

Type TCF/Telecom Circuit Fuse

TCF系列/电信电力保险丝



**Description**

Eliminates the need for a current limiting resistor

- ➡ 不需要限流电阻器

Designed to protect Consumer Premises Equipment from harmful overcurrents.

- ➡ 旨在保护消费者的房屋设备免受有害的过电流。

Allows compliance with telecom regulatory standards including UL 1950/60950, and FCC part 68. Application circuit testing is recommended.

符合电信监管标准，包括UL 1950/60950，和FCC part 68。建议进行应用电路测试。

**Features产品特征**

Surface mount surge resistant Slo-Blo® :

- ➡ 表面安装防浪涌的慢断保险丝

Meet UL 60950 3rd Edition power cross requirements standard alone

- ➡ 单独满足UL 60950第三版电源交叉要求标准

Designed to allow compliance with Telcordia GR-1089-CORE and TIA-968-A(formerly FCC Part 68) Surge Specifications

- ➡ 设计允许符合Telcordia GR-1089-CORE和TIA-968-A(前FCC Part 68)浪涌规范

Provide coordinated protection with Kfuse SIDACTor® Transient Voltage Suppressor (TVS) or a Greentube™ Gas Plasma Arrestor, without series resistors

- ➡ 使用Kfuse SIDACTor®瞬态电压抑制器 (TVS) 或Greentube™气体等离子体提供协调保护

Designed to serve the requirements of a wide range of telecommunication and networking equipment

- ➡ 设计用于满足广泛的电信和网络设备的需求。

2A rating has improved temperature rise performance under 2.2A surge current testing when compared with 1.25A rating

- ➡ 2A额定值与1.25A额定值相比，在2.2A浪涌电流测试下改善了温升性能

Standard product is RoHS Compliant and compatible with lead-free solders and higher temperature profiles.

- ➡ 标准产品符合RoHS标准，与无铅焊料和高温焊料兼容。

**Applications产品应用**

- ➡ T1/E1/J1 and HDSL2/4

Ethernet 10/100/1000Base T

- ➡ Baystation T1/E1/J1, T3 (DS3) trunk cards

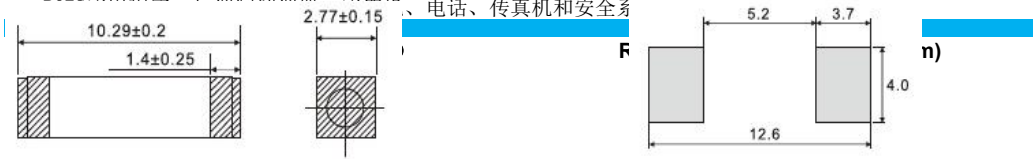
ISDN™U™interface  
ISDN™U™接口

SLIC interface portion of Fiber to the Curb (FTTC) and Fiber to the Premises (FTTP)  
光纤到路缘的SLIC接口 (FTTC) 和光纤到房屋的SLIC接口 (FTTP)

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**Applications 产品应用**

- Non-Fiber SLIC interface for Central Office (CO) locations and Remote Terminals (RT)
- 用于中心办公室(CO)位置和远程终端(RT)的非光纤SLIC接口
- xDSL applications such as ADSL, ADSL2+, VDSL, and VDSL2+
- xDSL应用程序, 如ADSL、ADSL2+、VDSL和VDSL2+
- POTS applications such as modems, answering machines, telephones, fax machines, and security system
- POTS应用程序, 如调制解调器、电话、传真机和安全系统



**Electrical Characteristics 熔断特性**

| Electrical Characteristics 熔断特性 |                 |                        |
|---------------------------------|-----------------|------------------------|
| Ampere Rating                   | % of Amp Rating | Opening Time           |
| 500mA-2A                        | 100%            | 4 Hours Minimum        |
|                                 | 250%            | 1 Sec Min, 120 Sec Max |
|                                 | 300%*           | 10 Seconds Maximum     |

\*The fuse does not open at 250% within 120 sec, increase current to 300% in 10 sec, fuse must open in 10 sec

**Safety Agency**

TIA-968-A(formerly FCC Part 68) Surge Waveforms(Fuse cannot open)

| Surge          | Voltage | Waveforms       | Current | Reps | Fuse Choices |
|----------------|---------|-----------------|---------|------|--------------|
| Metallic A     | 800V    | 10x560µs        | 100A    | 2    | 0.5/1.25A    |
| Longitudinal A | 1500V   | 10x160µs        | 200A    | 2    | 1.25/2A      |
| Metallic B     | 800V    | 9x720µs/5x320µs | 25A     | 2    | 1.25/2A      |
| Longitudinal B | 1500V   | 9x720µs/5x320µs | 37.5A   | 2    | 0.5/1.25A    |

Bellcore GR-1089-CORE Surge Waveforms(Fuse cannot open)

| Surge                  | Voltage | Waveforms | Current | Reps | Fuse Choices |
|------------------------|---------|-----------|---------|------|--------------|
| First Level Linhtning  | 1000V   | 10x1000µs | 100A    | 50   | 1.25/2A      |
| Second Level Linhtning | 2500V   | 2x10µs    | 500A    | 50   | 1.25/2A      |

ITU K.20 Surge Waveforms(Fuse cannot open)

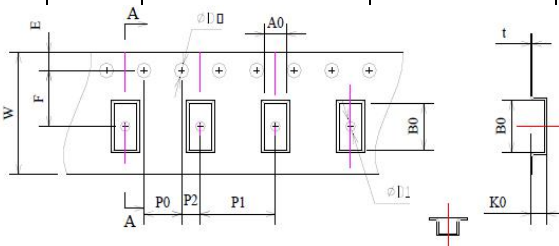
| Surge    | Voltage | Waveforms        | Current | Reps | Fuse Choices |
|----------|---------|------------------|---------|------|--------------|
| A series | 1500V   | 10x700µs/5x310µs | 37.5A   | 10   | 1.25A        |

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**Electrical Specifications** 电特性

| Catalog Number | Ampere Rated In | Marking | Inte                     | Normal Resistance Cold(Ohm) | Normal Melting I <sup>2</sup> T(A <sup>2</sup> sec) |
|----------------|-----------------|---------|--------------------------|-----------------------------|---|
| TCF500mA       | 500mA           | F       | 50A@250VAC<br>60A@600VAC | 0.530                       | 1.3   |
| TCF1.25A       | 1.25A           | J       |                          | 0.090                       | 22.2  |
| TCF2A          | 2A              |         |                          |                             | 30.0  |

**Packaging and Type D**



| Dimension (mm) | W±0.3 | A0±0.1 | B0±0.1 | K0±0.1 | P0±0.1 | P1±0.1 | P2±0.05 | t±0.05 | E±0.1 | F±0.1 | D0±0.1 | D1min |
|----------------|-------|--------|--------|--------|--------|--------|---------|--------|-------|-------|--------|-------|
| TCF            | 24    | 3.30   | 11.0   | 3.20   | 4.0    | 8.0    | 2.0     | 0.3    | 1.75  | 11.5  | 1.5    | 1.5   |

**Formation of Type Designation** 类型命名的形成

TCF      2A      250V

①                  ②                  ③

① Series Nmber 系列名称:TCF

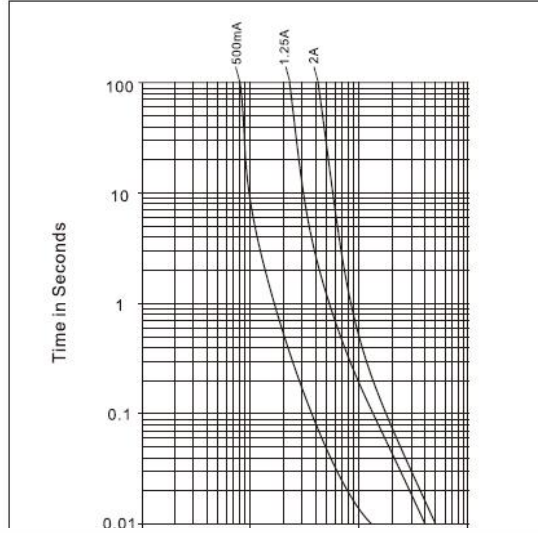
② Ampere rating 额定电流:2A

③ Voltage Rating 额定电压:250V

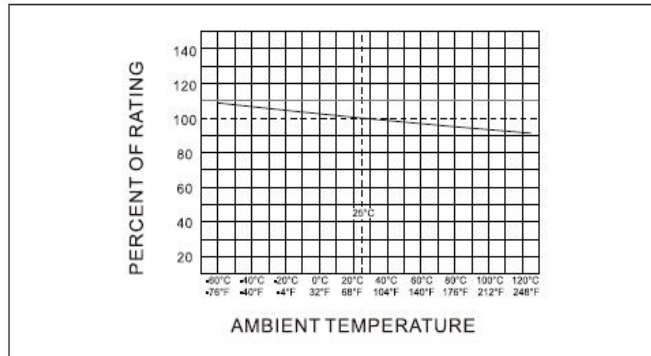
**Packaging** 包装

On Tape:TCF-2500pcs Per Reel,15000pcs Outer Box

Time-Current Characteristics 熔断时间特性表



Temperature R



Note:

Derating depicted in this curve is in addition to the standard derating of 25% for continuous operation.