

1. 适用范围 / Scope of Application

本产品适用于各类电子设备电路初、次级电路板的过流保护，广泛应用于固态照明、电池充电、消费电子、电子镇流器、LED AC/DC 电源供应、网络通信、医疗仪器及工业控制器等领域。

This product is suitable for over-current protection of primary and secondary circuit boards of various electronic devices, and is widely used in solid-state lighting, battery charging, etc.

2. 安规认证标准及编号 / Standards and Agency Approvals

2.1 执行标准: 遵循 UL248-1;UL248-14。

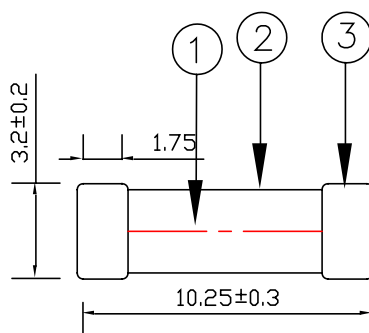
Standards: In accordance with UL248-1;UL248-14.

2.2 认证范围 Certification:

额定电压 Rated Voltage	安规标准 Agency	认证电流 Ampere Range	证书编号 Agency File Number
32V/60V/72V/125Vdc/250V	UR-CUR	12A~60A	E358589

3. 结构及尺寸 / Dimensions and Structure

单位: 毫米 / Unit: mm



材料明细 Material Details

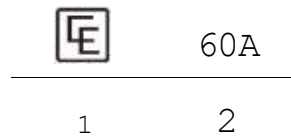
编号 NO.	零件名称 Part Name	材质 Material
1	熔丝 Fuse Wire	合金银线 Silver Alloy
2	管体 Body	陶瓷管 Ceramic Tube
3	铜帽 Cap	铜镀金 Brass Gold plated

5. 产品标示 / Product Marking

保险丝两端铜帽上或本体上需有下列标示。

The fuses cap or fuse body shall have the following markings.

示例 Example:



1. 标识/Logo

2. 额定电流/Rated Current:

注意 / Note: 对于标示的大小和位置没有规定。

Size and position of the markings shall not be provided



产品规格书

文件版本:Version

A/1

文件编号:No

型号 Type:1032 DBF

安规类型: Approve

UL

6. 产品特性 / Product Characteristic

额定电流 Rated current	额定电压 Rated voltage	分断能力 Breaking capacity	产品电阻 product resistance	I ² T (A ² T)	Safety Aproval
12A	32V/60V 72V/125Vdc 250V ac	100A@125V ac 100A@125V dc 100A@250v ac 1000A@32V dc 1000A@60V dc 400A@72v dc	/	/	●
15A			/	/	●
16A			/	/	●
20A			1.75mΩ~1.95mΩ	961	●
25A			/	/	●
30A			1.57mΩ~1.70mΩ	784	●
35A			/	/	●
40A			1.27mΩ~1.43mΩ	1988	●
50A			0.92mΩ~1.18mΩ	2116	●
60A			/	/	●

● Approved pending

7. 外观及形状 / Appearances and Configuration

7.1 外观不应出现显著的污点、裂纹，标识应该容易辨识。

There shall not be any remarkable stain and crack on the appearances, markings shall be easily legible.

7.2 形状：贴片式陶瓷管保险丝。

Configuration: SMD type Ceramic Fuse.

8. 产品特性 / Product Characteristics

8.1 引脚拉力强度 / Lead Pull Strength

10 牛顿 10±1 秒 / 10N for 10±1 Seconds

8.2 引脚推力强度 / Lead Thrust Strength



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2 牛顿 10±1 秒 / 2N for 10±1 Seconds

9.电气特性 / Electrical Characteristics

9.1 实验条件: Test Condition

所有测试环境温度为 25±5℃。

All electrical test is to be conducted with the ambient air at a temperature of 25±5℃.

9.2 分断能力 / Interrupting Rating:

XA 安培使用 XV 伏交流电源(详见 6)

XA @XV (see the table 6)

9.3 温度上升试验 / Rising Temperature Test:

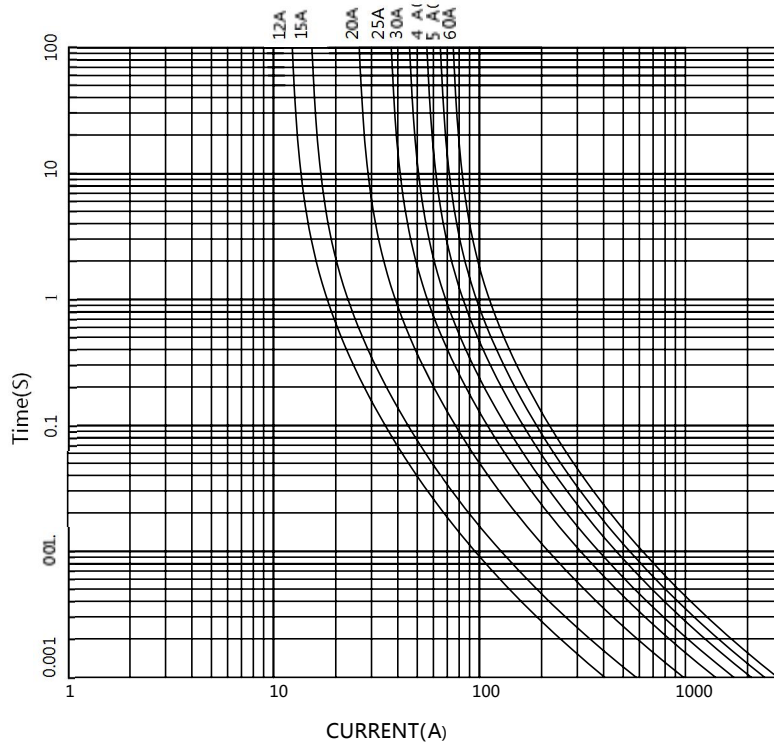
温度上升试验: 通 1.0 倍额定电流, 当温度稳定时(5 分钟测量 4 次, 且每次测量值与平均值相差不超过 2℃)。测得熔断体任何部位的温升不得超过 75℃, 周围环境温度为 25±5℃。

When the 100% times of rating electric current passes the fuse, After reaching thermal balance, the temperature on the fuse surface rising is not higher than 75℃, Ambient Temperature is 25±5℃。 Rising temperature= The surface temperature-Ambient temperature

9.4 熔断时限 / Opening Time

额定电流的% % of Ampere Rating	熔断时间 Opening Time
100%	I=<30A:T>4hrs
	I>30A:T>1hr
200%	T<60s

9.5 平均时间电流曲线图 / Average Time Current Curves



10. 环境特性 / Environmental Characteristic

10.1 使用温度范围 / Operating Temperature

-55℃~+125℃。

10.2 保存条件 Stock Condition

湿度: 相对湿度≤75%平均可以存放 3 年。

Humidity: Relative humidity ≤ 75% store 3 years in average.

10.3 若操作环境温度超出 25±5℃范围, 在选用保险丝规格时, 需考虑操作环境温度对保险丝的影响, 请参照如下: 温度-电流曲线图。

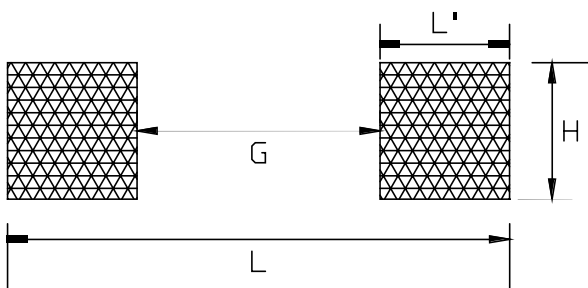
When choosing the fuse's specification, if the operating environmental temperature beyond the scope from 20~30℃, engineer should consider the environmental temperature's affection to fuses. Please

refer: Temperature Rerating Curve:

11. 安装建议 / Installation Recommendations

11.1 建议按照如下示意图方式进行安装。

Propose installation way as following picture.

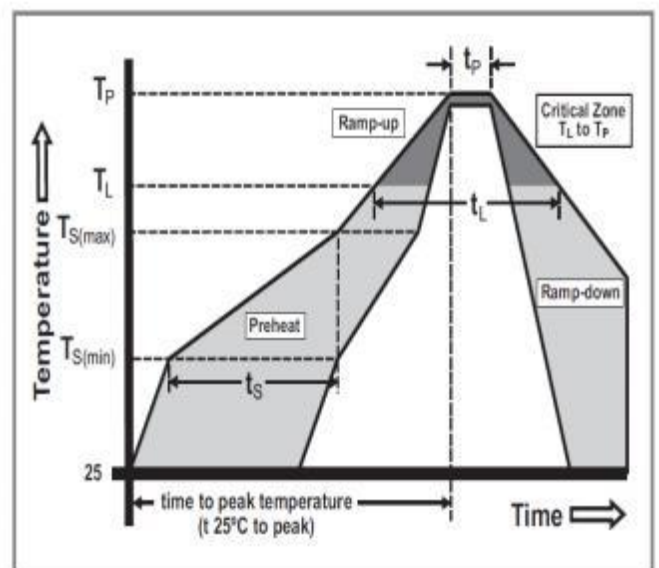


/	mm	inch
L	12.6	0.496
H	3.43	0.135
G	6.10	0.240
L'	3.25	0.128

11.2 建议焊接参数 / Recommended Soldering Parameters

- A. 回流焊/Infrared Reflow : 温度 Temperature 250°C ; 时间 Time 5sec Max;
 - B. 波峰焊/ Wave soldering : 温度 Temperature 250°C ; 时间 Time 10sec Max;
 - C. 烙铁焊/Hand Soldering: 温度 Temperature 300°C ; 时间 Time 2sec Max
- 烙铁避免接触铜帽 Soldering iron avoid touch Copper cap

Profile Feature	Pb-Free assembly
Average Ramp-up Rate (Tsmax to Tp)	3°C/sec Max.
Preheat Temperature Min Ts(min) Temperature Max Ts(max) Time(Tsmin to Tsmax)	150°C 200°C 60-120 sec
Peak Temperature(Tp)	250°C
Time within 5°C of actual Peak Temperature(Tp)	5 sec
Melting tin time(TL)	20sec~40sec
Ramp-down Rate	6°C/sec Max





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Time25Cto peak Temperature

8minutes Max

回流焊接参考温度 Recommend Reflow profile

12. 包装 / Packaging

12.1 包装袋/盒印明下列标示: / The following items indicated on the label:

产品料号、额定(电压、电流)、分断类型及安规名称。

Catalog number, ratings (voltage, current), interrupting type and safety mark.

包装材料均符合 ROHS/REACH/HF 的环保要求, 且包装材料不会和零件发生化学反应, 造成不良。

The packing material conforms to ROHS/REACH/HF environmental protection request. And the packing materials will not have the chemical reaction with the components.

12.2 包装数量 / Packing Quantity

每 2000pcs 一卷/Every 2000 PCS for 1 roll