



HOLLYLAND®
高新技术企业
High Technology Enterprise

HOLLY®

FUSE RoHS&Pb-free 好利® 保险丝管

Your Power Safeguard™
您的电路安全卫士



好利来(中国)电子科技股份有限公司

Hollyland (China) Electronics Technology Corporation Limited

股票代码/Stock Code:002729



2015-2016

公司荣誉

Honors and Awards

中国电器工业协会电器附件及家用控制器分会第六届理事会常务理事单位

Member of the 6th Council of Electrical Accessories & Automatic controls Institute of China Electrical Equipment Industrial Association Branch

全国熔断器标准化技术委员会成员

Member of the National Technical Committee on Fuses of Standardization Administration of China

厦门市高新技术发展协会理事会副会长单位

Vice-President Unit of Xiamen High-tech Development Association

福建名牌产品

The Famous-brand Product of Fujian Province

福建省及厦门市著名商标

The Famous Trademark of Fujian Province and Xiamen City

厦门市出口名牌企业

The famous Exporting Brand of Xiamen City

厦门市自主创新试点企业

An Experimental Enterprise in Innovation of Xiamen City

“感动人的管理”企业

An Enterprise with Touching Management

全国熔断器标准化技术委员会小型熔断器分技术委员会成员

Member of the Subcommittee on Miniature Fuse of National Technical Committee on Fuses of Standardization Administration of China

厦门电子元器件产业技术创新战略联盟理事长单位

President Organization of Xiamen Electronic Components Technology Innovation Strategic Alliance

福建省创新型试点企业

An Experimental Enterprise in Innovation of Fujian Province

厦门市高新技术企业

A High Technology Enterprise of Xiamen City

厦门市守合同重信用企业

An Enterprise with Good Sincerity & Credit

厦门市创新型示范企业

A Model Enterprise in Innovation of Xiamen City

资信等级为AAA-级企业

An Enterprise with AAA- Credit Rating



公司简介

Company Introduction

好利来（中国）电子科技股份有限公司成立于1992年，是专业研发、生产、销售电路保护器产品的高新技术企业。公司拥有众多专利产品，是全球知名的电路保护器制造商。

公司秉持“以人为本、责任与分享”的经营理念。产品包括小型熔断器、微型熔断器、SMD熔断器、温度保险丝、高/低压熔断器及自复保险丝等电路保护器，广泛应用于通讯、计算机、交通、玩具、家用电器、电池、新能源及其它电子电力系统保护。

公司的产品使命是作为“您的电路安全卫士”，“安全、可靠、环保”是公司顾客以及整个社会做出的承诺。所有产品均实现无铅化生产并完全符合RoHS指令和REACH法规要求。公司通过了BSI ISO9001、ISO/TS16949和CQC ISO14001认证。公司荣获全球众多著名制造商授予的优秀供应商、绿色合作伙伴等荣誉。

经过多年的探索与积累，公司赢得了良好的市场信誉，已发展成为资历深厚、业绩骄人的业界知名企业。“”商标不仅获得了国内诸多荣誉，也获得了国际上的广泛认可。

我们相信，在全球竞争日益激烈的电路保护器领域，高效的运营和可持续的竞争优势是公司成功的关键。公司始终把技术创新和产品与服务的完善作为发展的驱动力。公司将人才视为最重要的资源，聚集了一批来自海内外的电路保护器领域专家，拥有最顶尖的人才和高效的运营团队。公司的竞争力来源于卓越的品质、一流的服务及持续的创新能力。

公司注重了解、满足客户的需求，不断为客户创造更高价值。不仅为客户提供标准产品，而且根据客户的需求，我们将一如既往地积极配合设计、选型、现场指导、品质跟踪等全过程的服务。

Founded in 1992, Hollyland (China) Electronics Technology Corporation Limited is a high-technology company that specializes in the development, production and marketing of circuit protection devices. As the world's leading circuit protection devices manufacturer, the company is proud to have developed and own a wide variety of patent products.

The company upholds the belief of "people-oriented, accountability and sharing" as the business philosophy. It has a wide product ranges, including miniature fuses, micro fuses, SMD fuses, thermal-link fuses, high/low voltage fuses and PTC resettable fuses as well as other circuit protection devices that are widely used in communications, computers, transportation, toys, household appliances, batteries, new energy resource and other electronic power system protection.

The mission of the company's products is to be the "Your Power Safeguard". "Safety, reliability and environmental friendly" are the company's commitment to both the customers and the society. All the products are lead-free that complies with RoHS Directive and REACH regulations. The world-class production plant is accredited with BSI ISO9001, ISO/TS16949 and CQC ISO14001 system certifications. In all these years, the company has been awarded with the title of being best manufacturer as well as receiving the honor of being the green partner by some of the world's best well-known corporations.

With years of development and dedication, the company has won an excellent reputation in the market and is being regarded as the one of the industry leaders. "" brand not only has been awarded as "Famous Trademark of China" - the highest honor in the People's Republic of China, but it has also received respectful world - wide recognitions.

We believe that in the increasingly competitive circuit protection industry, efficient operations and sustainable competitiveness are the key to the success of our business. The company emphasizes in driving technological innovation as well as in promoting excellence in both product quality and customer service. We also believe that people is one of our most important resources; the company has successfully gathered circuit protection industry experts from around the world and now has one of the best team of talents in our operations. For more than two decades, the company has dedicated in providing the best quality of solutions to our customers by having the strongest commitment in proprietary research & development, vigorous quality control as well as innovation.

The company is also proud of its outstanding customer service. We focus on understanding and meeting customers' needs and are committed to create values for customers. Not only do we provide standard products, we also offer customized design products. Depending on customers' requirements, we are proactive in providing the best tailor-made solutions, offering services such as on-site special production, vigorous quality control and more.



公司宗旨

Company's Mission

为客户创造价值 为员工提供平台

Create value for customers and provide workplace for employees

为企业创造利润 为股东增加回报

Generate profits for the enterprises and for its shareholders

用信誉赢得尊重 用责任回报社会

Earn respect with creditability and give back to the society with social responsibility

Index 产品索引

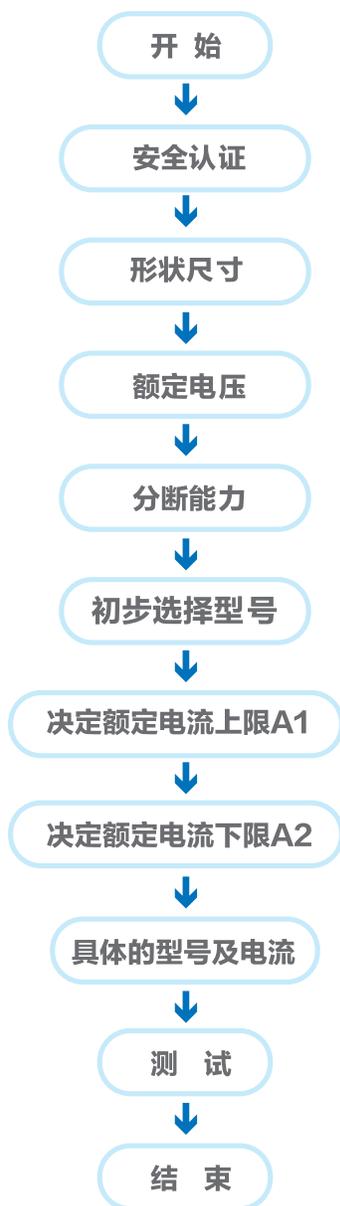
	TYPE	DESCRIPTION	RATING	APPROVALS	
Surface Mount Fuse	25F	Fast-Blow Type	100mA-10A, 125V / 250V; 12-15A,65V / 125V	UR, cUR, TUV, CQC	P07
	25T	Slow-Blow Type	200mA-5A,125V / 250V	UR, cUR	P08
	06F	Fast-Blow Type	200mA-5A, 32V / 63V	UR, cUR	P09
	06T	Slow-Blow Type	1A-5A, 32V / 63V	UR, cUR	P10
	12F	Fast-Blow Type	100mA-7A, 24V / 32V / 63V	UR, cUR	P11
	12T	Slow-Blow Type	500mA-7A, 24V / 32V / 63V	UR, cUR	P12
Φ8x8.5mm Radial Lead Microfuse	5RF	Quick-acting Type	315mA-6.3A, 250V	CCC, CQC, cURus, VDE, SEMKO, PSE	P13
	5RT	Time-lag Type	100mA-6.3A, 125V / 250V / 300V	CCC, CQC, cURus, VDE, SEMKO, BSI, PSE, KC	P14
	5EF	Quick-acting Type	315mA-6.3A, 250V	CQC, cURus, VDE, SEMKO, PSE	P15
	5ET	Time-lag Type	100mA-10A, 125V / 250V / 300V	CQC, cURus, VDE, SEMKO, BSI, PSE, KC	P16
Φ2.4x7mm Microfuse	20N	Very Quick-acting Type	100mA-10A, 125V/250V;12-15A, 72V; 20A 60V	CCC, UL, cUL, UR, cUR, CSA, PSE	P17
	20S	Medium Slow-Blow Type	200mA-10A, 125V / 250V	CCC, CQC, UL, cUL, CSA, PSE	P18
	20T	Slow-Blow Type	375mA-7A, 125V / 250V	CCC, CQC, UR, cUR, CSA, PSE	P19
Φ3.6x10mm Microfuse	30N	Fast-Blow Type	200mA-15A, 125V / 250V / 350V	UL, cUL, CSA, PSE	P20
	25S	Slow-Blow Type	1A-2A, 125V / 250V	CQC, VDE, UR, cUR, PSE	P21
	30TS	Slow-Blow Type	200mA-15A, 125V / 250V / 350V	CCC, CQC, VDE, UL, cUL, UR, cUR, CSA, PSE	P22
	31NM, 32NM/31NM(P)	Fast-Blow Type	100mA-15A, 125V / 250V	UL, cUL, CSA	P23
	31S, 32S/31S(P)	Slow-Blow Type	100mA-15A, 125V / 250V	UL, cUL, CSA	P24
	30T	Time-lag Type	200mA-6.3A, 250V	CQC, VDE, cURus	P25
	36T	Time-lag Type	200mA-6.3A, 250V	VDE	P26
	35NM, 36NM/35NM(P)	Fast-Blow Type	100mA-15A, 125V / 250V	UL, cUL, CSA	P27
	35S, 36S/35S(P)	Slow-Blow Type	100mA-15A, 125V / 250V	UL, cUL, CSA	P28
Φ4.5x15mm Glass Tube fuse	41NM, 42NM/41NM(P)	Fast-Blow Type	300mA-15A, 125V / 250V / 300V	UR, cUR, PSE, KC	P29
	41S, 42S/41S(P)	Slow-Blow Type	200mA-10A, 125V / 250V	UL, cUL, UR, cUR, PSE, KC	P30
	41ST, 42ST	Medium Slow-Blow Type	100mA-15A, 125V / 250V	PSE	P31
Φ5.2x20mm Glass & Ceramic Tube fuse	51NM, 52NM/51NM(P)	Fast-Blow Type	100mA-15A, 125V / 250V	UL, cUL, UR, cUR, CSA, PSE, KC	P32
	51MS, 52MS/51MS(P)	Medium Slow-Blow Type	100mA-15A, 125V / 250V	UL, cUL, UR, cUR, CSA, PSE, KC	P33
	51S, 52S/51S(P)	Slow-Blow Type	100mA-15A, 125V / 250V	UL, cUL, UR, cUR, CSA, PSE, KC	P34
	51NR, 52NR	Fast-Blow Type	100mA-15A, 125V / 250V	PSE, KC	P35
	51ST, 52ST	Medium Slow-Blow Type	100mA-15A, 125V / 250V	PSE	P36
	50F	Quick-acting Type	125mA-20A, 250V	CCC, CQC, SEMKO, VDE, BSI, IMQ, UR, cUR, CSA, PSE, KC	P37
	5GT	Time-lag Type	800mA-10A, 250V	CQC, VDE, PSE, cURus, KC	P38
	50T	Time-lag Type	100mA-20A,250V	CCC, CQC, SEMKO, VDE, BSI, IMQ, UR, cUR, CSA, PSE, KC	P39
	50CF	Quick-acting Type	250mA-16A,250V	CCC, CQC, SEMKO, VDE, BSI, UR, cUR, PSE, KC	P40
	50CT	Time-lag Type	200mA-16A,250V	CCC, CQC, SEMKO, VDE, BSI, UR, cUR, PSE, KC	P41
	5CT	Time-lag Type	1A-10A, 250V	CQC, VDE, PSE, cURus, KC	P42
	5HF	Time-lag Type	250mA-20A,300V / 420V 500V / 600V	cURus, TUV	P43
	5HT	Time-lag Type	2A-16A,400V / 500V / 600V	cURus, TUV	P44
5FF	Very Fast-acting Type	500mA-16A,250V		P45	
Φ6.35x32mm Glass&Ceramic Tube fuse	61NM, 62NM/61NM(P)	Fast-Blow Type	100mA-30A, 125V / 250V	UL, cUL, CSA, PSE, KC	P46
	61MS, 62MS/61MS(P)	Medium Slow-Blow Type	100mA-15A, 125V / 250V	UL, cUL, CSA, PSE, KC	P47
	61S, 62S/61S(P)	Slow-Blow Type	200mA-15A, 125V / 250V	UL, cUL, CSA, PSE, TUV, KC	P48
	61NR, 62NR	Fast-Blow Type	100mA-15A, 125V / 250V	PSE, KC	P49
	61ST, 62ST	Medium Slow-Blow Type	100mA-15A, 125V / 250V	PSE	P50
	65NM	Fast-Blow Type	300mA-30A, 125V / 250V	UL, cUL, UR, cUR, PSE, KC	P51
	65TS	Slow-Blow Type	500mA-30A, 125V / 250V	UL, cUL, UR, cUR, PSE, KC, TUV	P52
	61T	Time-lag Type	8A-30A, 250V	CQC	P53
	6FF	Very Fast-acting Type	200mA-2A, 500V/600V/1000V; 2.5A-16A, 500V / 600V	UR, cUR, TUV	P54
	Thermal cutoff	TH Series	66-240℃	10A/15A, 250V	CCC, VDE, UR(10A)
RH01 Series		75-150℃	1A/2A/3A, 250V	CCC, TUV	P56
RH03 Series		75-150℃	1A/2A/3A, 250V	CCC	
Thermostat	KSD-F01 Series	48±3℃ ~185±10℃	5A/10A, 250V	CQC(VDE PENDING)	P57
	KSD-9700, CK-1 Series	60±5℃ ~150±5℃	5A/10A, 250V	CQC(KSD-9700)	P58
Fuse holder, clip&block					P59-64

用户指南

保险丝管的选用

为便于用户针对所需保护的元件、电路或设备选用合适的保险丝管，特制定本指南。保险丝管的选用可依以下流程：

选用流程



需考虑因素

根据整机所需的安全认证决定保险丝管的安全认证，在此，可初步确定选用 IEC 规格或 UL 规格保险丝管。

- ▶ 设计时电路中空间的限制。
- ▶ 安装方式

额定电压应大于等于有效的电路电压。

分断能力的电流应大于电路中的最大故障电流。

整机开关时电路中是否存在启动电流，启动电流在某些电路中是正常的，这种场合应使用慢断型或中等慢断型保险丝管。

保险丝管必须切断的电流及持续时间（该条件由设计人员依具体电路的保护需求而定），参考相应型号的 I-T 曲线，取满足要求的最大额定电流作为上限值 A1。

- ▶ 通过保险丝管的稳态电流（依具体电路而定）。
 - ▶ IEC 规格及 UL 规格保险丝管的额定电流的差别，详见“稳态电流”。
 - ▶ 环境温度对保险丝管承载能力的影响，详见“环境温度”。
 - ▶ 脉冲（冲击电流，浪涌电流，启动电流及电流瞬变值）对保险丝管寿命的影响，详见“脉冲”。
 - ▶ 启动电流及持续时间与相应型号的 I-T 曲线比较。
- 综合考虑以上五个因素后，选出满足要求的最小额定电流作为下限 A2。

综合考虑以上因素后，选出最合适的型号及额定电流。

- ▶ 当 $A1 \geq A2$ 时，则可选用 A2 到 A1 区间内的任一规格的保险丝管。
- ▶ 当 $A1 < A2$ 时，则建议选用其它型号的保险丝管。

样品应在实际电路中试运行。



用户指南

稳态电流

在实际应用中和实验室之间有不同的条件，如：

- ▶ 有时使用保险丝盒；
- ▶ 电路中的电线横截面积；
- ▶ 保险丝管夹的接触电阻等。

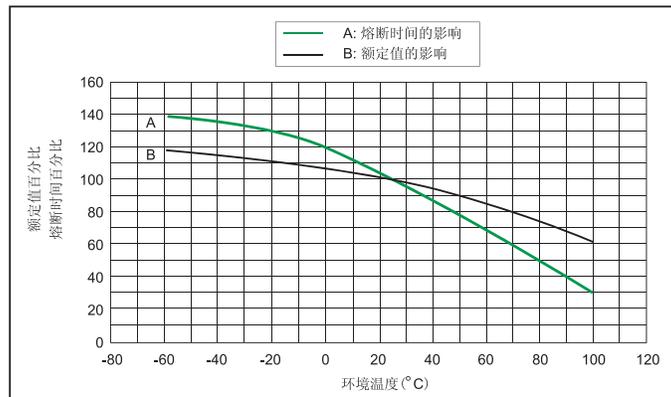
考虑到以上因素，故在 25℃ 条件下所选用的保险丝管应满足如下条件才可使得保险丝管持续可靠地工作：

IEC 规格：保险丝管的额定电流 $I_n = \text{稳态电流} / 0.9$

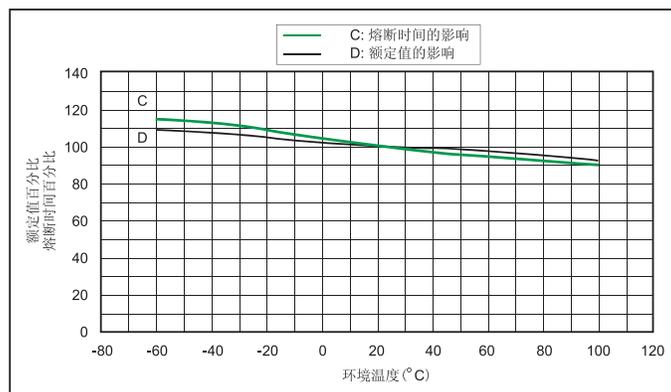
UL 规格：保险丝管的额定电流 $I_n = \text{稳态电流} / 0.75$

环境温度

保险丝管的电流承载能力测试是在环境温度 25℃ 条件下进行的，而保险丝管的电流承载能力是会受环境温度影响的。环境温度越高，保险丝管的寿命越短，承载能力就越低。所以选用保险丝管时应考虑保险丝管周边的环境温度，环境温度对各类保险丝管承载能力的影响如下图所示：



(a) 表示环境温度对传统慢断型及中等慢断型保险丝管承载能力及 5In 熔断时间的影响



(b) 表示环境温度对快速熔断型及慢断型保险丝管承载能力及 5In 熔断时间的影响

用户指南

脉冲

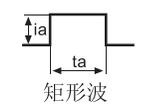
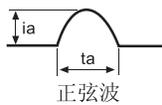
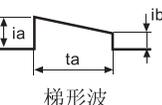
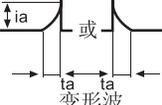
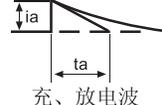
脉冲产生热循环，从而产生机械疲劳影响保险丝管寿命。设计时应使脉冲 I^2T 远远小于保险丝管标称熔化热能 I^2T 。保险丝管寿命（可承受的脉冲循环次数）与 U （脉冲 I^2T 值与保险丝管 I^2T 值之比率）的关系参照表 1。本目录提供的各种规格的保险丝管熔化热能 I^2T 可供参考，表 2 提供各种典型脉冲波形的 I^2T 值近似计算公式：

表 1

可承受脉冲次数	U (比率)
100,000 次	20%
10,000 次	30%
1,000 次	40%

注：脉冲间隔时间必须足够长才可使前一脉冲产生的热量散失。

表 2

波形	I^2T 值计算公式	波形	I^2T 值计算公式
 矩形波	$ia^2 ta$	 正弦波	$(1/2) ia^2 ta$
 梯形波	$(1/3)(ia^2 + iaib + ib^2) ta$	 变形波	$(1/5) ia^2 ta$
 三角形波	$(1/3) ia^2 ta$	 充、放电波	$(1/2) ia^2 ta$

测试

所选定的样品必须在实际的被保护电路中进行测试，以验证所选择的保险丝管。此验证应包括正常条件及故障条件下的测试，以确保所选择的保险丝管在被保护电路中能正常运行。

如您在电路保护方面遇见各种疑问，欢迎与好利来（中国）电子科技股份有限公司工程技术人员联系，好利来（中国）电子科技股份有限公司将提供恰当建议协助您共同解决。

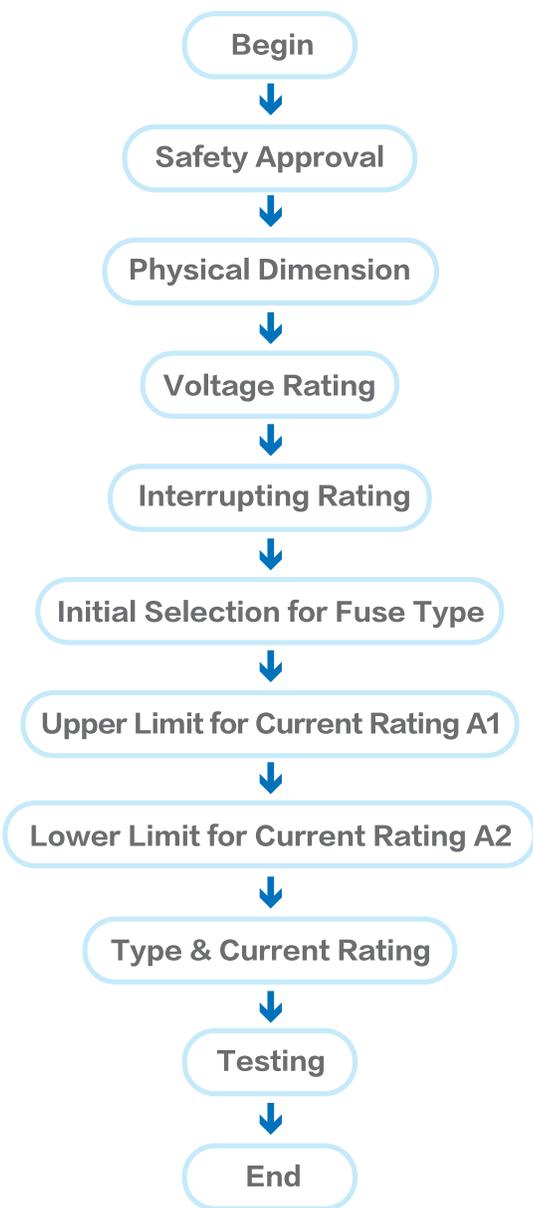


USER GUIDE

FUSE SELECTION

The purpose of this guide is for users to properly select a fuse which provides protection of components, circuit or equipments. The following flow is considered for fuse selection.

FLOW CHART



Factors taken into consideration

The safety approvals required for fuse shall be determined according to the safety approvals required on the end product. It is the safety approval that determines initially the selected fuse designed to IEC standard or UL standard.

- ▶ The space limit of circuit in design.
- ▶ Mounting mode.

The voltage rating of the fuse shall be greater than, or equal to the available circuit voltage.

The interrupting rating of the fuse should exceed the Maximum Fault Current of the circuit.

Does there exist “turn-on current” in a circuit when the end product turns on or off? The “turn-on current” is normal for some circuit and requires the slow-blow fuse or medium slow-blow fuse.

The overload current and time in which a fuse must function (It may be specified on the specific protection needs of circuit by a design engineer.). Referring to the Time-Current curve, the maximum current rating which meet the requirement would be taken as the upper limit for current rating A1.

- ▶ Steady state current through a fuse (based on the specific circuit.).
- ▶ The difference of current rating for fuse designed to IEC standard and UL standard, refer to STEADY STATE CURRENT.
- ▶ Effect of ambient temperature on current-carrying capacity of fuse, refer to AMBIENT TEMPERATURE.
- ▶ Effect of pulse (including surge currents, turn-on currents, in-rush currents and transients) on life of fuse, refer to PULSE.
- ▶ “Turn-on current” and duration should be compared to Time-Current curve of relevant fuse.

When $A1 \geq A2$, any rating can be selected from the range of $A2$ to $A1$.

When $A1 < A2$, it is advised to select another type fuse.

The sample shall trial-operate in the actual circuit.

USER GUIDE

STEADY STATE CURRENT

There exist the different conditions between the actual appliance and test conditions, such as,

- ▶ Fuse-holder,
- ▶ Connecting cable size,
- ▶ Contacting resistance between fuse clip and fuse, etc.

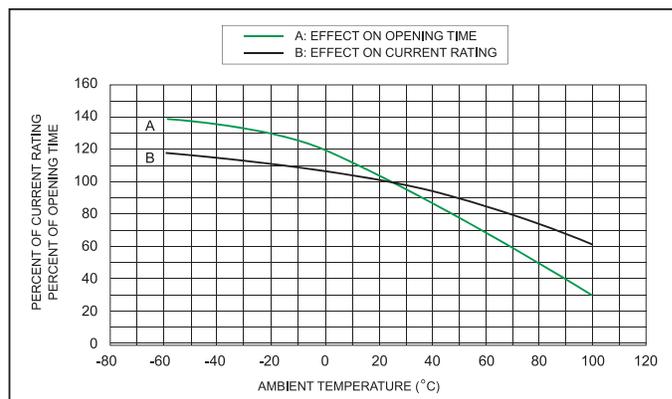
The above factors should be taken into consideration when selecting a fuse in a 25℃ ambient. To compensate for the variation, the following conditions shall be met to ensure the fuse operating continuously and properly.

Fuse designed to IEC standard: current rating (In)=steady state current of circuit/0.9

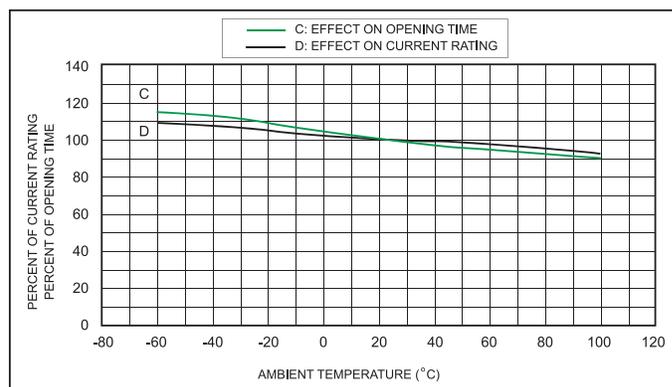
Fuse designed to UL standard: current rating (In)=steady state current of circuit/0.75

AMBIENT TEMPERATURE

The current carrying capacity tests of a fuse are performed at 25℃ and will be effected by changes with the ambient temperature. The higher the ambient temperature is, the shorter fuse life will be and the lower the current carrying capacity will be. So the ambient temperature shall be considered for proper fuse selection. Refer to the following charts showing its effect on the current carrying capacity of all kinds of fuse.



(I) Effect on rating and opening time in 5In of traditional slow-blow and medium slow-blow fuse



(II) Effect on rating and opening time in 5In of fast-blow and slow-blow fuse



USER GUIDE

PULSE

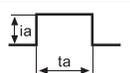
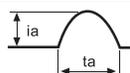
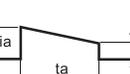
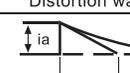
Pulse produces thermal cycling and mechanical fatigue which could affect the life of fuse. In design the selected fuse should have a I^2T value much greater than the I^2T value of pulse. Refer to TABLE A showing the relationship between the life of fuse (the endurable times of pulse shock) and U (ratio between pulse I^2T value and fuse I^2T value). The I^2T value of a fuse presented in this catalog may be for your reference. The I^2T value of a pulse can be approximated from the following formulas for a typical wave shape, refer to TABLE B.

TABLE A

Endurable times of pulse shock	U (ratio)
100,000 times	20%
10,000 times	30%
1,000 times	40%

Note: Adequate interval (5s-10s) must exist between pulse events to allow the heat from the previous event to dissipate.

TABLE B

Wave shape	Formula	Wave shape	Formula
 Rectangle wave	$ia^2 ta$	 Sine wave	$(1/2) ia^2 ta$
 Trapezoid wave	$(1/3) (ia^2 + iaib + ib^2) ta$	 Distortion wave	$(1/5) ia^2 ta$
 Triangle wave	$(1/3) ia^2 ta$	 Charge or discharge wave	$(1/2) ia^2 ta$

TESTING

The selected sample should be tested in the actual circuit to verify the selection. The testing should include the tests under normal and fault conditions to ensure that the fuse will operate properly in the circuit.

In all kinds of electrical protection doubts, contacting our engineers are welcome. Possibly we will work with you making some special recommendations to help you solve these problems.



2410, RoHS Compliant & Pb-Free SMD NANO FUSE (FAST-BLOW) 方型超微表面贴片式保险丝 (速断型)

INTERRUPTING CAPACITY / 分断能力:

50A at 250V AC (200mA-10A), 50A at 125V AC/DC (12A-15A, 1A-5A), 100A at 125V AC/DC (200mA-10A), 100A at 65V DC (12A-15A), 100A at 250V AC(1A-5A)

TECHNICAL PARAMETERS/ 技术参数:

CATALOG NO. 目录编号	CURRENT RATING 额定电流	SAFETY APPROVALS 安全认证						REFERENCE (A ² .Sec.) (RoHS) I ² T 参考值
		CQC			UR/cUR			
		H	L1	L2	H	L1	L2	
25F-0200H/L1	200mA				●	●	0.008	
25F-0250H/L1	250mA				●	●	0.012	
25F-0315H/L1	315mA				●	●	0.031	
25F-0375H/L1	375mA				●	●	0.067	
25F-0400H/L1	400mA				●	●	0.073	
25F-0500H/L1	500mA				●	●	0.101	
25F-0630H/L1	630mA				●	●	0.188	
25F-0750H/L1	750mA				●	●	0.315	
25F-0800H/L1	800mA				●	●	0.335	
25F-010H/L1	1A	●	●		●	●	0.34	
25F-012H/L1	1.2A	●	●		●	●	0.49	
25F-013H/L1	1.25A	●	●		●	●	0.52	
25F-015H/L1	1.5A	●	●		●	●	0.93	
25F-016H/L1	1.6A	●	●		●	●	0.97	
25F-020H/L1	2A	●	●		●	●	1.92	
25F-025H/L1	2.5A	●	●		●	●	3.38	
25F-030H/L1	3A	●	●		●	●	3.95	
25F-032H/L1	3.15A	●	●		●	●	4.01	
25F-035H/L1	3.5A	●	●		●	●	5.26	
25F-040H/L1	4A	●	●		●	●	7.81	
25F-050H/L1	5A	●	●		●	●	12.22	
25F-063H/L1	6.3A	●	●		●	●	7.01	
25F-070H/L1	7A	●	●		●	●	8.36	
25F-080H/L1	8A	●	●		●	●	12.81	
25F-100H/L1	10A	●	●		●	●	19.03	
25F-120L1/L2	12A				●	●	35.62	
25F-150L1/L2	15A				●	●	70.997	

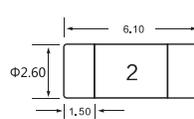
● DENOTES FOR APPROVED ● 表示已取得安全认证
H DENOTES FOR 250V H 代表 250V
L1 DENOTES FOR 125V L1 代表 125V
L2 DENOTES FOR 65V L2 代表 65V

ELECTRICAL CHARACTERISTICS/ 电气特性:

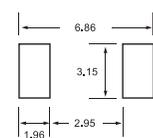
% of CURRENT RATING 额定电流的 %	BLOWING TIME 熔断时间	
100%	4 hours Min. 最快 4 小时	(200mA-15A)
125%	1 hours Min. 最快 1 小时	(1A-5A)
200%	5 seconds Max. 最慢 5 秒	(200mA-10A)
	20 seconds Max. 最慢 20 秒	(12A-15A)
1000%	0.001S-0.01S	(1A-5A)

Standards/ 标准: UL 248-1, UL 248-14
Operating Temperature/ 工作温度: -55°C ~125°C
Storing Temperature/ 储存温度: -55°C ~85°C
Resistance to soldering heat/ 耐焊接热性: 260°C ± 5°C, 30s ± 5s
Solderability/ 可焊性: MIL-STD-202, Method 208

Dimensions/ 尺寸



Land Pattern:

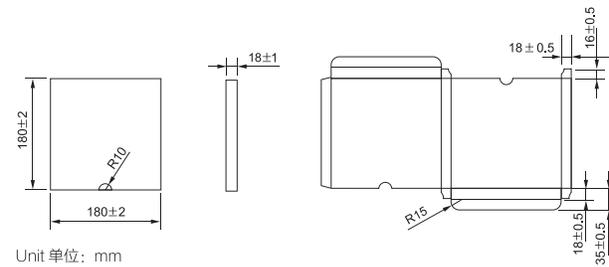


Unit 单位: mm

PACKING/ 包装:

1,000 PIECES TAPED AND REELED IN ONE BOX
每卷 1,000 只保险丝, 装入一个包装盒

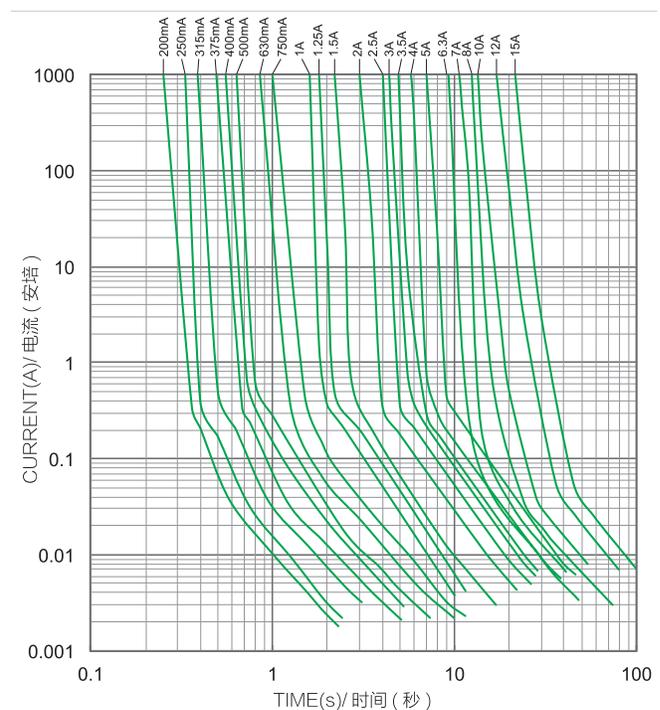
BOX SIZE/ 包装盒尺寸:



Unit 单位: mm

25F AVERAGE I-T CHARACTERISTICS CURVE (FOR REFERENCE ONLY)

25F 平均 I-T 曲线图 (仅供参考)





2410, RoHS Compliant & Pb-Free SMD NANO FUSE (SLOW-BLOW) 方型超微表面贴片式保险丝 (慢断型)

INTERRUPTING CAPACITY / 分断能力:

50A at 250V AC (200mA-5A)
100A at 125V DC/AC (200mA-5A)

TECHNICAL PARAMETERS/ 技术参数:

CATALOG NO. 目录编号	CURRENT RATING 额定电流	SAFETY APPROVALS 安全认证 UR/cUR	REFERENCE (A ² .Sec.) (RoHS) [T 参考值]
25T-0200H/L	200mA	●	0.06
25T-0250H/L	250mA	●	0.08
25T-0315H/L	315mA	●	0.130
25T-0375H/L	375mA	●	0.186
25T-0400H/L	400mA	●	0.210
25T-0500H/L	500mA	●	0.329
25T-0630H/L	630mA	●	0.532
25T-0750H/L	750mA	●	0.845
25T-0800H/L	800mA	●	1.16
25T-010H/L	1A	●	1.88
25T-012H/L	1.2A	●	3.10
25T-013H/L	1.25A	●	3.56
25T-015H/L	1.5A	●	4.49
25T-016H/L	1.6A	●	4.98
25T-020H/L	2A	●	5.18
25T-025H/L	2.5A	●	10.66
25T-030H/L	3A	●	14.01
25T-032H/L	3.15A	●	15.04
25T-035H/L	3.5A	●	15.51
25T-040H/L	4A	●	24.22
25T-050H/L	5A	●	32.39

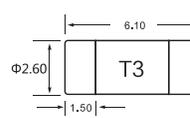
● DENOTES FOR APPROVED ● 表示已取得安全认证
H DENOTES FOR 250V L DENOTES FOR 125V

ELECTRICAL CHARACTERISTICS/ 电气特性:

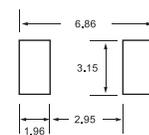
% of CURRENT RATING 额定电流的 %	BLOWING TIME 熔断时间	
100%	4 hours Min.	最快 4 小时
200%	1-60 seconds	1-60 秒
300%	0.2-3 seconds	0.2-3 秒
800%	0.01-0.1 seconds	0.01-0.1 秒

Standards/ 标准: UL 248-1, UL 248-14
Operating Temperature/ 工作温度: -55°C ~125°C
Storing Temperature/ 储存温度: -55°C ~85°C
Resistance to soldering heat/ 耐焊接热性: 260°C ±5°C, 30s ±5s
Solderability/ 可焊性: MIL-STD-202, Method 208

Dimensions/ 尺寸



Land Pattern:

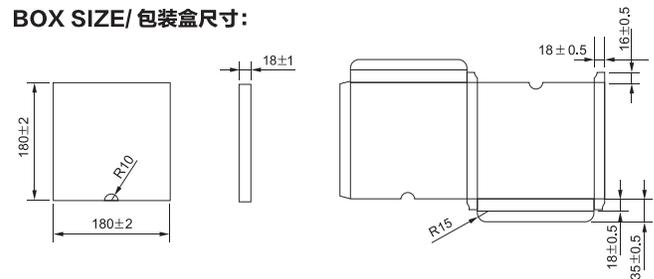


Unit 单位: mm

PACKING/ 包装:

1,000 PIECES TAPED AND REELED IN ONE BOX
每卷 1,000 只保险丝, 装入一个包装盒

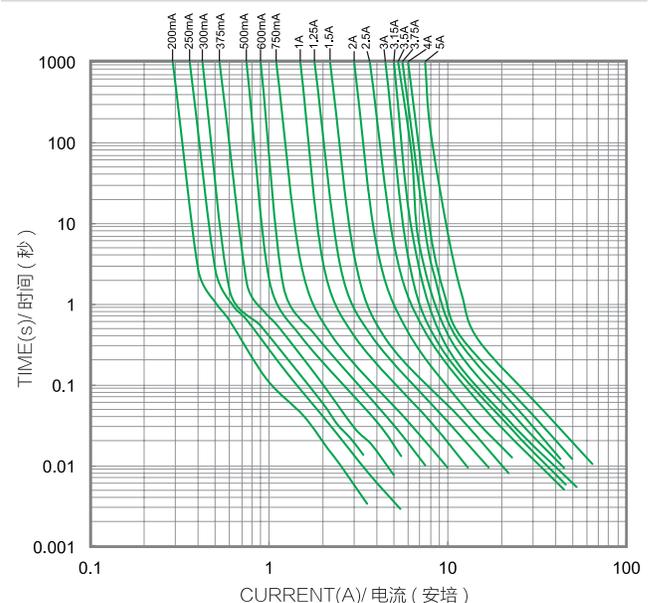
BOX SIZE/ 包装盒尺寸:

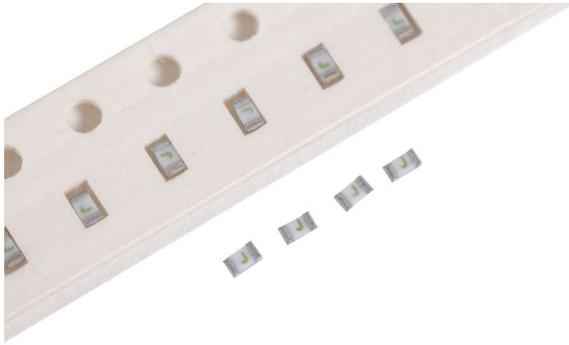


Unit 单位: mm

25T AVERAGE I-T CHARACTERISTICS CURVE (FOR REFERENCE ONLY)

25T 平均 I-T 曲线图 (仅供参考)





0603, RoHS Compliant & Pb-Free SURFACE MOUNT CHIP FUSE (FAST-BLOW) 表面贴装片式保险丝 (速断型)

INTERRUPTING CAPACITY / 分断能力:

50A 32V AC (200mA-1A) 35A 32V AC (1.2A-5A)
50A 63V DC (200mA-250mA) 50A 32V DC (300mA-1A)
35A 32V DC (1.2A-5A)

TECHNICAL PARAMETERS/ 技术参数:

CATALOG NO. 目录编号	CURRENT RATING 额定电流	SAFETY APPROVALS 安全认证				REFERENCE (A ² .Sec.) (RoHS) I ² T 参考值
		UR		cUR		
		L1	L2	L1	L2	
06F-0200L	200mA	●	●	●	●	0.00056
06F-0250L	250mA	●	●	●	●	0.00078
06F-0315L	315mA	●		●		0.00083
06F-0375L	375mA	●		●		0.00115
06F-0400L	400mA	●		●		0.00135
06F-0500L	500mA	●		●		0.0069
06F-0630L	630mA	●		●		0.0072
06F-0750L	750mA	●		●		0.017
06F-0800L	800mA	●		●		0.019
06F-010L	1A	●		●		0.041
06F-012L	1.2A	●		●		0.043
06F-013L	1.25A	●		●		0.045
06F-015L	1.5A	●		●		0.078
06F-016L	1.6A	●		●		0.076
06F-020L	2A	●		●		0.130
06F-025L	2.5A	●		●		0.180
06F-030L	3.0A	●		●		0.280
06F-032L	3.15A	●		●		0.32
06F-035L	3.5A	●		●		0.361
06F-040L	4A	●		●		0.408
06F-050L	5A	●		●		1.100

● DENOTES FOR APPROVED ● 表示已取得安全认证
L1 DENOTES FOR 32V L1 代表 32V
L2 DENOTES FOR 63V L2 代表 63V

ELECTRICAL CHARACTERISTICS/ 电气特性:

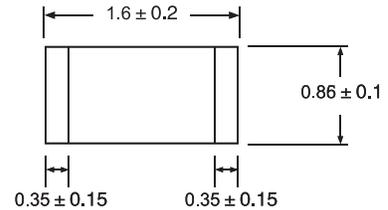
% of CURRENT RATING 额定电流的 %	BLOWING TIME 熔断时间
100%	4 hours Min. 最快 4 小时
250%	10 seconds Max. 最慢 10 秒 (200mA-3A)
350%	1 second Max. 最慢 1 秒 (3.15A-5A)

Standards/ 标准: UL 248-1, UL 248-14
Operating Temperature/ 工作温度: -55°C ~90°C
Storing Temperature/ 储存温度: -55°C ~85°C
Resistance to soldering heat/ 耐焊接热性: 260°C, 10s Max.
Solderability/ 可焊性: 235°C ±5°C, 3.5s+0.5/-0s

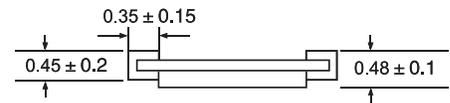
Dimensions/ 尺寸:

Unit 单位: mm

TOP VIEW/ 上面:



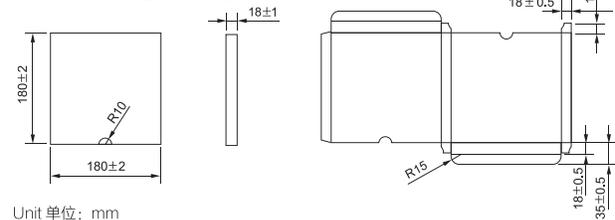
SIDE VIEW/ 侧面:



PACKING/ 包装:

5,000 PIECES TAPED AND REELED IN ONE BOX
每卷 5,000 只保险丝, 装入一个包装盒

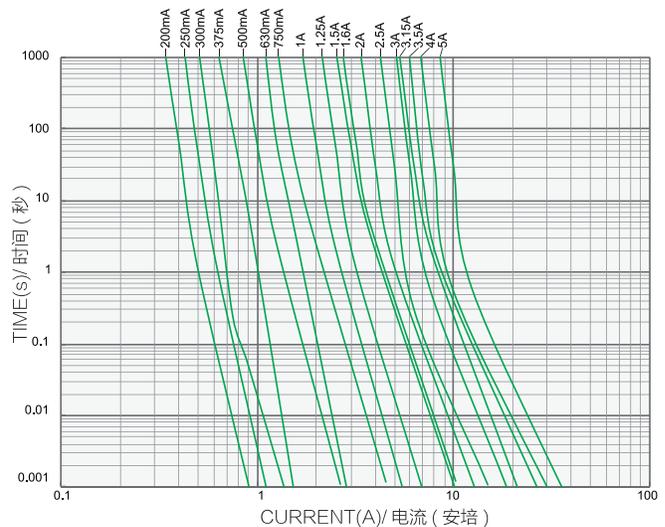
BOX SIZE/ 包装盒尺寸:



Unit 单位: mm

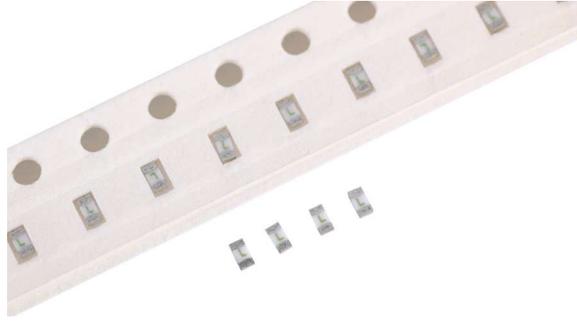
06F AVERAGE I-T CHARACTERISTICS CURVE (FOR REFERENCE ONLY)

06F 平均 I-T 曲线图 (仅供参考)





Your Power Safeguard™
您的电路安全卫士



0603, RoHS Compliant & Pb-Free SURFACE MOUNT CHIP FUSE (SLOW-BLOW) 表面贴装片式保险丝 (慢断型)

TECHNICAL PARAMETERS/ 技术参数:

CATALOG NO. 目录编号	CURRENT RATING 额定电流	SAFETY APPROVALS 安全认证				REFERENCE (A ² .Sec.) (RoHS) I ² T 参考值
		UR		cUR		
		L1	L2	L1	L2	
06T-010L	1A	●		●		0.061
06T-012L	1.2A	●		●		0.100
06T-013L	1.25A	●		●		0.106
06T-015L	1.5A	●		●		0.145
06T-016L	1.6A	●		●		0.156
06T-020L	2A	●		●		0.265
06T-025L	2.5A	●		●		0.453
06T-030L	3A	●		●		0.952
06T-032L	3.15A	●		●		0.990
06T-035L	3.5A	●		●		1.16
06T-040L	4A	●		●		1.38
06T-050L	5A	●		●		2.53

● DENOTES FOR APPROVED ● 表示已取得安全认证
L1 DENOTES FOR 32V L1 代表 32V
L2 DENOTES FOR 63V L2 代表 63V

ELECTRICAL CHARACTERISTICS/ 电气特性:

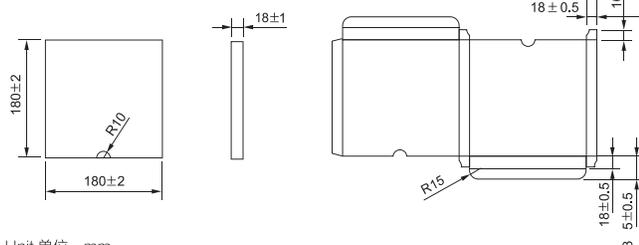
% of CURRENT RATING 额定电流的 %	BLOWING TIME 熔断时间	
100%	4 hours Min.	最快 4 小时
200%	1 second Min. 120 seconds Max.	最快 1 秒 最慢 120 秒
300%	0.05 seconds Min. 3 seconds Max.	最快 0.05 秒 最慢 3 秒
800%	0.0005 seconds Min. 0.05 seconds Max.	最快 0.0005 秒 最慢 0.05 秒

PACKING/ 包装:

5,000 PIECES TAPED AND REELED IN ONE BOX

每卷 5,000 只保险丝, 装入一个包装盒

BOX SIZE/ 包装盒尺寸:

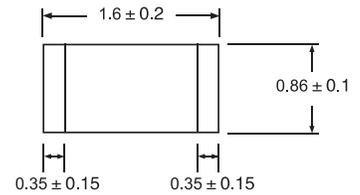


Unit 单位: mm

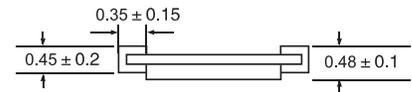
Dimensions/ 尺寸:

Unit 单位: mm

TOP VIEW/ 上面:



SIDE VIEW/ 侧面:



Standards/ 标准: UL 248-1, UL 248-14

Operating Temperature/ 工作温度: -55°C ~90°C

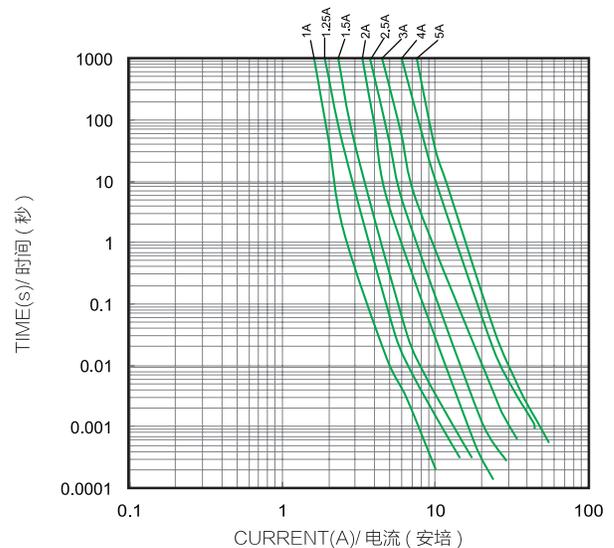
Storing Temperature/ 储存温度: -55°C ~85°C

Resistance to soldering heat/ 耐焊接热性: 260°C, 10s Max.

Solderability/ 可焊性: 235°C ± 5°C, 3.5s+0.5/-0s

06T AVERAGE I-T CHARACTERISTICS CURVE (FOR REFERENCE ONLY)

06T 平均 I-T 曲线图 (仅供参考)





1206, RoHS Compliant & Pb-Free SURFACE MOUNT CHIP FUSE (FAST-BLOW) 表面贴装片式保险丝 (速断型)

INTERRUPTING CAPACITY / 分断能力:

50A 32V AC (100mA-375mA) 50A 63V AC (400mA-3A)
35A 24V AC (3.15A-7A) 50A 63V DC (100mA-3A)
50A 32V DC (3.15A-7A)

TECHNICAL PARAMETERS/ 技术参数:

CATALOG NO. 目录编号	CURRENT RATING 额定电流	SAFETY APPROVALS 安全认证						REFERENCE (A, Sec.) (RoHS) IT 参考值
		UR			cUR			
		L1	L2	L3	L1	L2	L3	
12F-0100L	100mA	●	●		●	●	0.00034	
12F-0125L	125mA	●	●		●	●	0.00040	
12F-0150L	150mA	●	●		●	●	0.00084	
12F-0200L	200mA	●	●		●	●	0.0010	
12F-0250L	250mA	●	●		●	●	0.0014	
12F-0315L	315mA	●	●		●	●	0.0017	
12F-0375L	375mA	●	●		●	●	0.0026	
12F-0400L	400mA		●		●	●	0.0029	
12F-0500L	500mA		●		●	●	0.0049	
12F-0630L	630mA		●		●	●	0.012	
12F-0750L	750mA		●		●	●	0.015	
12F-0800L	800mA		●		●	●	0.025	
12F-010L	1A		●		●	●	0.042	
12F-012L	1.2A		●		●	●	0.055	
12F-013L	1.25A		●		●	●	0.055	
12F-015L	1.5A		●		●	●	0.099	
12F-016L	1.6A		●		●	●	0.108	
12F-020L	2A		●		●	●	0.114	
12F-025L	2.5A		●		●	●	0.198	
12F-030L	3A		●		●	●	0.276	
12F-032L	3.15A	●	●		●	●	0.631	
12F-035L	3.5A	●	●		●	●	0.695	
12F-040L	4A	●	●		●	●	0.784	
12F-050L	5A	●	●		●	●	1.225	
12F-063L	6.3A	●	●		●	●	1.652	
12F-070L	7A	●	●		●	●	1.890	

● DENOTES FOR APPROVED ● 表示已取得安全认证
L1 DENOTES FOR 24V (L1 代表 24V) L2 DENOTES FOR 32V (L2 代表 32V)
L3 DENOTES FOR 63V (L3 代表 63V)

ELECTRICAL CHARACTERISTICS/ 电气特性:

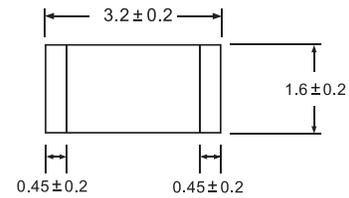
% of CURRENT RATING 额定电流的 %	BLOWING TIME 熔断时间
100%	4 hours Min. 最快 4 小时
250%	10 seconds Max. 最慢 10 秒 (100mA-5A)
350%	1 second Max. 最慢 1 秒 (6A-7A)

Standards/ 标准: UL 248-1, UL 248-14
Operating Temperature/ 工作温度: -55°C ~90°C
Storing Temperature/ 储存温度: -55°C ~85°C
Resistance to soldering heat/ 耐焊接热性: 260°C, 10s Max.
Solderability/ 可焊性: 235°C ± 5°C, 3.5s+0.5/-0s

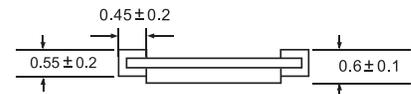
Dimensions/ 尺寸:

Unit 单位: mm

TOP VIEW/ 上面:



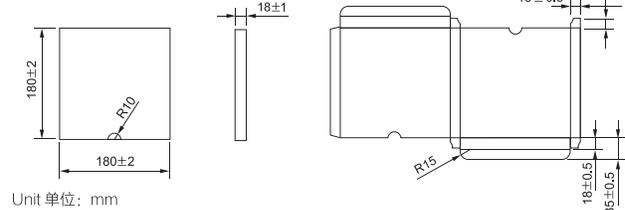
SIDE VIEW/ 侧面:



PACKING/ 包装:

5,000 PIECES TAPED AND REELED IN ONE BOX
每卷 5,000 只保险丝, 装入一个包装盒

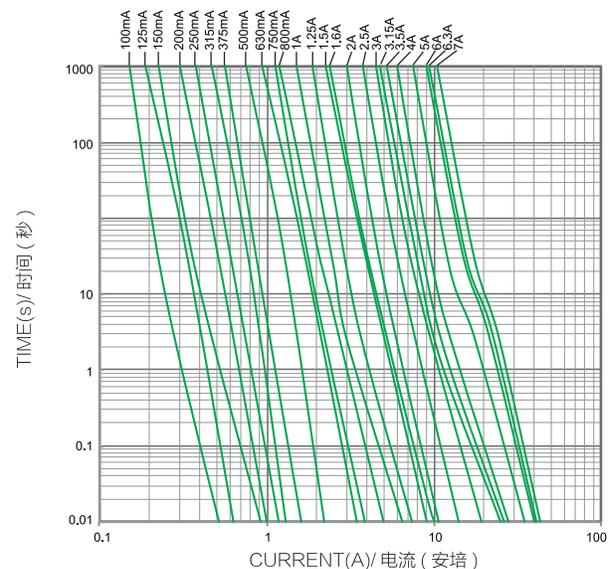
BOX SIZE/ 包装盒尺寸:



Unit 单位: mm

12F AVERAGE I-T CHARACTERISTICS CURVE (FOR REFERENCE ONLY)

12F 平均 I-T 曲线图 (仅供参考)





1206, RoHS Compliant & Pb-Free
SURFACE MOUNT CHIP FUSE (SLOW-BLOW)
表面贴装片式保险丝 (慢断型)

TECHNICAL PARAMETERS/ 技术参数:

CATALOG NO. 目录编号	CURRENT RATING 额定电流	SAFETY APPROVALS 安全认证						REFERENCE (A ² .Sec.) (RoHS) I ² T 参考值
		UR			cUR			
		L1	L2	L3	L1	L2	L3	
12T-0500L	500mA			●			●	0.0182
12T-0630L	630mA			●			●	0.0418
12T-0750L	750mA			●			●	0.0684
12T-0800L	800mA			●			●	0.0699
12T-010L	1A			●			●	0.110
12T-013L	1.25A			●			●	0.125
12T-015L	1.5A			●			●	0.170
12T-016L	1.6A			●			●	0.190
12T-020L	2A			●			●	0.250
12T-025L	2.5A			●			●	0.900
12T-030L	3A			●			●	1.300
12T-032L	3.15A	●	●		●	●		1.401
12T-035L	3.5A	●	●		●	●		1.714
12T-040L	4A	●	●		●	●		2.025
12T-050L	5A	●	●		●	●		4.225
12T-063L	6.3A	●	●		●	●		5.404
12T-070L	7A	●	●		●	●		6.305

● DENOTES FOR APPROVED ● 表示已取得安全认证
L1 DENOTES FOR 24V (L1 代表 24V) L2 DENOTES FOR 32V (L2 代表 32V)
L3 DENOTES FOR 63V (L3 代表 63V)

ELECTRICAL CHARACTERISTICS/ 电气特性:

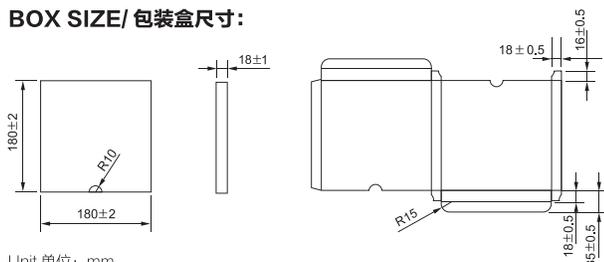
% of CURRENT RATING 额定电流的 %	BLOWING TIME 熔断时间	
100%	4 hours Min.	最快 4 小时
200%	1-120 seconds	1-120 秒
300%	0.05-3.00 seconds	0.05-3.00 秒
800%	0.0015-0.05 seconds	0.0015-0.05 秒

PACKING/ 包装:

5,000 PIECES TAPED AND REELED IN ONE BOX

每卷 5,000 只保险丝, 装入一个包装盒

BOX SIZE/ 包装盒尺寸:



Unit 单位: mm

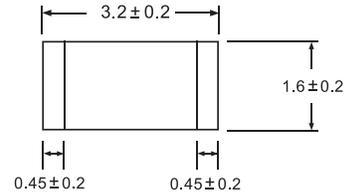
INTERRUPTING CAPACITY / 分断能力:

50A 63V AC (500mA-3A) 35A 24V AC (3.15A-7A)
50A 63V DC (500mA-3A) 50A 32V DC (3.15A-7A)

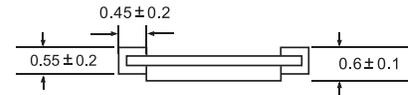
Dimensions/ 尺寸

Unit 单位: mm

TOP VIEW/ 上面:



SIDE VIEW/ 侧面:



Standards/ 标准: UL 248-1, UL 248-14

Operating Temperature/ 工作温度: -55°C ~90°C

Storing Temperature/ 储存温度: -55°C ~85°C

Resistance to soldering heat/ 耐焊接热性: 260°C, 10s Max.

Solderability/ 可焊性: 235°C ±5°C, 3.5s+0.5/-0s

**12T AVERAGE I-T CHARACTERISTICS CURVE
(FOR REFERENCE ONLY)**

12T 平均 I-T 曲线图 (仅供参考)

