

Surface Mount Fuse, 5 x 20 mm, Super-Time-Lag TT, L, 250 VAC, Au plating



## UL 248-14 · 250 VAC · Super-Time-Lag TT

See below:

### Approvals and Compliances


#### Description

- Directly solderable on printed circuit boards

#### Weblinks

[pdf data sheet](#), [html datasheet](#), [General Product Information](#), [Distributor-Stock-Check](#), [Detailed request for product](#), [Microsite](#)

#### Technical Data

|                              |   |
|------------------------------|---|
| Rated Voltage                | 250 VAC   |
| Rated current                | 0.16 - 4 A  |
| Breaking Capacity            | 35 A  |
| Characteristic               | Super-Time-Lag TT   |
| Mounting                     | PCB,SMT   |
| Admissible Ambient Air Temp. | -55 °C to 125 °C  |
| Climatic Category            | 55/125/21 acc. to IEC 60068-1   |
| Material: Housing            | Glass   |
| Material: Terminals          | Gold-Plated Copper Alloy  |
| Unit Weight                  | 1.11 g  |
| Storage Conditions           | 0 °C to 60 °C, max. 70% r.h.  |
| Product Marking              |  Rated current, Rated Voltage, Characteristic, Breaking Capacity |

|                              |   |
|------------------------------|---|
| Soldering Methods            | Reflow<br><a href="#">Soldering Profile</a>                             |
| Solderability                | 245 °C / 3 sec acc. to IEC 60068-2-58, Test Td                          |
| Resistance to Soldering Heat | 260 °C / 10 sec acc. to IEC 60068-2-58, Test Td                         |
| Moisture Sensitivity Level   | MSL 1, J-STD-020  |
| Case Resistance              | acc. to EIA/IS-722, Test 4.7<br>>100 MΩ (between leads and body)        |
| Flammability                 | min. UL 94V-1<br>(acc. to EIA/IS-722, Test 4.12)                        |
| Resistance to Vibration      | acc. to IEC 60068-2-6, test Fc  |
| Moisture Resistance Test     | MIL-STD-202, Method 106<br>(50 cycles in a temp./mister chamber)        |
| Thermal Shock                | MIL-STD-202, Method 107D<br>(200 air-to-air cycles from -55 to +125 °C) |
| Operational Life             | MIL-STD-202, Method 108<br>(1000h @ 0.42*In @ 70 °C)                    |
| Load Humidity Test           | MIL-STD-202, Method 103<br>0.1 x In @ 0.85 r.H. @ 85 °C                 |
| Resistance to Solvents       | MIL-STD-202, Method 215   |
| Terminal Strength            | MIL-STD-202, Method 211A<br>(Deflection of board 1 mm for 1 minute)     |

#### Approvals and Compliances


Detailed information on product approvals, code requirements, usage instructions and detailed test conditions can be looked up in [Details about Approvals](#)

SCHURTER products are designed for use in industrial environments. They have approvals from independent testing bodies according to national and international standards. Products with specific characteristics and requirements such as required in the automotive sector according to IATF 16949, medical technology according to ISO 13485 or in the aerospace industry can be offered exclusively with customer-specific, individual agreements by SCHURTER.

#### Approvals



The approval mark is used by the testing authorities to certify compliance with the safety requirements placed on electronic products.

Approval Reference Type: SMD-FTT 5x20

| Approval Logo   | Certificates                 | Certification Body | Description            |
|---|------------------------------|--------------------|------------------------|
|  | <a href="#">UL Approvals</a> | UL                 | UR File Number: E41599 |


## Product standards

Product standards that are referenced

| Organization   | Design                | Standard           | Description                                     |
|--|-----------------------|--------------------|---|
|  | Designed according to | UL 248-14          | Low voltage fuses - Part 14: Supplemental fuses |
|  | Designed according to | CSA22.2 No. 248.14 | Low-Voltage Fuses - Part 14: Supplemental Fuses |






## Application standards

Application standards where the product can be used

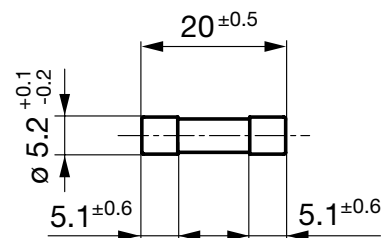
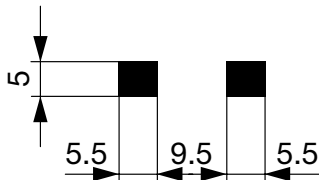
| Organization   | Design                         | Standard       | Description   |
|--|--------------------------------|----------------|---|
|  | Suitable for applications acc. | IEC/UL 62368-1 | Audio/video, information and communication technology equipment - Part 1: Safety requirements |

## Compliances

The product complies with following Guide Lines

| Identification  | Details  | Initiator   | Description   |
|---|--|-------------|---|
|   | <a href="#">CE declaration of conformity</a>   | SCHURTER AG | The CE marking declares that the product complies with the applicable requirements laid down in the harmonisation of Community legislation on its affixing in accordance with EU Regulation 765/2008. |
|   | <a href="#">UKCA declaration of conformity</a> | SCHURTER AG | The UKCA marking declares that the product complies with the applicable requirements laid down in the British Amendment of Regulation (EC) 765/2008.  |
|   | RoHS   | SCHURTER AG | Directive RoHS 2011/65/EU, Amendment (EU) 2015/863  |
|   | China RoHS                                     | SCHURTER AG | The law SJ / T 11363-2006 (China RoHS) has been in force since 1 March 2007. It is similar to the EU directive RoHS.  |
|  | REACH  | SCHURTER AG | On 1 June 2007, Regulation (EC) No 1907/2006 on the Registration, Evaluation, Authorization and Restriction of Chemicals 1 (abbreviated as "REACH") entered into force.                               |

## Dimension [mm]

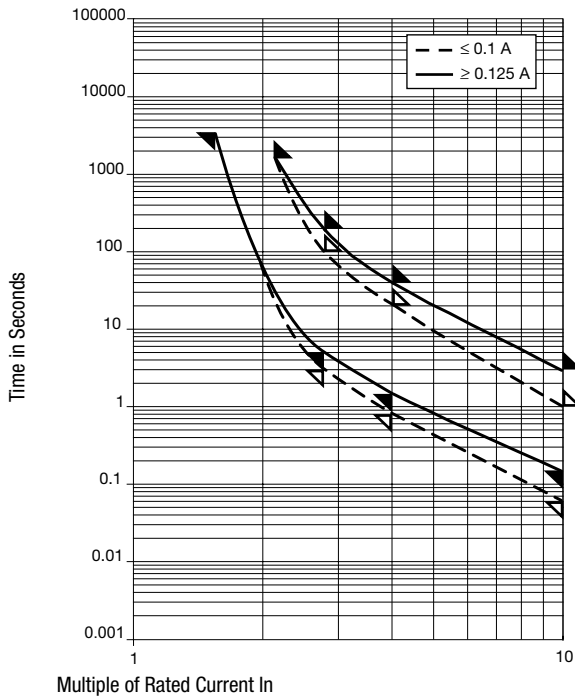


Soldering pads

## Pre-Arcing Time

| Rated Current In | 1.5 x In min. | 2.1 x In max. | 2.75 x In min. | 2.75 x In max. | 4.0 x In min. | 4.0 x In max. | 10.0 x In min. | 10.0 x In max. |
|------------------|---------------|---------------|----------------|----------------|---------------|---------------|----------------|----------------|
| 0.16 A - 4 A     | 60 min        | 30 min        | 5 s            | 200 s          | 1.5 s         | 40 s          | 150 ms         | 3 s            |

Time-Current-Curves



All Variants

| Rated Current [A] | Rated Voltage [VAC] | Breaking Capacity | Voltage Drop 1.0 I <sub>n</sub> max. [mV] | Voltage Drop 1.0 I <sub>n</sub> typ. [mV] | Power Dissipation 1.5 I <sub>n</sub> typ. [mW] | Melting I <sup>2</sup> t 10.0 I <sub>n</sub> typ. [A <sup>2</sup> s] | Order Number   |
|-------------------|---------------------|-------------------|---|---|--|--|----------------|
| 0.16              | 250                 | 1)                | 2000                                      | 450                                       | 300  | 1  | ● 0034.5705.11 |
| 0.16              | 250                 | 1)                | 2000                                      | 450                                       | 300  | 1  | ● 0034.5705.22 |
| 0.2               | 250                 | 1)                | 1500                                      | 400                                       | 330  | 1.73   | ● 0034.5706.11 |
| 0.2               | 250                 | 1)                | 1500                                      | 400                                       | 330  | 1.73   | ● 0034.5706.22 |
| 0.25              | 250                 | 1)                | 1200                                      | 330                                       | 350  | 2.53   | ● 0034.5707.11 |
| 0.25              | 250                 | 1)                | 1200                                      | 330                                       | 350  | 2.53   | ● 0034.5707.22 |
| 0.315             | 250                 | 1)                | 1000                                      | 300                                       | 360  | 4.17   | ● 0034.5708.11 |
| 0.315             | 250                 | 1)                | 1000                                      | 300                                       | 360  | 4.17   | ● 0034.5708.22 |
| 0.4               | 250                 | 1)                | 900                                       | 225                                       | 400  | 5.2  | ● 0034.5709.11 |
| 0.4               | 250                 | 1)                | 900                                       | 225                                       | 400  | 5.2  | ● 0034.5709.22 |
| 0.5               | 250                 | 1)                | 800                                       | 250                                       | 440  | 7.9  | ● 0034.5710.11 |
| 0.5               | 250                 | 1)                | 800                                       | 250                                       | 440  | 7.9  | ● 0034.5710.22 |
| 0.63              | 250                 | 1)                | 700                                       | 200                                       | 470  | 13.7   | ● 0034.5711.11 |
| 0.8               | 250                 | 1)                | 500                                       | 160                                       | 540  | 19.6   | ● 0034.5712.11 |
| 0.8               | 250                 | 1)                | 500                                       | 160                                       | 540  | 19.6   | ● 0034.5712.22 |
| 1                 | 250                 | 1)                | 250                                       | 150                                       | 540  | 19.4   | ● 0034.5713.11 |
| 1                 | 250                 | 1)                | 250                                       | 150                                       | 540  | 19.4   | ● 0034.5713.22 |
| 1.25              | 250                 | 1)                | 200                                       | 105                                       | 350  | 63   | ● 0034.5714.11 |
| 1.25              | 250                 | 1)                | 200                                       | 105                                       | 350  | 63   | ● 0034.5714.22 |
| 1.6               | 250                 | 1)                | 200                                       | 100                                       | 650  | 87   | ● 0034.5715.11 |
| 1.6               | 250                 | 1)                | 200                                       | 100                                       | 650  | 87   | ● 0034.5715.22 |
| 2                 | 250                 | 1)                | 200                                       | 100                                       | 800  | 124  | ● 0034.5716.11 |
| 2                 | 250                 | 1)                | 200                                       | 100                                       | 800  | 124  | ● 0034.5716.22 |
| 2.5               | 250                 | 1)                | 150                                       | 90  | 850  | 258  | ● 0034.5717.11 |
| 2.5               | 250                 | 1)                | 150                                       | 90  | 850  | 258  | ● 0034.5717.22 |
| 3.15              | 250                 | 1)                | 100                                       | 90  | 1000   | 395  | ● 0034.5718.11 |
| 3.15              | 250                 | 1)                | 100                                       | 90  | 1000   | 395  | ● 0034.5718.22 |
| 4                 | 250                 | 1)                | 100                                       | 80  | 1150   | 410  | ● 0034.5719.11 |

| Rated Current [A] | Rated Voltage [VAC] | Breaking Capacity | Voltage Drop 1.0 I <sub>n</sub> max. [mV] | Voltage Drop 1.0 I <sub>n</sub> typ. [mV] | Power Dissipation 1.5 I <sub>n</sub> typ. [mW] | Melting I <sup>2</sup> t 10.0 I <sub>n</sub> typ. [A <sup>2</sup> s] | Order Number |
|-------------------|---------------------|-------------------|---|---|--|--|--------------|
| 4                 | 250                 | 1)                | 100                                       | 80  | 1150   | 410 ●  | 0034.5719.22 |

Availability for all products can be searched real-time: <https://www.schurter.com/en/Stock-Check/Stock-Check-SCHURTER>

1) 35 A @ 250 VAC, cos φ = 0.99 - 1

### Packaging Unit

acc. IEC 60286-3 Type 3

.xx = .11

100 pcs. in ESD-plastic bag

.xx = .22

1000 pcs. in tape [W: 32mm and P1: 8mm] on reel [A: 33cm]