



2410 方头陶瓷 FUSE
(慢断内焊)

DOC.NO.:
ISS-SCT5A

INDIVIDUAL SPECIFICATION SHEET

Product Name: 2410方头陶瓷FUSE

Part Number: SCT5A

Revision: B



Dongguan TLC Electronic Technology Co., LTD

No.18,5th GaoLi Road,TangXia Town,DongGuan,GuangDong,P.R China 523710

TEL: 86-0769-3892 0511

FAX: 86-0769-8793 2077

Http: www.tlcet.com.cn

Rev.	Effective Date	Changed Contents
A	2020-11-23	New Release
B	2021-1-20	变更包装数量

The individual specification sheet are the property of Dongguan TLC electronic technology Co.,Ltd and shall not be copied or used as commercial purposes without permission.

PREPEARED BY

APPROVED BY

杨娟

杨娟

1. 适用范围 / Scope of Application

本产品适用于 LCD / PDP 电视. 液晶显示器. LCD / PDP 面板. LCD 背光逆变器. 便携式 DVD 播放器. 电源. 联网. PC 服务器. 冷却风扇系统. 存储系统. 电信系统. 无线基站. 白色家电. 游戏机. 办公自动化. 设备. 电池充电电路保护. 工业设备. 医疗器材. 汽车各类电子设备电路的过流保护作用.

This product is suitable for LCD / PDP TV. LCD display. LCD / PDP panel. LCD backlight inverter. Portable DVD player. Power supply. Networking. PC server. Cooling fan system. Storage system. Telecommunication system. Wireless base station. . Game machine. Office automation. Equipment. Battery charging circuit protection. Industrial equipment. Medical equipment. Over-current protection of various electronic equipment circuits.

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。

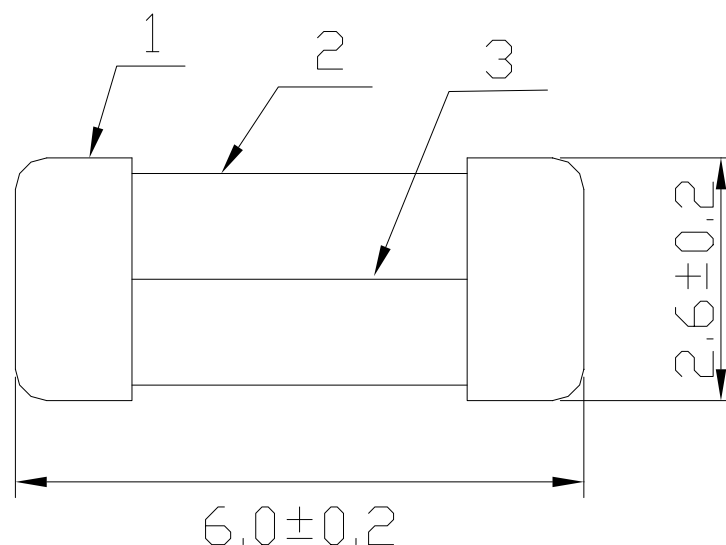
Standards: In accordance with UL248-1;UL248-14.

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
300V	UR-CUR	50mA ~ 10A	E467707

3. 结构及尺寸 / Dimensions and Structure

单位：毫米 / Unit: mm



4.材料明细 / Material Details


编号 NO.	零件名称 Part Name	材质 Material
1	熔丝 Element	合金银线 Silver alloy
2	管体 Body	陶瓷管 Body
3	铜帽 Cap	铜镀银/金 AU/Ag Plated Brass

5.产品标示 / Product Marking

保险丝本体上需有下列标示。

The fuses body shall have the following markings.

示例 Example:


	T	5A
1	2	3

1. 标识/ Logo
2. 电器特性符号/ Electrical Characteristic symbol
3. 额定电流/Rated Current: A 或 or Ma

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

6.产品特性/Product Characteristic(Ref)

Rated current	Rated voltage	Maximun voltage drop (mv)	Breaking capacity	I ² T A ² s	
50mA	300V	5000	50A	0.00019	●
62mA		4400		0.00019	●
100mA		3500		0.00138	●
125mA		2500		0.00286	●
160mA		2200		0.0048	●
200mA		1800		0.0089	●
250mA		1400		0.0158	●
315mA		1300		0.0311	●
400mA		1000		0.0551	●
500mA		900		0.0824	●
630mA		800		0.1381	●
800mA		600		0.2654	●
1A		500		0.6029	●
1.25A		400		0.664	●
1.6A		300		1.06	●
2A		300		0.53	●
2.5A		300		1.029	●
3.15A		300		1.92	●
4A		300		3.152	●
5A		300		5.566	●
6.3A	300	9.17	●		
7A	300	12.3	●		
8A	220	20.23	●		
10A	220	26.46	●		
12A	63V/72V	220	500A	32.0	○
15A		220		53.0	○
20A		220		/	○
25A		220		/	○

● 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：方形陶瓷贴片保险丝。

Configuration: Square ceramic patch 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

2 牛顿 10±1 秒 / 2N for 10±1 Seconds

9.电气特性 / Electrical Characteristics

9.1 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:

50 安培使用 300V 交流电源(50mA~10A)。

50A@ 300V AC

9.3 温度上升试验 / Rising Temperature Test:

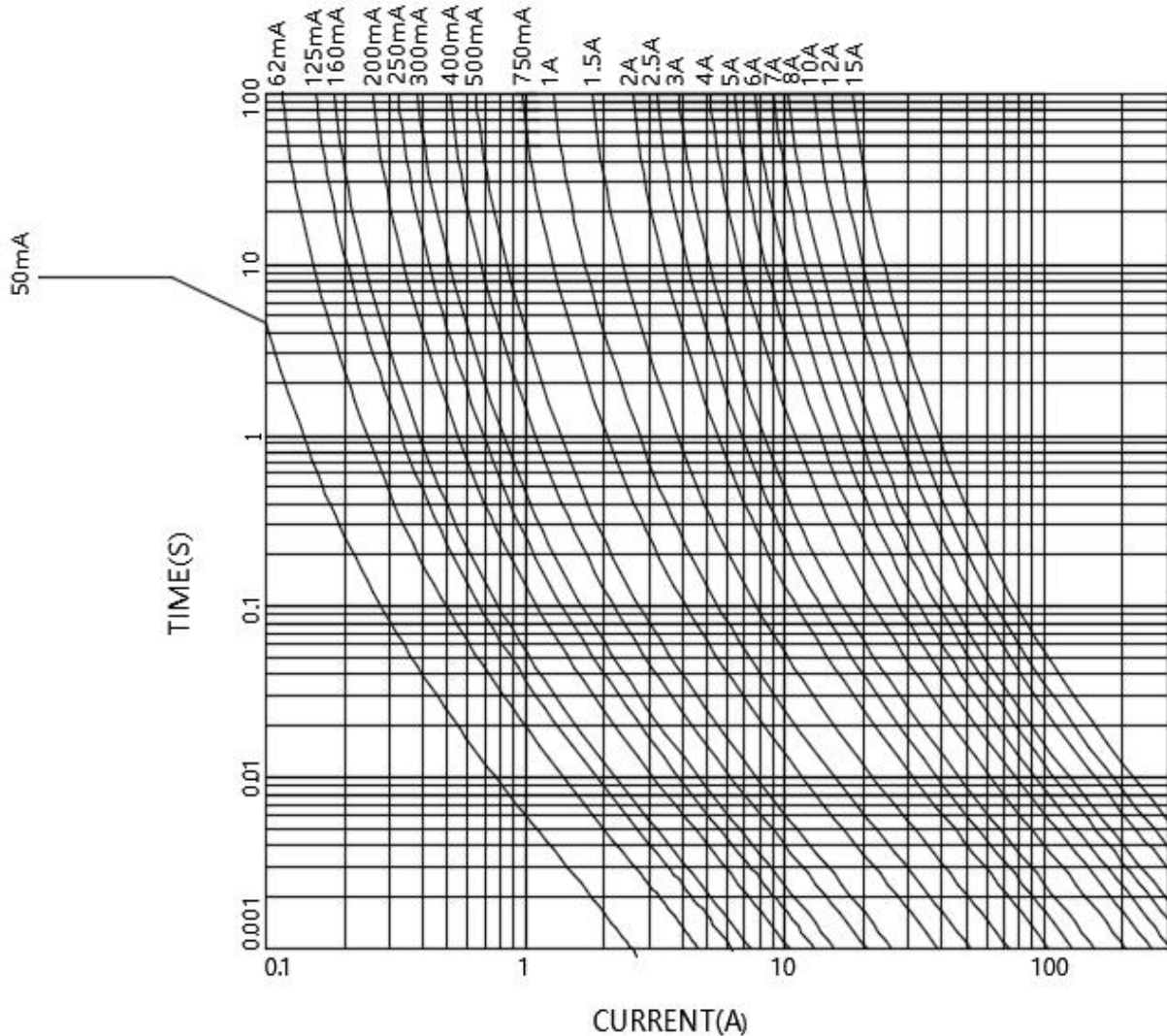
温度上升试验：通 1.0 倍额定电流，当温度稳定时（5 分钟测量 4 次，且每次测量值与平均值相差不超过 2℃）。测得熔断体任何部位的温升不得超过 75℃，周围环境温度为 25±5℃。

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℃.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 (Time lag)
100%	T>4hrs
200%	T<120s
300%	1s<T<3s
800%	10ms<T<100ms

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 $\leq 75\%$ 平均可以存放3年。

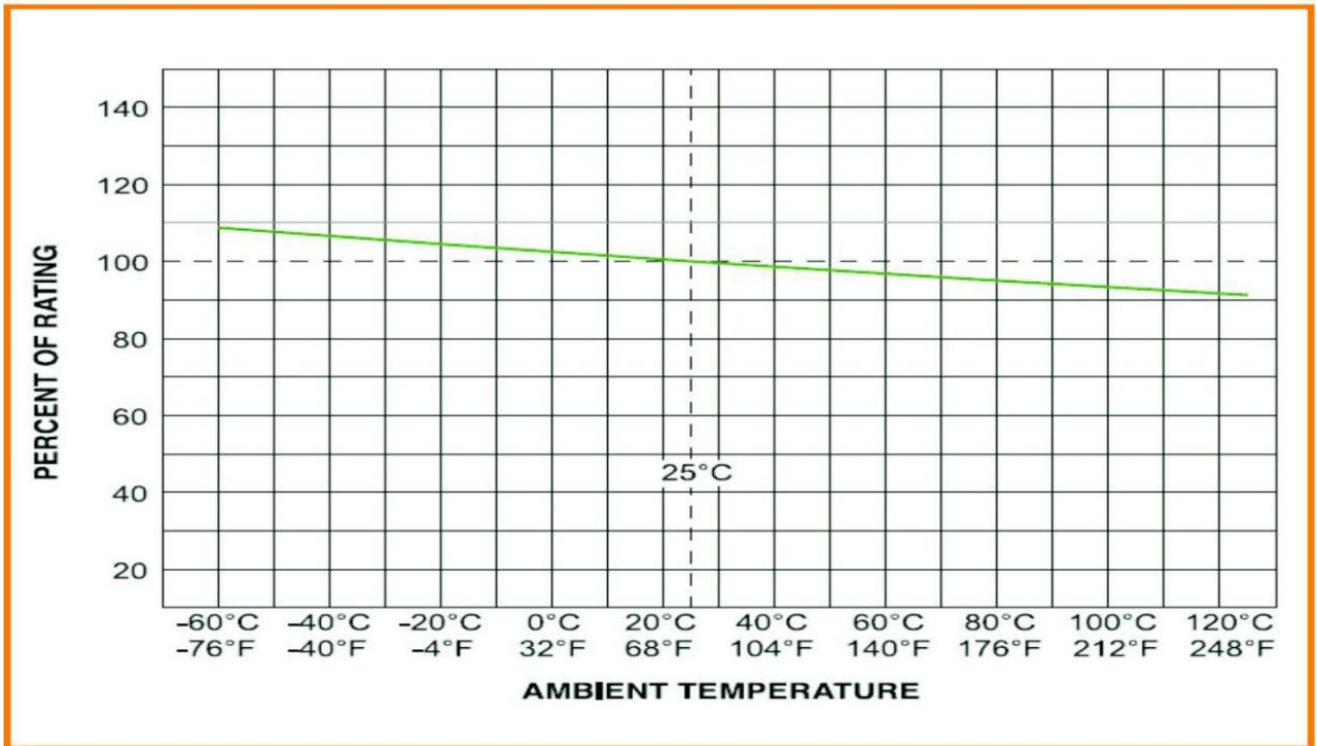
Humidity: Relative humidity $\leq 75\%$ store 3 years in average.

10.3 若操作环境温度超出 25 \pm 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 Derating Curve:

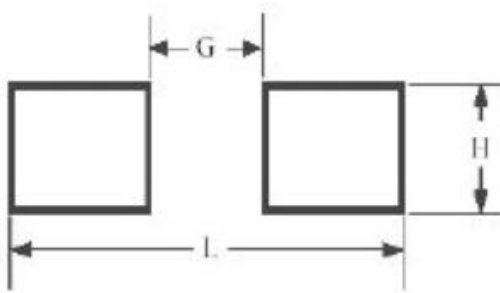
Temperature Derating Curve



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.

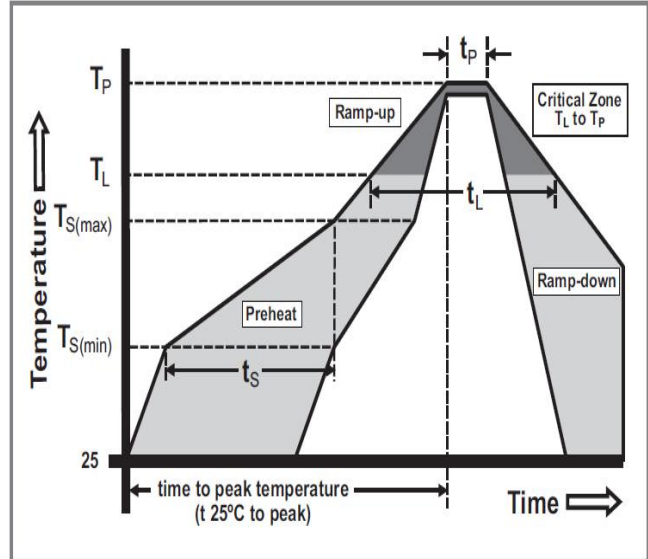


/	mm	inch
L	8.7	0.343
H	2.9	0.114
G	3.0	0.118

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 Features	Pb-Free assembly
Average Ramp-up Rate (T _{smax} to T _p)	3°C/sec Max.
Preheat Temperature Min T _{s(min)}	150°C
Temperature Max T _{s(max)}	200°C
Time(T _{smin} to T _{smax})	60-120 sec
Peak Temperature(T _p)	250°C
Time within 5 °C of actual Peak Temperature(T _p)	5 sec
Melting tin time(T _L)	20sec~40sec
Ramp-down Rate	6°C/sec Max
Time 25°C to 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 1500pcs 一卷/Every 1500 PCS for 1 roll

每盒 1 卷/Each box 1 volume

附件 I: 安规证书和 SGS 证书 / Appendix I: Safety approval certificates and SGS approval