

# INDIVIDUAL SPECIFICATION SHEET

**Product Name:** 表面贴装保险丝

**Part Number:** TAB Series

**Revision:** A



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Rev.	Effective Date	Changed Contents
A	2020-9-3	New Released

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PREPARED BY

APPROVED BY




## 1. 产品特性及应用范围 / Description, Features and Applications

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。

### Descriptions:

TLC TAB series square Surface Mount fuses are ceramic tube/end cap constructions, RoHS compliant, Halogen Free and lead(Pb) exempts of the requirements of RoHS Directive(2002/95/EC), with U.S. (UL/CSA) safety agency approvals. Provide board level primary and secondary circuit protection in a wide variety of applications. With excellent inrush current withstanding capability, excellent reliability for thermal and mechanic shock, also have a high reliability and stable solder ability, end caps are available in gold/silver/nickel plated.

### Features:


- Wide range of current rating
- Low temperature de-rating
- Tape and Reel for automatic
- Small size(6.1mm\*2.5mm)
- Wide operating temperature range
- RoHS compliant
- Conflict free metals

### Applications:

- LED lighting
- LCD backlight
- PC server
- Wireless base station
- Digital camera
- Notebook PC
- Portable Devices
- Cooling fan system
- White goods
- Industrial
- Battery devices
- Power supply
- Storage system
- Game console
- Medical
- LCD/PDP devices
- Networking
- Telecom system
- Office equipment
- Automotive

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

2.1 执行标准：遵循 UL 248-14. Standards: In accordance with UL 248-14.

2.2 认证范围	认证范围 Ampere Range	证书编号 Agency File Number
	15A-40A	E467707(JDYX2)
	15A-40A	E467707(JDYX8)

2.2 目录编号 Catalogue No., ● 已认证 Approved / ○ 认证中 Pending

目录编号 Catalog No.	额定电流 Ampere Rating	额定电压 Voltage Rating	分断能力 Breaking Capacity	冷阻值 Nominal Cold Resistance	熔化热能 I <sup>2</sup> T Melting Integral(A <sup>2</sup> .S)	安规认证 Agency Approvals	
TAB15	15A	72VDC	500A@72VDC	0.012	160.680	●	●
TAB16	16A	72VDC	500A@72VDC	0.011	161.250	●	●
TAB20	20A	72VDC	500A@72VDC	0.008	168.080	●	●
TAB25	25A	72VDC	500A@72VDC	0.006	170.170	●	●
TAB30	30A	72VDC	500A@72VDC	0.004	173.650	●	●
TAB40	40A	63VDC	500A@63VDC	0.002	175.780	●	●

- \*: These catalog no. cold resistance and I2t value are pending due to fuse elements shall be customized;
- DC Cold Resistance are measured at <10% of rated current in ambient temperature of 25°C;
- Typical Pre-arcing I2t are calculated at 10\*In Current or 8ms;
- Min Interrupting Rating: 1.35\*In.

3. 产品标示 / Product Marking

保险丝上需有下列标示 / The fuses shall have the following markings

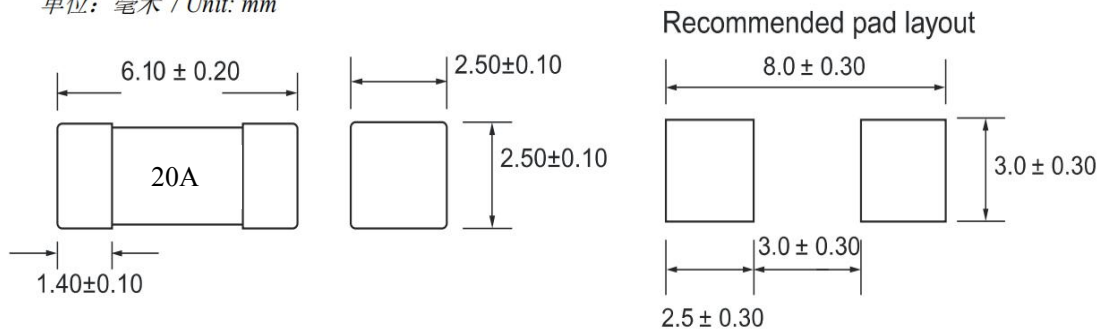
示例 Example:

<b>20A</b>	额定电流/Rated Current (A): <u>  </u> A 或or <u>  </u> mA
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注: 对于标示的大小和位置没有规定 / Note: Size and position of the markings shall not be provided.

4. 结构及尺寸 / Dimensions and Structure

单位: 毫米 / Unit: mm



## 5. 材料明细 / Material Details

编号 NO.	零件名称 Part Name	材质 Material
①	端帽End caps	黄铜镀金Au Plated Brass Cap
②	主体Body	陶瓷管Non-Transparent Square Ceramic Tube
③	熔丝Fuse element	合金Cu-Ag Alloy wire

## 6. 产品特性 / Product Characteristics

编号 NO.	项目 Item	内容 Content	参考标准 Reference standards
1	产品标识 Product Marking	Brand, Ampere Rating	REOMAX marking standards
2	工作温度 Operating Temperature	-55°C to 125°C	IEC60068-2-1/2
3	可焊性 Solderability	T=240°C±5°C, t=3sec±0.5sec, Coverage≥95%	MIL-STD-202, Method 208
4	耐焊接热 Resistance to Soldering Heat	10 sec at 260°C	MIL-STD-202, Method 210, Test condition B
5	绝缘阻抗 Insulation Resistance (after Opening)	10,000 ohms minimum	MIL-STD-202, Method 302, Test Condition A
6	热冲击 Thermal Shock	5 cycles, -65°C / +125°C, 15 minutes at each extreme	MIL-STD-202, Method 107, Test Condition B
7	机械冲击 Mechanical Shock	100G's peak for 6 milliseconds, 3cycles	MIL-STD-202, Method 213, Test I
8	振动试验 Vibration	0.03"amplitude, 10-55 Hz in 1 min. 2hrs each XYZ=6hrs	MIL-STD-202, Method 201
9	耐湿性 Moisture Resistance	10 cycles	MIL-STD-202, Method 106
10	盐雾试验 Salt Spray	5% salt solution, 48hrs	MIL-STD-202, Method 101, Test Condition B

## 7. 电气特性 / Electrical Characteristics

### 7.1 实验条件: Test Condition

所有测试环境温度均为 25±5°C。

All electrical test is to be conducted with the ambient air at a temperature

of  $25 \pm 5^\circ\text{C}$ .

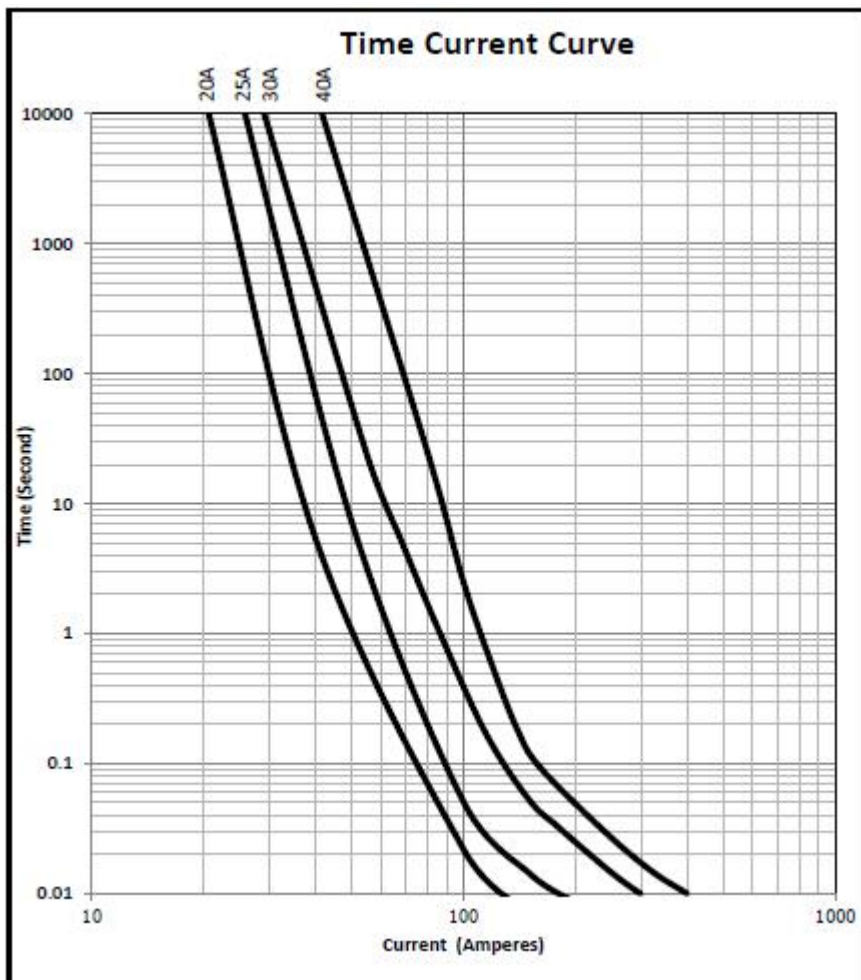
### 7.2 分断能力 Breaking Capacity

500A@72Vdc, 500A@63Vdc.

### 7.3 熔断时限 / Operating Characteristics

额定电流的% % of Ampere Rating(In)	熔断时间 Blowing Time
100% * In	大于4 小时(4 hours Min)
200% * In	小于120 秒 (120 sec Max)
1000% * In	大于10 毫秒 (10ms Min)

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



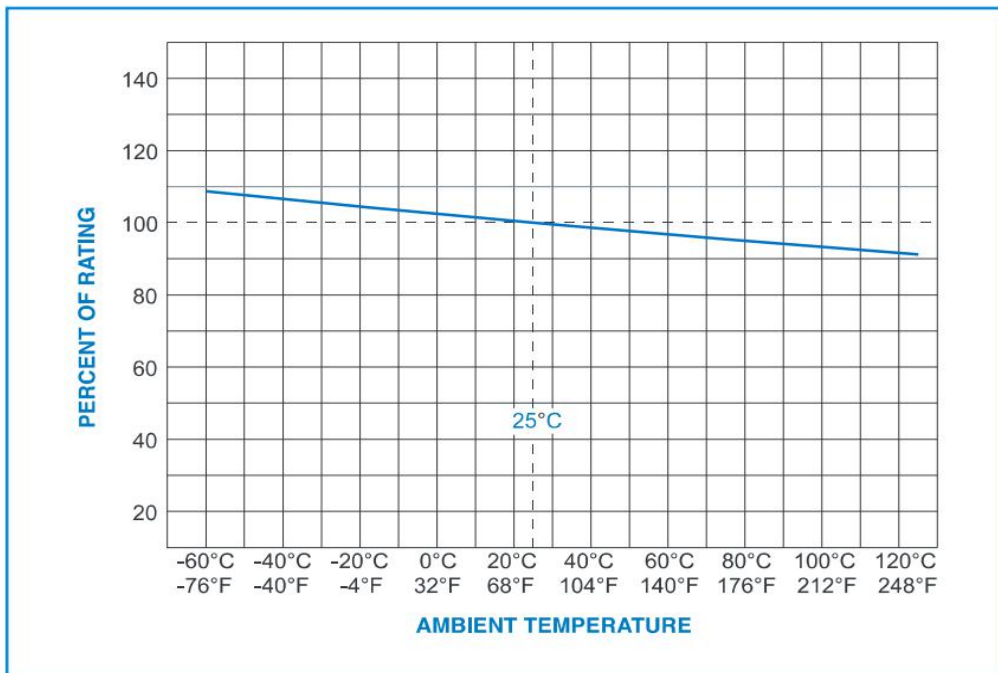
### 8. 环境特性 / Environmental Characteristic

若操作环境温度超出  $25 \pm 5^\circ\text{C}$  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  $20 \sim 30^\circ\text{C}$ , engineer should consider the environmental

temperature's affection to fuses.

Please refer: Temperature Rerating Curve:



### 9. 建议焊接参数 / Recommended Soldering Parameters

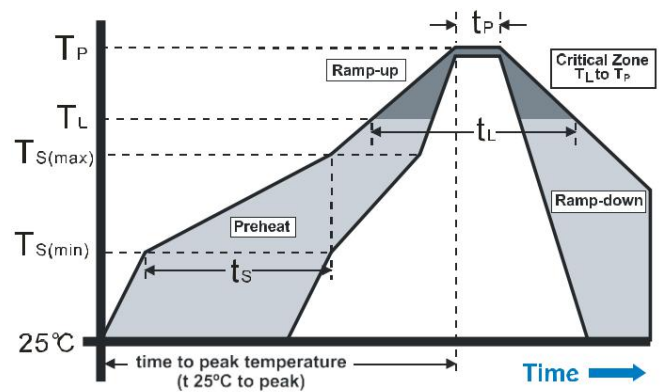
#### A. 波峰/回流焊参数 / Wave /Reflow Soldering Parameters:

锡膏工艺 / Solder paste process.

锡炉温度 / Solder Pot Temperature: 260° C Max;

焊接时间 / Solder Dwell Time: 5 seconds max

Reflow Condition	Pb-Free assembly
Average ramp-up rate (Ts(max)to Tp)	5°C /second max.
Temperature Min (Ts(min))	150°C
Temperature Max (Ts(max))	200°C
Preheat	
Time (Min to Max) (ts)	60-120 seconds
Temperature (TL)	220°C
Reflow	
Time Max (tl)	60 seconds
Peak Temperature(Tp)	260°C max
Ramp-down Rate	5°C/second max
Time 25°C to peak Temperature (Tp)	8 minutes max



#### B. 手工焊参数 / Hand-Solder Parameters:

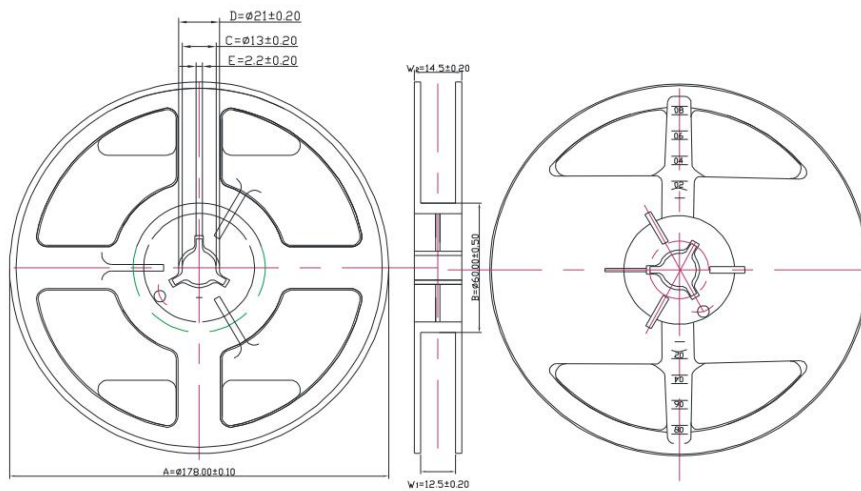
烙铁温度 / Solder Iron Temperature: 300±5°C

焊接时间 / Heating Time: 1~2 s Max

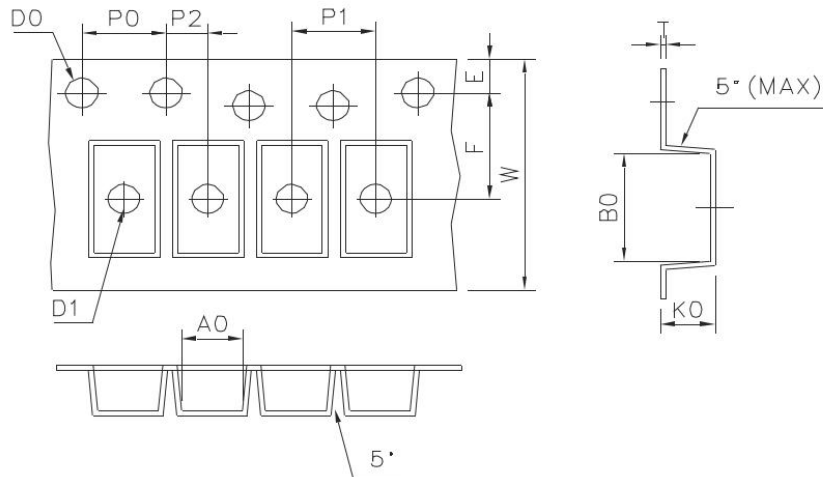
### 10. 包装 / Packaging

1000 个每卷 / 1,000 pcs in 7 inches dia. reel, 12mm wide tape, EIA Standard

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Item	A	B	C	D	E	W1	W2
Spec.(mm)	178±0.10	60±0.50	13±0.20	21±0.20	2.2±0.20	12.5±0.20	14.5±0.20



Item	A <sub>0</sub>	B <sub>0</sub>	D <sub>0</sub>	D <sub>1</sub>	E	F
Spec.(mm)	2.70±0.10	6.40±0.10	1.50±0.10	1.50±0.25	1.75±0.10	5.50±0.10
Item	K <sub>0</sub>	P <sub>0</sub>	P <sub>1</sub>	P <sub>2</sub>	W	t
Spec.(mm)	2.70±0.10	4.00±0.10	4.00±0.10	2.00±0.10	12.00±0.15	0.25±0.05

### 11. 其他 / Others

11.1 如果在使用中有超出本规格书的要求，须经双方协商确认。

In the event that an impropriety is found beyond this specification, it shall be fixed by mutual agreement between the parties.