

## Subminiature Fuse, 8.5 mm, Quick-Acting F, 250 VAC



Subminiature fuse 8.5 mm, quick-acting  
F, 250 VAC  
Short terminal



Subminiature fuse 8.5 mm, quick-acting  
F, 250 VAC  
Terminal long  
PCB Mounting

## IEC 60127-3 · 250 VAC · Quick-Acting F

See below:

## Approvals and Compliances

## Description

- Directly solderable on printed circuit boards
- Low Breaking Capacity

## References

[Packaging Details](#)

Corresponding Fuseholder

Fuse Kit [Fuse Kit MST250 / MSF 250](#)

## Weblinks

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

## Technical Data

|                              |                                                                                                                                                             |
|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rated Voltage                | 250 VAC                                                                                                                                                     |
| Rated current                | 0.04 - 5 A                                                                                                                                                  |
| Breaking Capacity            | 35 A                                                                                                                                                        |
| Characteristic               | Quick-Acting F                                                                                                                                              |
| Mounting                     | PCB, THT                                                                                                                                                    |
| Admissible Ambient Air Temp. | -40 °C to 85 °C                                                                                                                                             |
| Climatic Category            | 40/085/21 acc. to IEC 60068-1                                                                                                                               |
| Material: Housing            | Thermoplastic, UL 94V-0                                                                                                                                     |
| Material: Terminals          | Tin-Plated Copper                                                                                                                                           |
| Unit Weight                  | 0.5 g                                                                                                                                                       |
| Storage Conditions           | 0 °C to 40 °C, max. 70% r.h.                                                                                                                                |
| Product Marking              |  Type, Rated current, Rated Voltage, Characteristic, Certification marks |

|                              |                                                                              |
|------------------------------|------------------------------------------------------------------------------|
| Soldering Methods            | Wave<br><a href="#">Soldering Profile</a>                                    |
| Solderability                | 235 °C / 2 sec acc. to IEC 60068-2-20, Test Ta                               |
| Resistance to Soldering Heat | 260 °C / 10 sec acc. to IEC 60068-2-20, Test Tb                              |
| Case Resistance              | >100 MΩ (between leads and body)<br>acc. to EIA/IS-722, Test 4.7             |
| Flammability                 | UL 94V-0<br>(acc. to EIA/IS-722, Test 4.12)                                  |
| Resistance to Vibration      | acc. to IEC 60068-2-6, test Fc                                               |
| Current Carrying Capacity    | acc. to EIA/IS-722, Test 4.3.3                                               |
| Thermal Shock                | MIL-STD-202, Method 107D<br>(200 air-to-air cycles from -55 to +125 °C)      |
| Operational Life             | 1000h @ 0.60 x I <sub>n</sub> @ 70 °C<br>(acc. to EIA/IS-722, Test 4.4.1)    |
| Load Humidity Test           | 0.1 x I <sub>n</sub> @ 0.85 r.h. @ 85 °C<br>(acc. to EIA/IS-722, Test 4.4.2) |
| Moisture Resistance Test     | (acc. to EIA/IS-722, Test 4.4.3)                                             |
| Mechanical Shock             | MIL-STD-202, Method 213 Condition A                                          |
| Resistance to Solvents       | MIL-STD-202, Method 215                                                      |
| Terminal Strength            | Tensile load min. 9 N<br>(acc. to EIA/IS-722, Test 4.5.1)                    |

## 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: MSF 250

| Approval Logo                                                                    | Certificates  | Certification Body | Description                              |
|----------------------------------------------------------------------------------|---------------|--------------------|------------------------------------------|
|  | VDE Approvals | VDE                | VDE Certificate Number: 101035           |
|  | UL Approvals  | UL                 | UL File Number: E41599                   |
|  | CCC Approvals | CCC                | CCC Certificate Number: 2003010207100499 |

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

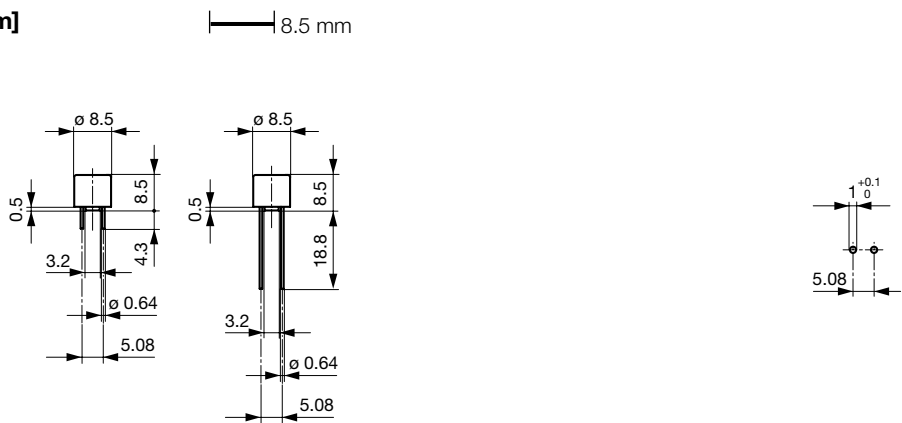
| Organization                                                                     | Design                         | Standard       | Description                                                                                                          |
|----------------------------------------------------------------------------------|--------------------------------|----------------|----------------------------------------------------------------------------------------------------------------------|
|  | Designed for applications acc. | IEC/UL 62368-1 | IEC 62368-1 includes the basic requirements for safety of audio, video, information technology and office equipment. |

Compliances

The product complies with following Guide Lines

| Identification                                                                     | Details                      | Initiator   | Description                                                                                                                                                                                           |
|------------------------------------------------------------------------------------|------------------------------|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | CE declaration of conformity | 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. |
|  | 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]

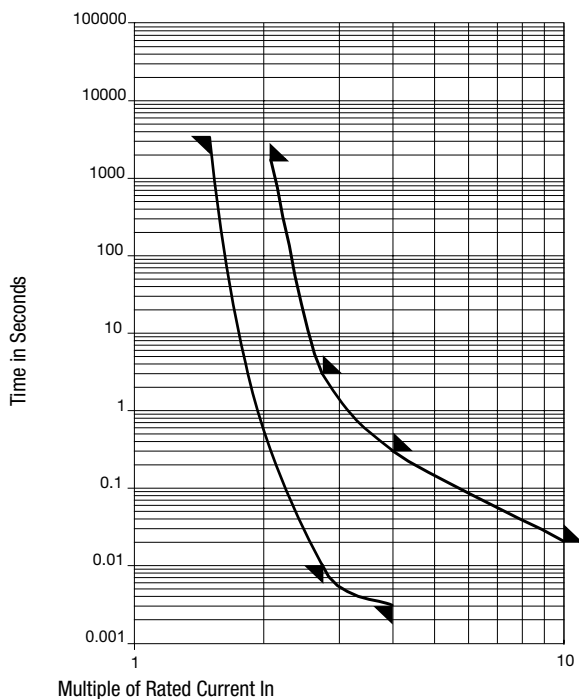


Drilling diagram

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 max. |
|------------------|---------------|---------------|----------------|----------------|---------------|---------------|----------------|
| 0.04 A - 5 A     | 60 min        | 30 min        | 10 ms          | 3 s            | 3 ms          | 300 ms        | 20 ms          |

## 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> max. [mW] | Melting I <sup>2</sup> t 10.0 I <sub>n</sub> typ. [A <sup>2</sup> s] |  |  |  | S | L | T | Order Number |
|-------------------|---------------------|-------------------|-------------------------------------------|-------------------------------------------|------------------------------------------------|----------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---|---|---|--------------|
| 0.04              | 250                 | 1)                | -                                         | 400                                       | -                                              | 0.00016                                                              | •                                                                                   | •                                                                                    | •                                                                                     | • |   |   | 0034.6000    |
| 0.05              | 250                 | 1)                | 850                                       | 460                                       | 110                                            | 0.0004                                                               | •                                                                                   | •                                                                                    | •                                                                                     | • |   |   | 0034.6001    |
| 0.063             | 250                 | 1)                | 750                                       | 330                                       | 120                                            | 0.001                                                                | •                                                                                   | •                                                                                    | •                                                                                     | • |   |   | 0034.6002    |
| 0.08              | 250                 | 1)                | 650                                       | 280                                       | 140                                            | 0.001                                                                | •                                                                                   | •                                                                                    | •                                                                                     | • |   |   | 0034.6003    |
| 0.1               | 250                 | 1)                | 600                                       | 300                                       | 160                                            | 0.002                                                                | •                                                                                   | •                                                                                    | •                                                                                     | • |   |   | 0034.6004    |
| 0.125             | 250                 | 1)                | 550                                       | 210                                       | 180                                            | 0.006                                                                | •                                                                                   | •                                                                                    | •                                                                                     | • |   |   | 0034.6005    |
| 0.16              | 250                 | 1)                | 500                                       | 460                                       | 210                                            | 0.014                                                                | •                                                                                   | •                                                                                    | •                                                                                     | • |   |   | 0034.6006    |
| 0.2               | 250                 | 1)                | 480                                       | 470                                       | 250                                            | 0.024                                                                | •                                                                                   | •                                                                                    | •                                                                                     | • |   |   | 0034.6007    |
| 0.25              | 250                 | 1)                | 440                                       | 360                                       | 290                                            | 0.058                                                                | •                                                                                   | •                                                                                    | •                                                                                     | • |   |   | 0034.6008    |
| 0.315             | 250                 | 1)                | 400                                       | 345                                       | 330                                            | 0.104                                                                | •                                                                                   | •                                                                                    | •                                                                                     | • |   |   | 0034.6009    |
| 0.4               | 250                 | 1)                | 370                                       | 80                                        | 390                                            | 0.044                                                                | •                                                                                   | •                                                                                    | •                                                                                     | • |   |   | 0034.6010    |
| 0.5               | 250                 | 1)                | 350                                       | 75                                        | 460                                            | 0.09                                                                 | •                                                                                   | •                                                                                    | •                                                                                     | • |   |   | 0034.6011    |
| 0.63              | 250                 | 1)                | 320                                       | 70                                        | 530                                            | 0.15                                                                 | •                                                                                   | •                                                                                    | •                                                                                     | • |   |   | 0034.6012    |
| 0.8               | 250                 | 1)                | 300                                       | 70                                        | 630                                            | 0.22                                                                 | •                                                                                   | •                                                                                    | •                                                                                     | • |   |   | 0034.6013    |
| 1                 | 250                 | 1)                | 280                                       | 70                                        | 740                                            | 0.33                                                                 | •                                                                                   | •                                                                                    | •                                                                                     | • |   |   | 0034.6014    |
| 1.25              | 250                 | 1)                | 280                                       | 65                                        | 920                                            | 0.68                                                                 | •                                                                                   | •                                                                                    | •                                                                                     | • |   |   | 0034.6015    |
| 1.6               | 250                 | 1)                | 250                                       | 70                                        | 1000                                           | 0.94                                                                 | •                                                                                   | •                                                                                    | •                                                                                     | • |   |   | 0034.6016    |
| 2                 | 250                 | 1)                | 240                                       | 70                                        | 1360                                           | 1.3                                                                  | •                                                                                   | •                                                                                    | •                                                                                     | • |   |   | 0034.6017    |
| 2.5               | 250                 | 1)                | 200                                       | 65                                        | 1310                                           | 1.9                                                                  | •                                                                                   | •                                                                                    | •                                                                                     | • |   |   | 0034.6018    |
| 3.15              | 250                 | 1)                | 180                                       | 65                                        | 1490                                           | 5.4                                                                  | •                                                                                   | •                                                                                    | •                                                                                     | • |   |   | 0034.6019    |
| 4                 | 250                 | 2)                | 160                                       | 60                                        | 1680                                           | 7.9                                                                  | •                                                                                   | •                                                                                    | •                                                                                     | • |   |   | 0034.6020    |
| 5                 | 250                 | 2)                | 150                                       | 60                                        | 1970                                           | 11.2                                                                 | •                                                                                   | •                                                                                    | •                                                                                     | • |   |   | 0034.6021    |
| 0.04              | 250                 | 1)                | -                                         | 400                                       | -                                              | 0.00016                                                              | •                                                                                   | •                                                                                    | •                                                                                     | • |   |   | 0034.6030    |
| 0.05              | 250                 | 1)                | 850                                       | 460                                       | 110                                            | 0.0004                                                               | •                                                                                   | •                                                                                    | •                                                                                     | • |   |   | 0034.6031    |
| 0.063             | 250                 | 1)                | 750                                       | 330                                       | 120                                            | 0.001                                                                | •                                                                                   | •                                                                                    | •                                                                                     | • |   |   | 0034.6032    |
| 0.08              | 250                 | 1)                | 650                                       | 280                                       | 140                                            | 0.001                                                                | •                                                                                   | •                                                                                    | •                                                                                     | • |   |   | 0034.6033    |
| 0.1               | 250                 | 1)                | 600                                       | 300                                       | 160                                            | 0.002                                                                | •                                                                                   | •                                                                                    | •                                                                                     | • |   |   | 0034.6034    |

| 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> max. [mW] | Melting I <sup>2</sup> t 10.0 I <sub>n</sub> typ. [A <sup>2</sup> s] |  |  |  | S | L | T | Order Number |
|-------------------|---------------------|-------------------|-------------------------------------------|-------------------------------------------|------------------------------------------------|----------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---|---|---|--------------|
| 0.125             | 250                 | 1)                | 550                                       | 210                                       | 180                                            | 0.006                                                                | ●                                                                                 | ●                                                                                  | ●                                                                                   | ● |   |   | 0034.6035    |
| 0.16              | 250                 | 1)                | 500                                       | 460                                       | 210                                            | 0.014                                                                | ●                                                                                 | ●                                                                                  | ●                                                                                   | ● |   |   | 0034.6036    |
| 0.2               | 250                 | 1)                | 480                                       | 470                                       | 250                                            | 0.024                                                                | ●                                                                                 | ●                                                                                  | ●                                                                                   | ● |   |   | 0034.6037    |
| 0.25              | 250                 | 1)                | 440                                       | 360                                       | 290                                            | 0.058                                                                | ●                                                                                 | ●                                                                                  | ●                                                                                   | ● |   |   | 0034.6038    |
| 0.315             | 250                 | 1)                | 400                                       | 345                                       | 330                                            | 0.104                                                                | ●                                                                                 | ●                                                                                  | ●                                                                                   | ● |   |   | 0034.6039    |
| 0.4               | 250                 | 1)                | 370                                       | 80                                        | 390                                            | 0.044                                                                | ●                                                                                 | ●                                                                                  | ●                                                                                   | ● |   |   | 0034.6040    |
| 0.5               | 250                 | 1)                | 350                                       | 75                                        | 460                                            | 0.09                                                                 | ●                                                                                 | ●                                                                                  | ●                                                                                   | ● |   |   | 0034.6041    |
| 0.63              | 250                 | 1)                | 320                                       | 70                                        | 530                                            | 0.15                                                                 | ●                                                                                 | ●                                                                                  | ●                                                                                   | ● |   |   | 0034.6042    |
| 0.8               | 250                 | 1)                | 300                                       | 70                                        | 630                                            | 0.22                                                                 | ●                                                                                 | ●                                                                                  | ●                                                                                   | ● |   |   | 0034.6043    |
| 1                 | 250                 | 1)                | 280                                       | 70                                        | 740                                            | 0.33                                                                 | ●                                                                                 | ●                                                                                  | ●                                                                                   | ● |   |   | 0034.6044    |
| 1.25              | 250                 | 1)                | 280                                       | 65                                        | 920                                            | 0.68                                                                 | ●                                                                                 | ●                                                                                  | ●                                                                                   | ● |   |   | 0034.6045    |
| 1.6               | 250                 | 1)                | 250                                       | 70                                        | 1000                                           | 0.94                                                                 | ●                                                                                 | ●                                                                                  | ●                                                                                   | ● |   |   | 0034.6046    |
| 2                 | 250                 | 1)                | 240                                       | 70                                        | 1360                                           | 1.3                                                                  | ●                                                                                 | ●                                                                                  | ●                                                                                   | ● |   |   | 0034.6047    |
| 2.5               | 250                 | 1)                | 200                                       | 65                                        | 1310                                           | 1.9                                                                  | ●                                                                                 | ●                                                                                  | ●                                                                                   | ● |   |   | 0034.6048    |
| 3.15              | 250                 | 1)                | 180                                       | 65                                        | 1490                                           | 5.4                                                                  | ●                                                                                 | ●                                                                                  | ●                                                                                   | ● |   |   | 0034.6049    |
| 4                 | 250                 | 2)                | 160                                       | 60                                        | 1680                                           | 7.9                                                                  |                                                                                   | ●                                                                                  |                                                                                     | ● |   |   | 0034.6050    |
| 5                 | 250                 | 2)                | 150                                       | 60                                        | 1970                                           | 11.2                                                                 |                                                                                   | ●                                                                                  |                                                                                     | ● |   |   | 0034.6051    |
| 0.04              | 250                 | 1)                | -                                         | 400                                       | -                                              | 0.00016                                                              |                                                                                   | ●                                                                                  |                                                                                     |   | ● |   | 0034.6060    |
| 0.05              | 250                 | 1)                | 850                                       | 460                                       | 110                                            | 0.0004                                                               | ●                                                                                 | ●                                                                                  | ●                                                                                   |   |   | ● | 0034.6061    |
| 0.063             | 250                 | 1)                | 750                                       | 330                                       | 120                                            | 0.001                                                                | ●                                                                                 | ●                                                                                  | ●                                                                                   |   |   | ● | 0034.6062    |
| 0.08              | 250                 | 1)                | 650                                       | 280                                       | 140                                            | 0.001                                                                | ●                                                                                 | ●                                                                                  | ●                                                                                   |   |   | ● | 0034.6063    |
| 0.1               | 250                 | 1)                | 600                                       | 300                                       | 160                                            | 0.002                                                                | ●                                                                                 | ●                                                                                  | ●                                                                                   |   |   | ● | 0034.6064    |
| 0.125             | 250                 | 1)                | 550                                       | 210                                       | 180                                            | 0.006                                                                | ●                                                                                 | ●                                                                                  | ●                                                                                   |   |   | ● | 0034.6065    |
| 0.16              | 250                 | 1)                | 500                                       | 460                                       | 210                                            | 0.014                                                                | ●                                                                                 | ●                                                                                  | ●                                                                                   |   |   | ● | 0034.6066    |
| 0.2               | 250                 | 1)                | 480                                       | 470                                       | 250                                            | 0.024                                                                | ●                                                                                 | ●                                                                                  | ●                                                                                   |   |   | ● | 0034.6067    |
| 0.25              | 250                 | 1)                | 440                                       | 360                                       | 290                                            | 0.058                                                                | ●                                                                                 | ●                                                                                  | ●                                                                                   |   |   | ● | 0034.6068    |
| 0.315             | 250                 | 1)                | 400                                       | 345                                       | 330                                            | 0.104                                                                | ●                                                                                 | ●                                                                                  | ●                                                                                   |   |   | ● | 0034.6069    |
| 0.4               | 250                 | 1)                | 370                                       | 80                                        | 390                                            | 0.044                                                                | ●                                                                                 | ●                                                                                  | ●                                                                                   |   |   | ● | 0034.6070    |
| 0.63              | 250                 | 1)                | 320                                       | 70                                        | 530                                            | 0.15                                                                 | ●                                                                                 | ●                                                                                  | ●                                                                                   |   |   | ● | 0034.6072    |
| 0.8               | 250                 | 1)                | 300                                       | 70                                        | 630                                            | 0.22                                                                 | ●                                                                                 | ●                                                                                  | ●                                                                                   |   |   | ● | 0034.6073    |
| 1                 | 250                 | 1)                | 280                                       | 70                                        | 740                                            | 0.33                                                                 | ●                                                                                 | ●                                                                                  | ●                                                                                   |   |   | ● | 0034.6074    |
| 1.25              | 250                 | 1)                | 280                                       | 65                                        | 920                                            | 0.68                                                                 | ●                                                                                 | ●                                                                                  | ●                                                                                   |   |   | ● | 0034.6075    |
| 1.6               | 250                 | 1)                | 250                                       | 70                                        | 1000                                           | 0.94                                                                 | ●                                                                                 | ●                                                                                  | ●                                                                                   |   |   | ● | 0034.6076    |
| 2                 | 250                 | 1)                | 240                                       | 70                                        | 1360                                           | 1.3                                                                  | ●                                                                                 | ●                                                                                  | ●                                                                                   |   |   | ● | 0034.6077    |
| 2.5               | 250                 | 1)                | 200                                       | 65                                        | 1310                                           | 1.9                                                                  | ●                                                                                 | ●                                                                                  | ●                                                                                   |   |   | ● | 0034.6078    |
| 3.15              | 250                 | 1)                | 180                                       | 65                                        | 1490                                           | 5.4                                                                  | ●                                                                                 | ●                                                                                  | ●                                                                                   |   |   | ● | 0034.6079    |
| 4                 | 250                 | 2)                | 160                                       | 60                                        | 1680                                           | 7.9                                                                  |                                                                                   | ●                                                                                  |                                                                                     | ● |   | ● | 0034.6080    |
| 5                 | 250                 | 2)                | 150                                       | 60                                        | 1970                                           | 11.2                                                                 |                                                                                   | ●                                                                                  |                                                                                     | ● |   | ● | 0034.6081    |

Most Popular:

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

1) 35 A @ 250 VAC

2) 10 In @ 250 VAC

#### Packaging Unit

S = 4.3 mm  
L = 18.8 mm  
T = 18.8 mm

Plastic Bag (100 pcs.)  
Bulk (100 pcs.)  
Taped 36 cm Reel (750 pcs.)