

Surface Mount Fuse, 5 x 20 mm, Time-Lag T, H, 250 VAC, Au plating



IEC 60127-2 · 250 VAC · 300 VDC · Time-Lag T

## Approvals and Compliances

### Description

- Directly solderable on printed circuit boards
- IEC Standard Fuse
- H = High Breaking Capacity

### Applications

- Primary protection on SMD PCBs

### References

[Packaging Details](#)

### Weblinks

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

### Technical Data

|                              |                                                                                                                                                       |
|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rated Voltage                | 250 VAC, 300 VDC                                                                                                                                      |
| Rated current                | 1 - 16 A                                                                                                                                              |
| Breaking Capacity            | 500 A - 1500 A                                                                                                                                        |
| Characteristic               | Time-Lag T                                                                                                                                            |
| Mounting                     | PCB, SMT                                                                                                                                              |
| Admissible Ambient Air Temp. | -55 °C to 125 °C                                                                                                                                      |
| Climatic Category            | 55/125/21 acc. to IEC 60068-1                                                                                                                         |
| Material: Housing            | Ceramic                                                                                                                                               |
| Material: Terminals          | Gold-Plated Copper Alloy                                                                                                                              |
| Unit Weight                  | 1 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                         |
| Resistance to Vibration      | acc. to IEC 60068-2-6, test Fc                                          |
| Moisture Resistance Test     | MIL-STD-202, Method 106E<br>(50 cycles in a temp./mister chamber)       |
| Terminal Strength            | MIL-STD-202, Method 211A<br>(Deflection of board 1 mm for 1 minute)     |
| Thermal Shock                | MIL-STD-202, Method 107D<br>(200 air-to-air cycles from -55 to +125 °C) |
| Case Resistance              | acc. to EIA/IS-722, Test 4.7<br>>100 MΩ (between leads and body)        |
| Resistance to Solvents       | MIL-STD-202, Method 215A                                                |

## Approvals and Compliances

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

### 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-SPT

| Approval Logo                                                                       | Certificates                  | Certification Body | Description                      |
|-------------------------------------------------------------------------------------|-------------------------------|--------------------|----------------------------------|
|  | <a href="#">VDE Approvals</a> | VDE                | VDE Certificate Number: 40010881 |
|  | <a href="#">UL Approvals</a>  | UL                 | UL File Number: E41599           |
|  | <a href="#">CQC Approvals</a> | CQC                | CCC File Number:                 |

## Product standards

Product standards that are referenced

| Organization                                                                     | Design                | Standard           | Description                                     |
|----------------------------------------------------------------------------------|-----------------------|--------------------|-------------------------------------------------|
|  | Designed according to | UL 248-14          | Low voltage fuses - Part 14: Additional 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                                                                                     |
|----------------------------------------------------------------------------------|--------------------------------|--------------|-------------------------------------------------------------------------------------------------|
|  | Designed for applications acc. | IEC/UL 60950 | IEC 60950-1 includes the basic requirements for the safety of information technology equipment. |

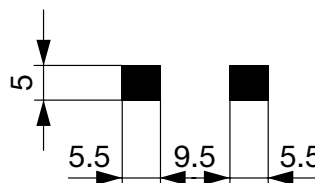
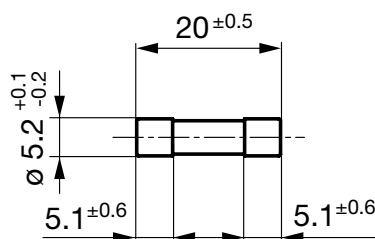
## Compliances

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="#">RoHS</a>                         | SCHURTER AG | EU Directive RoHS 2011/65/EU                                                                                                                                                                          |
|  | <a href="#">China RoHS</a>                   | 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.                                                                                  |
|  | <a href="#">REACH</a>                        | 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]

20 mm

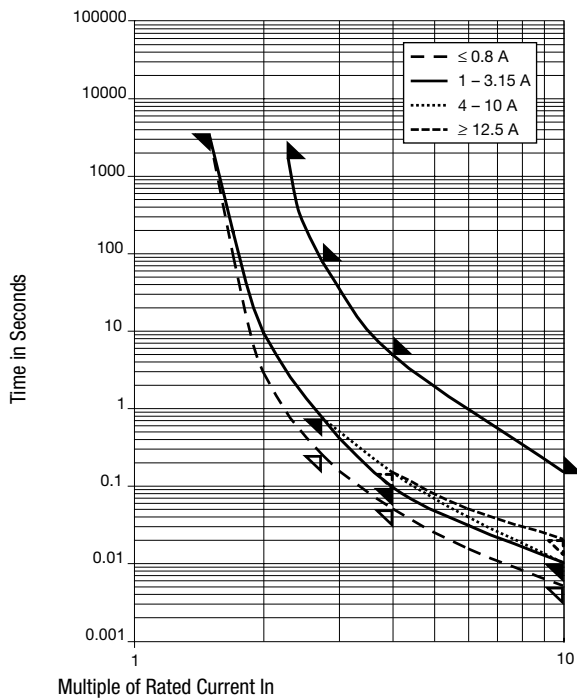


Soldering pads

## 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. |
|------------------|---------------|---------------|----------------|----------------|---------------|---------------|----------------|----------------|
| 1 A - 3.15 A     | 60 min        | 30 min        | 750 ms         | 80 s           | 95 ms         | 5 s           | 10 ms          | 150 ms         |
| 4 A - 6.3 A      | 60 min        | 30 min        | 750 ms         | 80 s           | 150 ms        | 5 s           | 10 ms          | 150 ms         |
| 8 A - 10 A       | 30 min        | 30 min        | 750 ms         | 80 s           | 150 ms        | 5 s           | 10 ms          | 150 ms         |
| 12.5 A - 16 A    | 15 min        | 30 min        | 750 ms         | 80 s           | 150 ms        | 5 s           | 20 ms          | 150 ms         |

## Time-Current-Curves



## All Variants

| Rated Current [A] | Rated Voltage [VAC] | Rated Voltage [VDC] | Breaking Capacity | Voltage Drop 1.0 $I_n$ max. [mV] | Voltage Drop 1.0 $I_n$ typ. [mV] | Power Dissipation 1.5 $I_n$ max. [mW] | Power Dissipation 1.5 $I_n$ typ. [mW] | Melting $I^2t$ 10.0 Intyp. [A <sup>2</sup> s] |    | Order Number                 |
|-------------------|---------------------|---------------------|-------------------|----------------------------------|----------------------------------|---------------------------------------|---------------------------------------|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| 1                 | 250                 | 300                 | 1)                | 250                              | 180                              | 2500                                  | 500                                   | 1.1                                           | ● ● ●                                                                                                                                                                                                                                                             | <a href="#">0001.2704.11</a> |
| 1                 | 250                 | 300                 | 1)                | 250                              | 180                              | 2500                                  | 500                                   | 1.1                                           | ● ● ●                                                                                                                                                                                                                                                             | <a href="#">0001.2704.22</a> |
| 1.25              | 250                 | 300                 | 1)                | 250                              | 150                              | 2500                                  | 500                                   | 1.86                                          | ● ● ●                                                                                                                                                                                                                                                             | <a href="#">0001.2705.11</a> |
| 1.25              | 250                 | 300                 | 1)                | 250                              | 150                              | 2500                                  | 500                                   | 1.86                                          | ● ● ●                                                                                                                                                                                                                                                             | <a href="#">0001.2705.22</a> |
| 1.6               | 250                 | 300                 | 1)                | 200                              | 130                              | 2500                                  | 500                                   | 4.35                                          | ● ● ●                                                                                                                                                                                                                                                             | <a href="#">0001.2706.11</a> |
| 1.6               | 250                 | 300                 | 1)                | 200                              | 130                              | 2500                                  | 500                                   | 4.35                                          | ● ● ●                                                                                                                                                                                                                                                             | <a href="#">0001.2706.22</a> |
| 2                 | 250                 | 300                 | 1)                | 190                              | 120                              | 2500                                  | 600                                   | 9.2                                           | ● ● ●                                                                                                                                                                                                                                                             | <a href="#">0001.2707.11</a> |
| 2                 | 250                 | 300                 | 1)                | 190                              | 120                              | 2500                                  | 600                                   | 9.2                                           | ● ● ●                                                                                                                                                                                                                                                             | <a href="#">0001.2707.22</a> |
| 2.5               | 250                 | 300                 | 1)                | 180                              | 100                              | 2500                                  | 600                                   | 11.7                                          | ● ● ●                                                                                                                                                                                                                                                             | <a href="#">0001.2708.11</a> |
| 2.5               | 250                 | 300                 | 1)                | 180                              | 100                              | 2500                                  | 600                                   | 11.7                                          | ● ● ●                                                                                                                                                                                                                                                             | <a href="#">0001.2708.22</a> |
| 3.15              | 250                 | 300                 | 1)                | 140                              | 100                              | 4000                                  | 800                                   | 33.7                                          | ● ● ●                                                                                                                                                                                                                                                             | <a href="#">0001.2709.11</a> |
| 3.15              | 250                 | 300                 | 1)                | 140                              | 100                              | 4000                                  | 800                                   | 33.7                                          | ● ● ●                                                                                                                                                                                                                                                             | <a href="#">0001.2709.22</a> |
| 4                 | 250                 | 150                 | 2)                | 100                              | 90                               | 4000                                  | 900                                   | 62.4                                          | ● ● ●                                                                                                                                                                                                                                                             | <a href="#">0001.2710.11</a> |
| 4                 | 250                 | 150                 | 2)                | 100                              | 90                               | 4000                                  | 900                                   | 62.4                                          | ● ● ●                                                                                                                                                                                                                                                             | <a href="#">0001.2710.22</a> |
| 5                 | 250                 | 150                 | 2)                | 100                              | 90                               | 4000                                  | 1200                                  | 97.5                                          | ● ● ●                                                                                                                                                                                                                                                             | <a href="#">0001.2711.11</a> |
| 5                 | 250                 | 150                 | 2)                | 100                              | 90                               | 4000                                  | 1200                                  | 97.5                                          | ● ● ●                                                                                                                                                                                                                                                             | <a href="#">0001.2711.22</a> |
| 6.3               | 250                 | 150                 | 2)                | 100                              | 70                               | 4000                                  | 1200                                  | 171                                           | ● ● ●                                                                                                                                                                                                                                                             | <a href="#">0001.2712.11</a> |
| 6.3               | 250                 | 150                 | 2)                | 100                              | 70                               | 4000                                  | 1200                                  | 171                                           | ● ● ●                                                                                                                                                                                                                                                             | <a href="#">0001.2712.22</a> |
| 8                 | 250                 | 150                 | 3)                | 100                              | 70                               | 4000                                  | 1300                                  | 268                                           | ● ● ●                                                                                                                                                                                                                                                             | <a href="#">0001.2713.11</a> |
| 8                 | 250                 | 150                 | 3)                | 100                              | 70                               | 4000                                  | 1300                                  | 268                                           | ● ● ●                                                                                                                                                                                                                                                             | <a href="#">0001.2713.22</a> |
| 10                | 250                 | 150                 | 3)                | 100                              | 70                               | 4000                                  | 2100                                  | 400                                           | ● ● ●                                                                                                                                                                                                                                                             | <a href="#">0001.2714.11</a> |
| 10                | 250                 | 150                 | 3)                | 100                              | 70                               | 4000                                  | 2100                                  | 400                                           | ● ● ●                                                                                                                                                                                                                                                             | <a href="#">0001.2714.22</a> |
| 12.5              | 250                 | 125                 | 4)                | 100                              | 70                               | 4000                                  | 2500                                  | 563                                           | ● ● ●                                                                                                                                                                                                                                                             | <a href="#">0001.2715.11</a> |
| 12.5              | 250                 | 125                 | 4)                | 100                              | 70                               | 4000                                  | 2500                                  | 563                                           | ● ● ●                                                                                                                                                                                                                                                             | <a href="#">0001.2715.22</a> |
| 16                | 250                 | 125                 | 4)                | 100                              | 70                               | 4000                                  | 3000                                  | 1272                                          | ● ● ●                                                                                                                                                                                                                                                             | <a href="#">0001.2716.11</a> |
| 16                | 250                 | 125                 | 4)                | 100                              | 70                               | 4000                                  | 3000                                  | 1272                                          | ● ● ●                                                                                                                                                                                                                                                             | <a href="#">0001.2716.22</a> |

Most Popular.

| Rated Cur-<br>rent [A] | Rated Vol-<br>tage [VAC] | Rated Vol-<br>tage [VDC] | Breaking<br>Capacity | Voltage Drop<br>1.0 I <sub>n</sub> max.<br>[mV] | Voltage Drop<br>1.0 I <sub>n</sub> typ.<br>[mV] | Power Dissi-<br>pation 1.5 I <sub>n</sub><br>max. [mW] | Power Dissi-<br>pation 1.5 I <sub>n</sub><br>typ. [mW] | Melting I <sup>2</sup> t<br>10.0 Intyp.<br>[A²s] |  | Order Number |
|------------------------|--------------------------|--------------------------|----------------------|-------------------------------------------------|-------------------------------------------------|--------------------------------------------------------|--------------------------------------------------------|--------------------------------------------------|-------------------------------------------------------------------------------------|--------------|
|------------------------|--------------------------|--------------------------|----------------------|-------------------------------------------------|-------------------------------------------------|--------------------------------------------------------|--------------------------------------------------------|--------------------------------------------------|-------------------------------------------------------------------------------------|--------------|

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

- 1) IEC: 1500 A @ 250 VAC, p.f. = 0.7 - 0.8
- 1) UL: 10 kA @ 125 VAC, p.f. = 0.7 - 0.8 / 1500 A @ 250 VAC, p.f. = 0.7 - 0.8 / 1500 A @ 300 VDC
- 2) IEC: 1500 A @ 250 VAC, p.f. = 0.7 - 0.8
- 2) UL: 10 kA @ 125 VAC, p.f. = 0.7 - 0.8 / 1500 A @ 250 VAC, p.f. = 0.7 - 0.8 / 1500 A @ 150 VDC
- 3) IEC: 1000 A @ 250 VAC
- 3) UL: 1000 A @ 250 VAC / 1500 A @ 150 VDC
- 4) UL: 500 A @ 125 VAC, p.f. = 0.7 - 0.8 / 1000 A @ 125 VAC / 500 A @ 250 VAC / 1500 A @ 125 VDC

|                       |                                               |
|-----------------------|-----------------------------------------------|
| <b>Packaging Unit</b> | .xx = .11 Plastic Bag (100 pcs.)              |
|                       | .xx = .22 Blister Tape 33 cm Reel (1000 pcs.) |