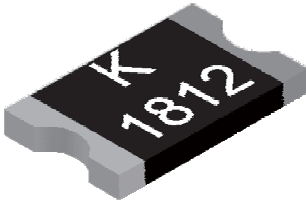
Operation Current
0.1A-3.5A
Maximum Voltage
6V-60V

工作电流
0.1A-3.5A
最大耐压
6V-60V

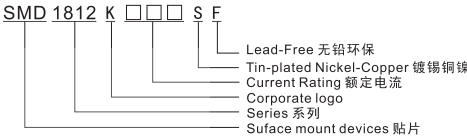
Temperature Range
-40℃to85℃
Agency Recognition

工作温度
-40℃to85℃
认证单位

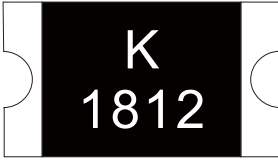
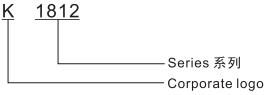
AGENCY	AGENCY FILE NUMBER
	E486890



Part Numbering System 型号定义



Part Marking System 标识定义

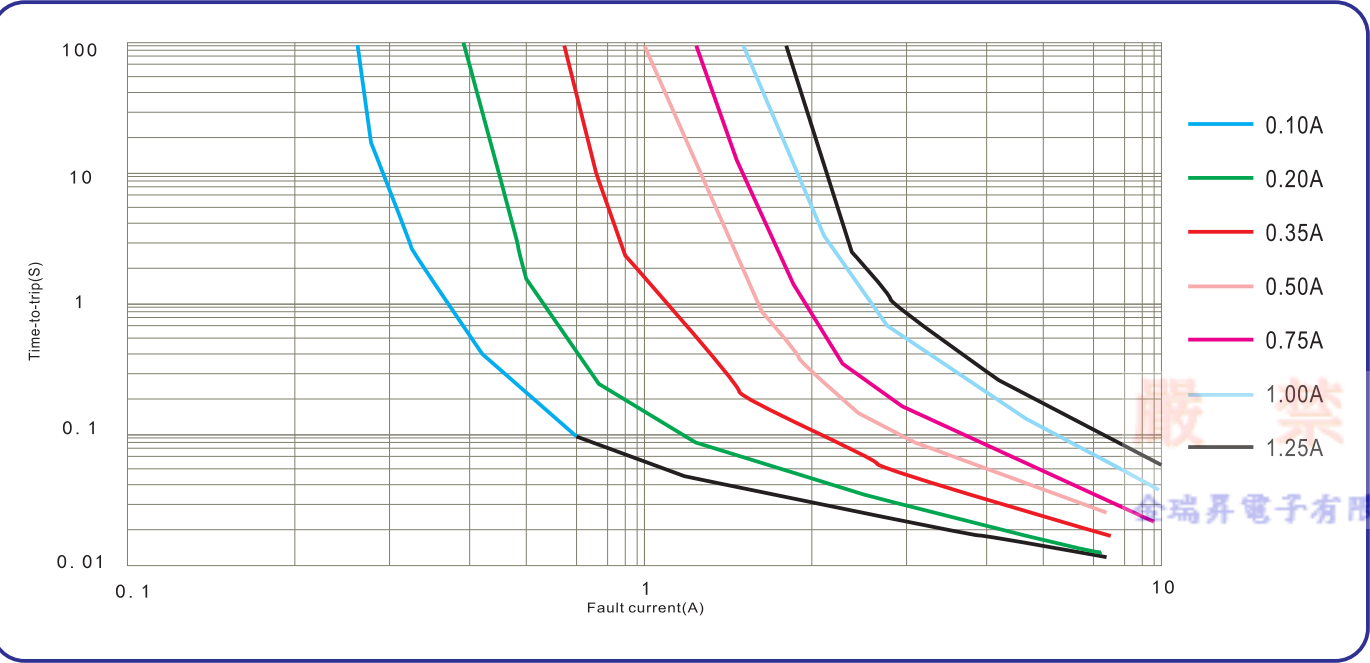


Thermal Deration Chart-Ihold 工作电流/温度环境折减表

Product model	Max ambien operating temperature VS. Hold current(Ihold)								
	-40℃	-20℃	0℃	25℃	40℃	50℃	60℃	70℃	85℃
SMD1812K010SF	0.16	0.14	0.12	0.10	0.08	0.07	0.06	0.05	0.03
SMD1812K014SF	0.23	0.19	0.17	0.14	0.12	0.10	0.09	0.08	0.06
SMD1812K020SF	0.29	0.26	0.23	0.20	0.17	0.15	0.14	0.12	0.10
SMD1812K030SF	0.44	0.39	0.35	0.30	0.26	0.23	0.21	0.18	0.15
SMD1812K050SF	0.59	0.57	0.55	0.50	0.45	0.43	0.35	0.30	0.23
SMD1812K075SF	1.10	0.99	0.87	0.75	0.63	0.57	0.49	0.45	0.35
SMD1812K110SF	1.60	1.45	1.28	1.10	0.90	0.83	0.72	0.66	0.52
SMD1812K125SF	2.00	1.75	1.52	1.25	1.00	0.95	0.90	0.75	0.53
SMD1812K150SF	2.30	2.05	1.77	1.50	1.23	1.09	0.95	0.82	0.61
SMD1812K160SF	2.10	1.96	1.88	1.60	1.26	1.12	0.98	0.84	0.63
SMD1812K200SF	2.88	2.61	2.25	2.00	1.80	1.66	1.45	1.09	0.80
SMD1812K260SF	3.90	3.42	2.96	2.60	2.33	2.07	1.94	1.35	1.00
SMD1812K300SF	4.15	3.76	3.46	3.00	2.55	2.28	2.01	1.61	1.33
SMD1812K350SF	4.84	4.39	4.04	3.50	2.98	2.66	2.35	1.88	1.55

SMD1812 Series 贴片1812系列

● PPTC在25°C ±2°C 动作保护时间曲线表
Typical Time-To-Trip at 25°C ±2°C

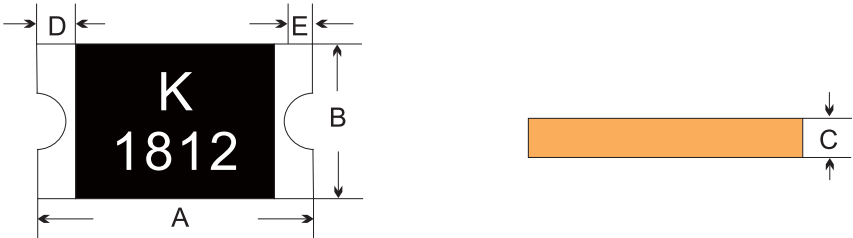


● Package Information 包装数量

型号Model	包装数量Standard Package
SMD1812 Series	1, 500PCS/REEL

8毫米磁带，7英寸卷轴每EIA-481-1
8 mm tape, 7 inch reel per EIA-481-1

● Dimensional parameters 尺寸参数



Product model	A	B	C	D	E
	Max	Max	Max	Min	Min
SMD1812K010SF	4.73	3.41	1.00	0.30	0.25
SMD1812K014SF	4.73	3.41	1.00	0.30	0.25
SMD1812K020SF	4.73	3.41	1.30	0.30	0.25
SMD1812K030SF	4.73	3.41	1.00	0.30	0.25
SMD1812K050SF	4.73	3.41	0.90	0.30	0.25
SMD1812K050SF33V	4.73	3.41	1.30	0.30	0.25
SMD1812K050SF60V	4.73	3.41	1.80	0.30	0.25
SMD1812K075SF	4.73	3.41	0.90	0.30	0.25
SMD1812K110SF	4.73	3.41	0.90	0.30	0.25
SMD1812K110SF16V	4.73	3.41	1.30	0.30	0.25
SMD1812K125SF	4.73	3.41	1.30	0.30	0.25
SMD1812K150SF	4.73	3.41	1.20	0.30	0.25
SMD1812K150SF16V	4.73	3.41	1.20	0.30	0.25
SMD1812K160SF	4.73	3.41	1.20	0.30	0.25
SMD1812K200SF	4.73	3.41	1.30	0.30	0.25
SMD1812K260SF	4.73	3.41	1.50	0.30	0.25
SMD1812K300SF	4.73	3.41	1.50	0.30	0.25
SMD1812K350SF	4.73	3.41	1.50	0.30	0.25

SMD1812 Series 贴片1812系列

Electrical Characteristics 电气参数

Product model	Vmax (V)	Imax (A)	Ihold (A)	Itrip (A)	Pd Max (W)	Max Time to trip		Resistance	
						Current(A)	Time(S)	Rmin(Ω)	R1max(Ω)
SMD1812K010SF	30	100	0.10	0.30	0.80	0.50	1.50	0.75	15.00
SMD1812K014SF	60	100	0.14	0.34	0.80	1.50	0.15	0.65	6.00
SMD1812K020SF	30	100	0.20	0.40	0.80	8.00	0.02	0.35	5.00
SMD1812K030SF	30	100	0.30	0.60	0.80	8.00	0.10	0.25	3.00
SMD1812K050SF	15/33/60	100	0.50	1.00	0.80	8.00	0.15	0.15	1.00
SMD1812K075SF	13.2	100	0.75	1.50	0.80	8.00	0.20	0.09	0.45
SMD1812K110SF	8/16	100	1.10	2.20	0.80	8.00	0.30	0.05	0.25
SMD1812K125SF	16	100	1.25	2.50	0.80	8.00	0.40	0.05	0.14
SMD1812K150SF	8/16	100	1.50	3.00	0.80	8.00	0.50	0.04	0.16
SMD1812K160SF	8	100	1.60	2.80	0.80	8.00	1.00	0.03	0.13
SMD1812K200SF	8	100	2.00	4.00	0.80	8.00	2.00	0.02	0.10
SMD1812K260SF	8	100	2.60	5.00	0.80	8.00	2.50	0.015	0.05
SMD1812K300SF	8	100	3.00	5.00	0.80	8.00	4.00	0.012	0.04
SMD1812K350SF	6	100	3.50	6.00	2.00	10.00	4.00	0.008	0.03



Warning:

1. 工作环境温度-40℃~85℃。
2. 超过本产品的适用条件或其它不适当的使用有可能导致损害，甚至可能引起电击穿或火苗。
3. PPTC组件是为电路中偶尔出现过流而设计，不建议用在连续且持续过流的电路中。
4. 避免PPTC组件接触化学溶剂，长时间的接触将损坏组件性能。
5. 在跳闸状态下，产品的表面最高温度为125℃。
1. Working environment temperature - 40-85 C.
2. Exceeding the applicable conditions or other inappropriate use of the product may cause damage or even electric breakdown or fire.
3. PPTC components are designed for occasional overcurrent in circuits, and are not recommended for continuous and continuous overcurrent circuits.
4. Avoid contact with chemical solvents for PPTC components. Long-term contact will damage the performance of components.
5. Under tripping condition, the highest surface temperature of the product is 125 C.

SMD1812 Series 贴片1812系列

Application
All high-density boards
Product Features
Small surface mountable, Solid state,
Faster time to trip than standard SMD
devices, Lower resistance than standard
SMD devices

产品应用
所有高密度板
产品特点
体积小，动作快，低阻值

Operation Current
0.3A-2.0A
Maximum Voltage
10V-60V

工作电流
0.3A-2.0A
最大耐压
10V-60V

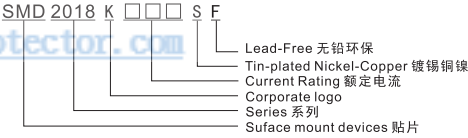
Temperature Range
-40℃to85℃
Agency Recognition

工作温度
-40℃to85℃
认证单位

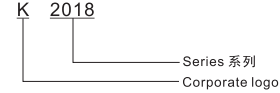
AGENCY	AGENCY FILE NUMBER
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Part Numbering System 型号定义



Part Marking System 标识定义

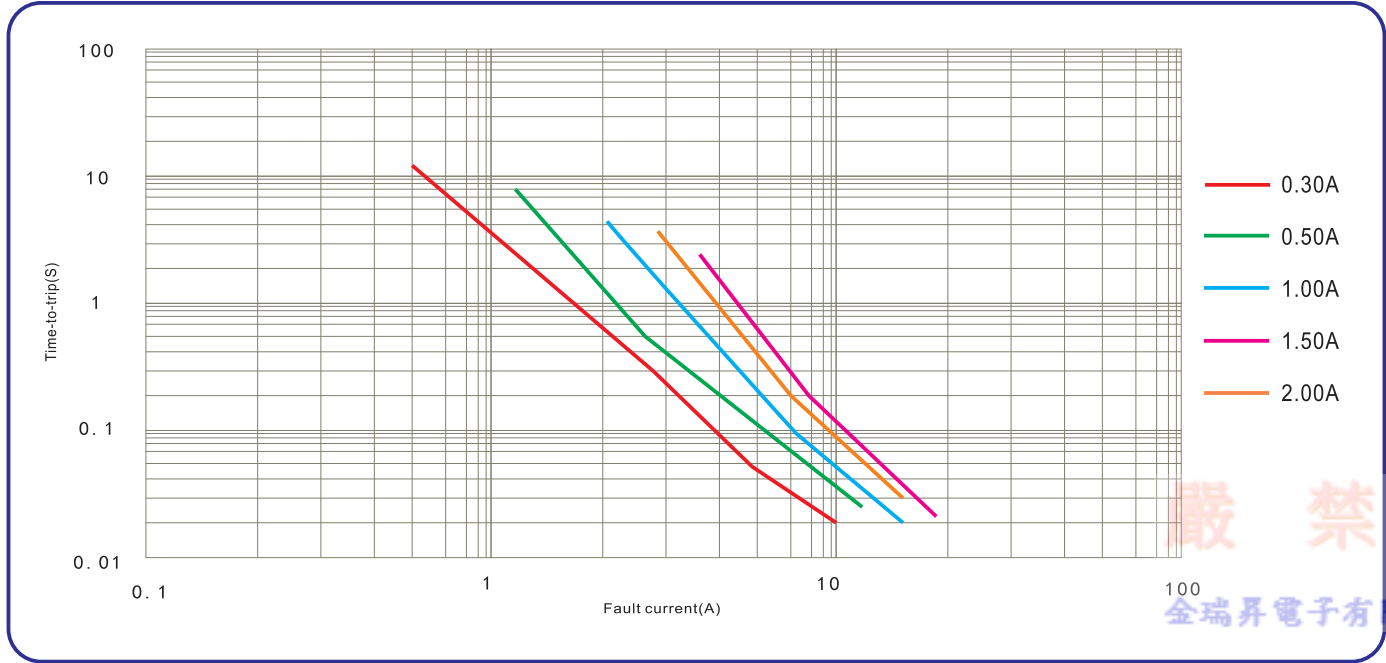


Thermal Deration Chart-Ihold 工作电流/温度环境折减表

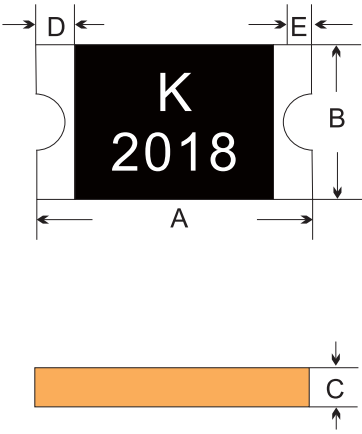
Product model	Max ambien operating temperature VS. Hold current(Ihold)								
	-40℃	-20℃	0℃	25℃	40℃	50℃	60℃	70℃	85℃
SMD2018K030SF	0.48	0.42	0.35	0.30	0.24	0.21	0.17	0.15	0.10
SMD2018K050SF	0.87	0.77	0.67	0.55	0.46	0.41	0.36	0.31	0.23
SMD2018K100SF	1.71	1.52	1.32	1.10	0.94	0.84	0.74	0.64	0.50
SMD2018K150SF	2.38	2.10	1.82	1.50	1.27	1.13	0.99	0.85	0.64
SMD2018K200SF	2.95	2.65	2.35	2.00	1.74	1.59	1.44	1.29	1.06

SMD2018 Series 贴片2018系列

● PPTC在25℃±2℃动作保护时间曲线表
Typical Time-To-Trip at 25℃±2℃



● Dimensional parameters 尺寸参数



Product model	A	B	C	D	E
	Max	Max	Max	Min	Min
SMD2018K030SF	2.20	1.50	1.00	0.20	0.10
SMD2018K050SF	2.20	1.50	1.00	0.20	0.10
SMD2018K100SF	2.20	1.50	1.00	0.20	0.10
SMD2018K100SF33V	2.20	1.50	1.00	0.20	0.10
SMD2018K150SF	2.20	1.50	1.00	0.20	0.10
SMD2018K200SF	2.20	1.50	1.00	0.20	0.10

● Electrical Characteristics 电气参数

Product model	Vmax (V)	Imax (A)	Ihold (A)	Itrip (A)	Pd Max (W)	Max Time to trip		Resistance	
						Current(A)	Time(S)	Rmin(Ω)	R1max(Ω)
SMD2018K030SF	60	100	0.30	0.60	0.90	1.50	3.00	0.50	2.30
SMD2018K050SF	60	100	0.55	1.20	1.00	2.50	3.00	0.20	1.00
SMD2018K100SF	15/33	100	1.10	2.20	1.10	8.00	0.40	0.06	0.36
SMD2018K150SF	15	100	1.50	3.00	1.10	8.00	0.80	0.05	0.17
SMD2018K200SF	10	100	2.00	4.00	1.10	8.00	2.40	0.03	0.10

● Package Information 包装数量

型号Model	包装数量Standard Package
SMD2018K030.050.SF	1, 500PCS/REEL
SMD0805K100.150.200.SF	2, 500PCS/REEL

8毫米磁带，7英寸卷轴每EIA-481-1
8 mm tape, 7 inch reel per EIA-481-1



Warning:

1. 工作环境温度-40℃~85℃。
 2. 超过本产品的适用条件或其它不适当的使用有可能导致损害，甚至可能引起电击穿或火苗。
 3. PPTC组件是为电路中偶尔出现过流而设计，不建议用在连续且持续过流的电路中。
 4. 避免PPTC组件接触化学溶剂，长时间的接触将损坏组件性能。
 5. 在跳闸状态下，产品的表面最高温度为125℃。
1. Working environment temperature - 40-85℃.
 2. Exceeding the applicable conditions or other inappropriate use of the product may cause damage or even electric breakdown or fire.
 3. PPTC components are designed for occasional overcurrent in circuits, and are not recommended for continuous and continuous overcurrent circuits.
 4. Avoid contact with chemical solvents for PPTC components. Long-term contact will damage the performance of components.
 5. Under tripping condition, the highest surface temperature of the product is 125 C.

SMD2920 Series

贴片2920系列

Application
All high-density boards

Product Features
2920 Dimension, Surface mountable,
Solid state, Faster time to trip than
standard SMD devices

产品应用
所有高密度板

产品特点
贴片2920尺寸. 动作快

Operation Current
0.3A-6.00A

MaxIMUM Voltage
6V-60V

工作电流
0.3A-6.00A

最大耐压
6V-60V

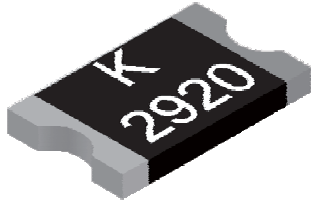
Temperature Range
-40°C to 85°C

Agency Recognition

工作温度
-40°C to 85°C

认证单位

AGENCY	AGENCY FILE NUMBER
	E486890



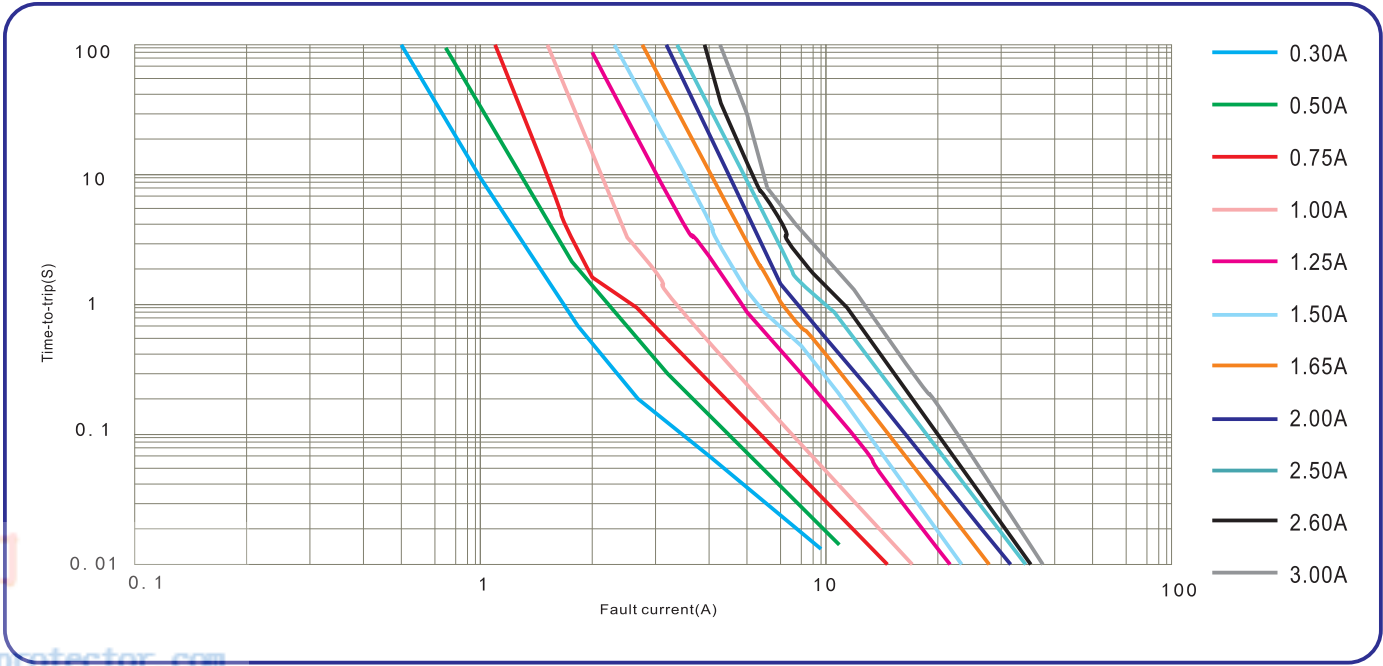
Thermal Deration Chart-Ihold

工作电流/温度环境折减表

Product model	Max ambien operating temperature VS. Hold current(Ihold)								
	-40°C	-20°C	0°C	25°C	40°C	50°C	60°C	70°C	85°C
SMD2920K030SF	0.45	0.40	0.35	0.30	0.25	0.23	0.20	0.17	0.14
SMD2920K050SF	0.76	0.67	0.59	0.50	0.42	0.38	0.33	0.29	0.23
SMD2920K075SF	1.13	1.01	0.88	0.75	0.62	0.56	0.50	0.44	0.34
SMD2920K100SF	1.66	1.47	1.29	1.10	0.91	0.83	0.73	0.64	0.50
SMD2920K125SF	1.89	1.68	1.46	1.25	1.04	0.94	0.83	0.73	0.56
SMD2920K150SF	2.27	2.01	1.76	1.50	1.25	1.13	1.00	0.87	0.74
SMD2920K185SF	2.80	2.47	2.17	1.85	1.54	1.39	1.22	1.07	0.85
SMD2920K200SF	3.02	2.68	2.34	2.00	1.66	1.50	1.32	1.16	0.90
SMD2920K250SF	3.78	3.35	2.93	2.50	2.08	1.88	1.65	1.45	1.13
SMD2920K260SF	3.64	3.25	2.91	2.60	2.26	2.08	1.95	1.74	1.13
SMD2920K300SF	4.53	4.02	3.51	3.00	2.52	2.26	1.99	1.75	1.34
SMD2920K400SF	6.04	5.36	4.68	4.00	3.36	3.01	2.65	2.33	1.79
SMD2920K500SF	7.55	6.70	5.85	5.00	4.20	3.77	3.32	2.92	2.23
SMD2920K600SF	8.60	7.70	6.80	6.00	4.95	4.60	4.06	3.65	3.15

PPTC在25°C±2°C动作保护时间曲线表

Typical Time-To-Trip at 25°C±2°C



Part Numbering System 型号定义

SMD 2920 K □ □ □ S F

- Lead-Free 无铅环保
- Tin-plated Nickel-Copper 镀锡铜镍
- Current Rating 额定电流
- Corporate logo
- Series 系列
- Surface mount devices 贴片

Part Marking System 标识定义

K 2920

- Series 系列
- Corporate logo

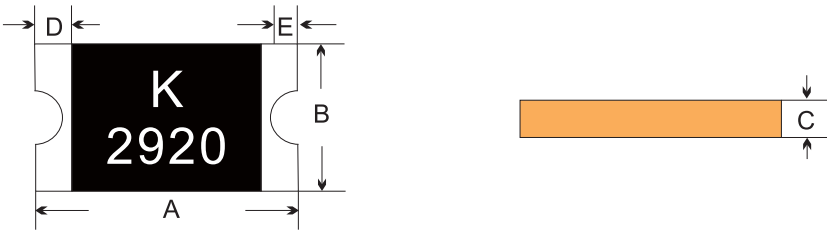


Package Information 包装数量

型号Model	包装数量Standard Package
SMD2920	1, 500PCS/REEL

8毫米磁带, 7英寸卷轴每EIA-481-1
8 mm tape, 7 inch reel per EIA-481-1

● Dimensional parameters 尺寸参数



Product model	A	B	C	D	E
	Max	Max	Max	Min	Min
SMD2920K030SF	7.98	5.44	1.30	0.30	0.25
SMD2920K050SF	7.98	5.44	1.30	0.30	0.25
SMD2920K075SF	7.98	5.44	1.30	0.30	0.25
SMD2920K100SF	7.98	5.44	1.00	0.30	0.25
SMD2920K125SF	7.98	5.44	0.90	0.30	0.25
SMD2920K150SF	7.98	5.44	0.90	0.30	0.25
SMD2920K185SF	7.98	5.44	0.90	0.30	0.25
SMD2920K200SF	7.98	5.44	0.90	0.30	0.25
SMD2920K250SF	7.98	5.44	0.90	0.30	0.25
SMD2920K260SF	7.98	5.44	0.90	0.30	0.25
SMD2920K300SF	7.98	5.44	1.30	0.30	0.25
SMD2920K400SF	7.98	5.44	1.30	0.30	0.25
SMD2920K500SF	7.98	5.44	1.30	0.30	0.25
SMD2920K500SF12V	7.98	5.44	1.30	0.30	0.25
SMD2920K500SF16V	7.98	5.44	1.80	0.30	0.25
SMD2920K600SF	7.98	5.44	1.80	0.30	0.25

● Electrical Characteristics 电气参数

Product model	Vmax (V)	Imax (A)	Ihold (A)	Itrip (A)	Pd Max (W)	Max Time to trip		Resistance	
						Current(A)	Time(S)	Rmin(Ω)	R1max(Ω)
SMD2920K030SF	60	10	0.30	0.60	1.50	1.50	3.00	0.60	4.80
SMD2920K050SF	60	10	0.50	1.00	1.50	2.50	4.00	0.18	1.40
SMD2920K075SF	33	40	0.75	1.50	1.50	8.00	0.30	0.10	1.00
SMD2920K100SF	33	40	1.10	2.20	1.50	8.00	0.50	0.065	0.41
SMD2920K125SF	33	40	1.25	2.50	1.50	8.00	2.00	0.05	0.25
SMD2920K150SF	33	40	1.50	3.00	1.50	8.00	2.00	0.035	0.23
SMD2920K185SF	33	40	1.85	3.70	1.50	8.00	2.50	0.03	0.15
SMD2920K200SF	16	40	2.00	4.00	1.50	8.00	4.50	0.02	0.12
SMD2920K250SF	16	40	2.50	5.00	1.50	8.00	16.00	0.02	0.085
SMD2920K260SF	6	40	2.60	5.20	1.50	8.00	10.00	0.014	0.075
SMD2920K300SF	6/16	40	3.00	6.00	1.50	8.00	20.00	0.012	0.048
SMD2920K400SF	16	40	4.00	8.00	1.50	20.00	4.00	0.008	0.04
SMD2920K500SF	6/12/16	40	5.00	10.00	1.50	25.00	5.00	0.005	0.031
SMD2920K600SF	6	40	6.00	12.00	1.50	25.00	6.00	0.003	0.025



Warning:

1. 工作环境温度-40℃~85℃。

2. 超过本产品的适用条件或其它不适当的使用有可能导致损害，甚至可能引起电击穿或火苗。

3. PPTC组件是为电路中偶尔出现过流而设计，不建议用在连续且持续过流的电路中。

4. 避免PPTC组件接触化学溶剂，长时间的接触将损坏组件性能。

5. 在跳闸状态下，产品的表面最高温度为125℃。
1. Working environment temperature - 40-85°C.

2. Exceeding the applicable conditions or other inappropriate use of the product may cause damage or even electric breakdown or fire.

3. PPTC components are designed for occasional overcurrent in circuits, and are not recommended for continuous and continuous overcurrent circuits.

4. Avoid contact with chemical solvents for PPTC components. Long-term contact will damage the performance of components.

5. Under tripping condition, the highest surface temperature of the product is 125 C.

KXSMD Series

大功率贴片系列

新品New products

Application
All high-density boards

Product Features
Small size, fast heat dissipation
and quick action,High power,
high voltage withstand

产品应用
所有高密度板

产品特点
体积小, 散热快, 动作快
大功率, 高耐压

Operation Current
0.13A-2.5A

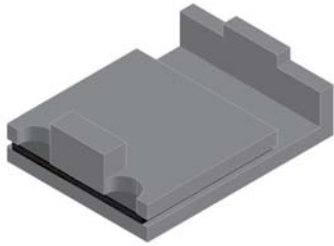
Maximum Voltage
6V-250V

工作电流
0.13A-2.5A

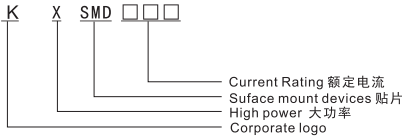
最大耐压
6V-250V

Temperature Range
-40°Cto85°C

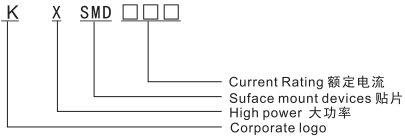
工作温度
-40°Cto85°C



Part Numbering System 型号定义



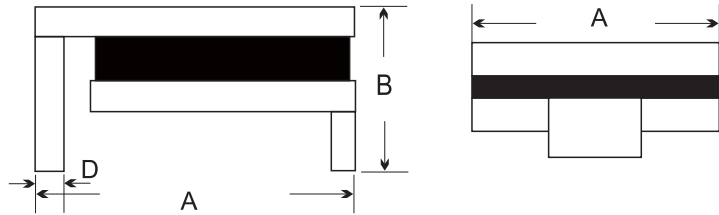
Part Marking System 标识定义



Thermal Deration Chart-Ihold 工作电流/温度环境折减表

Product model	Max ambien operating temperature VS. Hold current(Ihold)								
	-40°C	-20°C	0°C	25°C	40°C	50°C	60°C	70°C	85°C
KXSMD030	0.41	0.38	0.35	0.30	0.26	0.24	0.22	0.19	0.16
KXSMD050	0.68	0.64	0.59	0.50	0.45	0.40	0.37	0.31	0.27
KXSMD075	1.03	0.97	0.88	0.75	0.67	0.61	0.56	0.47	0.41
KXSMD110	1.50	1.42	1.29	1.10	0.98	0.89	0.82	0.69	0.59
KXSMD125	1.71	1.61	1.47	1.25	1.12	1.02	0.94	0.79	0.68
KXSMD130	1.78	1.67	1.52	1.30	1.16	1.06	0.97	0.82	0.70
KXSMD150	2.06	1.93	1.76	1.50	1.33	1.22	1.12	0.94	0.81
KXSMD185	2.53	2.38	2.17	1.85	1.65	1.50	1.38	1.16	1.00
KXSMD200	2.74	2.58	2.34	2.00	1.78	1.62	1.50	1.26	1.08
KXSMD260	3.56	3.35	3.05	2.60	2.32	2.11	1.94	1.63	1.40
KXSMD300	4.11	3.86	3.51	3.00	2.68	2.44	2.24	1.88	1.62
KXSMD250	3.43	3.22	2.93	2.50	2.23	2.03	1.87	1.57	1.35
KXSMDR130	0.18	0.16	0.15	0.13	0.12	0.11	0.10	0.08	0.07

Dimensional parameters 尺寸参数



Product model	A	B	C	D
	Max	Max	Max	Max
KXSMD030	7.98	3.18	5.44	0.50
KXSMD050	7.98	3.18	5.44	0.50
KXSMD075	7.98	3.18	5.44	0.50
KXSMD110	7.98	3.18	5.44	0.50
KXSMD125	7.98	3.18	5.44	0.50
KXSMD130	9.50	3.00	6.71	0.50
KXSMD150	9.50	3.00	6.71	0.50
KXSMD185	9.50	3.00	6.71	0.50
KXSMD200	9.50	3.00	6.71	0.50
KXSMD260	7.98	3.18	5.44	0.50
KXSMD300	7.98	3.18	5.44	0.50
KXSMD250	9.50	3.00	6.71	0.50
KXSMDR130	7.90	3.70	5.30	0.40

Electrical Characteristics 电气参数

Product model	Vmax (V)	Imax (A)	Ihold (A)	Itrip (A)	Pd Max (W)	Max Time to trip		Resistance	
						Current(A)	Time(S)	Rmin(Ω)	R1max(Ω)
KXSMD030	60	10	0.30	0.60	1.90	1.50	3.00	0.70	4.80
KXSMD050	60	10	0.50	1.00	1.90	2.50	4.00	0.35	1.40
KXSMD075	30	40	0.75	1.50	1.90	8.00	0.30	0.29	1.00
KXSMD110	33	40	1.10	2.20	1.90	8.00	0.50	0.10	0.48
KXSMD125	15	40	1.25	2.50	1.60	8.00	2.00	0.07	0.25
KXSMD130	33	40	1.30	2.60	2.10	8.00	4.00	0.08	0.28
KXSMD150	33	40	1.50	3.00	2.10	8.00	5.00	0.06	0.25
KXSMD185	33	40	1.85	3.70	2.10	8.00	5.00	0.045	0.165
KXSMD200	15	40	2.00	4.00	2.10	8.00	12.00	0.045	0.125
KXSMD260	6	40	2.60	5.20	1.90	8.00	20.00	0.025	0.075
KXSMD300	6	40	3.00	6.00	1.90	8.00	35.00	0.015	0.048
KXSMD250	15	40	2.50	5.00	1.90	8.00	25.00	0.025	0.085
KXSMDR130	250	3	0.13	0.26	1.50	1.00	2.00	4.00	12.00

Warning:

1. 工作环境温度-40℃~85℃。

2. 超过本产品的适用条件或其它不适当的使用有可能导致损害，甚至可能引起电击穿或火苗。

3. PPTC组件是为电路中偶尔出现过流而设计，不建议用在连续且持续过流的电路中。

4. 避免PPTC组件接触化学溶剂，长时间的接触将损坏组件性能。

5. 在跳闸状态下，产品的表面最高温度为125℃。
1. Working environment temperature - 40-85℃.

2. Exceeding the applicable conditions or other inappropriate use of the product may cause damage or even electric breakdown or fire.

3. PPTC components are designed for occasional overcurrent in circuits, and are not recommended for continuous and continuous overcurrent circuits.

4. Avoid contact with chemical solvents for PPTC components. Long-term contact will damage the performance of components.

5. Under tripping condition, the highest surface temperature of the product is 125 C.

Application

All high-density boards

产品特点

Small size, fast heat dissipation and quick action,High power, high voltage withstand

产品应用

所有高密度板

产品特点

体积小，散热快，动作快，大功率，高耐压

Operation Current

0.12A-0.145A

工作电流

0.12A~0.145A

Maximum Voltage

250V

最大耐压

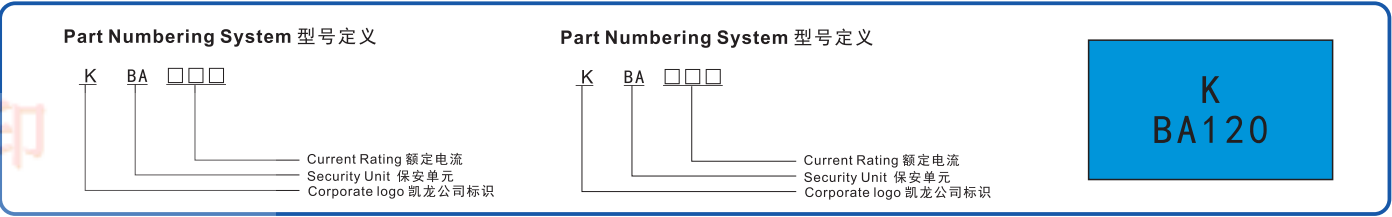
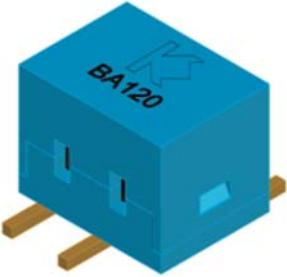
250V

Temperature Range

-40℃to85℃

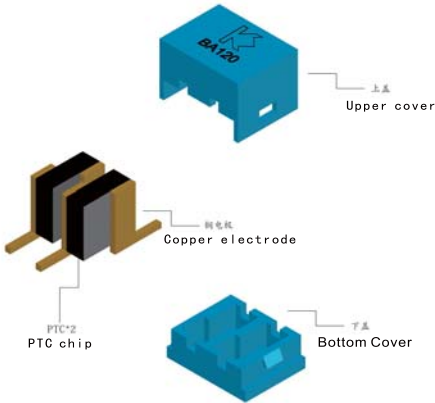
工作温度

-40℃to85℃



Product mix 产品结构

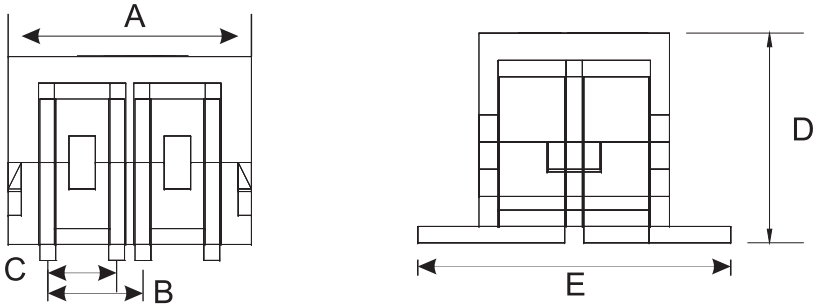
PTC芯片	PTC chip
铜电极	Copper electrode
上盖	Upper cover
下盖	Bottom Cover



Thermal Deration Chart-Ihold 工作电流/温度环境折减表

Product model	Max ambien operating temperature VS. Hold current(Ihold)								
	-40℃	-20℃	0℃	25℃	40℃	50℃	60℃	70℃	85℃
KXSMD030	0.41	0.38	0.35	0.30	0.26	0.24	0.22	0.19	0.16
KXSMD050	0.68	0.64	0.59	0.50	0.45	0.40	0.37	0.31	0.27

Dimensional parameters 尺寸参数



Product model	A	B	C	D	E
	Max	Max	Max	Max	Max
KBA120	9.20	3.60	2.60	7.70	11.50
KBA145	9.20	3.60	2.60	7.70	11.50

Electrical Characteristics 电气参数

Product model	Vmax (V)	Imax (A)	Ihold (A)	Itrip (A)	Pd Max (W)	Max Time to trip		Resistance	
						Current(A)	Time(S)	Rmin(Ω)	R1max(Ω)
KBA120	250	3	0.12	0.24	1.00	0.60	7.50	8.00	18.00
KBA145	250	3	0.145	0.29	1.00	0.725	2.50	3.50	11.00

Warning:

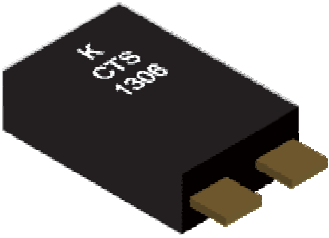
1. 工作环境温度-40℃~85℃。
2. 超过本产品的适用条件或其它不适当的使用有可能导致损害，甚至可能引起电击穿或火苗。
3. PPTC组件是为电路中偶尔出现过流而设计，不建议用在连续且持续过流的电路中。
4. 避免PPTC组件接触化学溶剂，长时间的接触将损坏组件性能。
5. 在跳闸状态下，产品的表面最高温度为125℃。

1. Working environment temperature - 40-85 C.
2. Exceeding the applicable conditions or other inappropriate use of the product may cause damage or even electric breakdown or fire.
3. PPTC components are designed for occasional overcurrent in circuits, and are not recommended for continuous and continuous overcurrent circuits.
4. Avoid contact with chemical solvents for PPTC components. Long-term contact will damage the performance of components.
5. Under tripping condition, the highest surface temperature of the product is 125 C.

Application
All automotive electronics
Product Features
Small size, fast heat dissipation, fast action, high power, high voltage, high working temperature

产品应用
所有汽车电子行业
产品特点
体积小，散热快，动作快
大功率，高耐压，高工作温度

Operation Current 6A-7A MaxIMUM Voltage 13V-16V	工作电流 6A-7A 最大耐压 13V-16V
Temperature Range -40℃to125℃	工作温度 -40℃to125℃



Part Numbering System 型号定义

K CTS □□□

Voltage/Current Rating 额定电压/电流
Temperature-sensitive 热敏端子
Corporate logo 凯龙公司标识

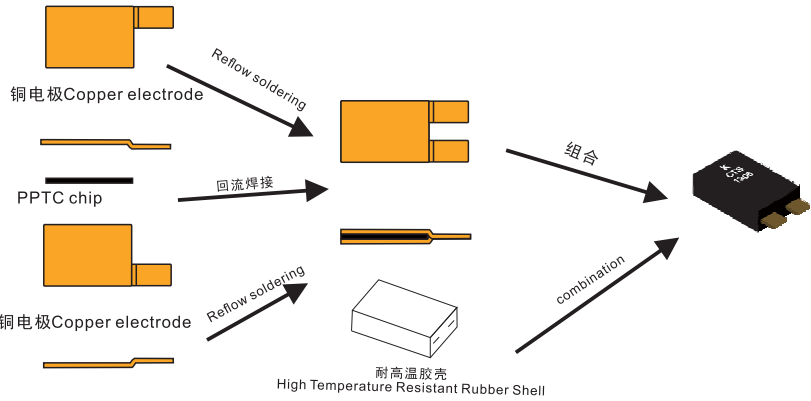
Part Numbering System 型号定义

K CTS □□□

Voltage/Current Rating 额定电压/电流
Temperature-sensitive 热敏端子
Corporate logo 凯龙公司标识

K
CTS
1306

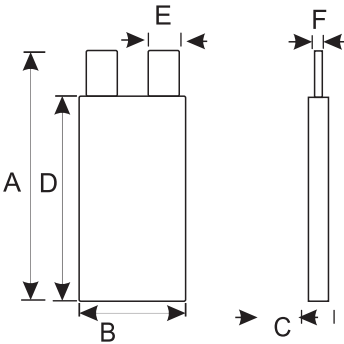
Product mix 产品结构



Thermal Deration Chart-Ihold 工作电流/温度环境折减表

Product model	Max ambien operating temperature VS.Hold current(Ihold)									
	-40℃	-20℃	0℃	25℃	40℃	50℃	60℃	70℃	85℃	125℃
KCTS1306	8.70	7.80	7.20	6.00	5.28	4.80	4.26	3.96	3.36	1.44
KCTS1607	10.15	9.10	8.40	7.00	6.16	5.60	4.97	4.62	3.92	1.68

● Dimensional parameters 尺寸参数



Product model	A	B	C	D	E	F
	Max	Max	Max	Max	Max	Max
KCTS1306	14.75	8.10	3.80	12.50	2.40	0.50
KCTS1607	16.75	10.10	4.80	14.50	2.40	0.50

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● Electrical Characteristics 电气参数

Product model	Vmax (V)	Imax (A)	Ihold (A)	Itrip (A)	Pd Max (W)	Max Time to trip		Resistance	
						Current(A)	Time(S)	Rmin(Ω)	R1max(Ω)
KCTS1306	13	40	6.00	12.00	3.00	30.00	16.00	0.02	0.08
KCTS1607	16	40	7.00	14.00	3.00	35.00	17.50	0.02	0.08



Warning:

1. 工作环境温度-40℃~85℃。
2. 超过本产品的适用条件或其它不适当的使用有可能导致损害，甚至可能引起电击穿或火苗。
3. PPTC组件是为电路中偶尔出现过流而设计，不建议用在连续且持续过流的电路中。
4. 避免PPTC组件接触化学溶剂，长时间的接触将损坏组件性能。
5. 在跳闸状态下，产品的表面最高温度为125℃。
1. Working environment temperature - 40-85°C.
2. Exceeding the applicable conditions or other inappropriate use of the product may cause damage or even electric breakdown or fire.
3. PPTC components are designed for occasional overcurrent in circuits, and are not recommended for continuous and continuous overcurrent circuits.
4. Avoid contact with chemical solvents for PPTC components. Long-term contact will damage the performance of components.
5. Under tripping condition, the highest surface temperature of the product is 125 C.



polymeric Positive Temperature Coefficient 自恢复保险丝

嚴禁複印

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