

Surface Mount Fuse, 11 x 4.6 mm, Quick-Acting F, 250 VAC, 250 DC



Exemplary part photo depending on part no.

IEC 60127-4 · 250 VAC · 250 VDC · Quick-Acting F

See below:

**Approvals and Compliances**

### Description

- Directly solderable on printed circuit boards

### Applications

- Primary protection on SMD PCBs

### References

Fuse Kit [Fuse Kit OMF](#)

### Weblinks

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

### Technical Data

|                              |                                                                                                                                                                                                                                                       |
|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rated Voltage                | 250 VAC, 250 VDC                                                                                                                                                                                                                                      |
| Rated current                | 0.25 - 4 A                                                                                                                                                                                                                                            |
| Breaking Capacity            | 100 A                                                                                                                                                                                                                                                 |
| Characteristic               | Quick-Acting F                                                                                                                                                                                                                                        |
| Mounting                     | PCB, SMT                                                                                                                                                                                                                                              |
| Admissible Ambient Air Temp. | -55 °C to 125 °C                                                                                                                                                                                                                                      |
| Climatic Category            | 55/125/21 acc. to IEC 60068-1                                                                                                                                                                                                                         |
| Material: Housing            | Thermoplastic, UL 94V-0                                                                                                                                                                                                                               |
| Material: Terminals          | Copper alloy, tin-plated                                                                                                                                                                                                                              |
| Unit Weight                  | 0.36 g                                                                                                                                                                                                                                                |
| Storage Conditions           | 0 °C to 60 °C, max. 70% r.h.                                                                                                                                                                                                                          |
| Product Marking              |   , Type, Rated current, Characteristic, Breaking Capacity, Certification marks |

|                              |                                                                         |
|------------------------------|-------------------------------------------------------------------------|
| Soldering Methods            | Reflow, Wave<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)                        |
| 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) |
| Load Humidity Test           | MIL-STD-202, Method 103<br>0.1 x In @ 0.85 r.H. @ 85 °C                 |
| Vibration, High Frequency    | MIL-STD-202, Method 204 Condition D                                     |
| Mechanical Shock             | MIL-STD-202, Method 213 Condition A                                     |
| 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: OMF 250

| Approval Logo                                                                    | Certificates                  | Certification Body | Description                    |
|----------------------------------------------------------------------------------|-------------------------------|--------------------|--------------------------------|
|  | <a href="#">VDE Approvals</a> | VDE                | VDE Certificate Number: 106328 |
|  | <a href="#">UL Approvals</a>  | UL                 | UR File Number: E41599         |

## Product standards

Product standards that are referenced

| Organization                                                                     | Design                | Standard           | Description                                                                                    |
|----------------------------------------------------------------------------------|-----------------------|--------------------|------------------------------------------------------------------------------------------------|
|  | Designed according to | IEC 60127-4/2      | Miniature fuses. Part 4. Universal modular fuse-links for through-hole and surface mount types |
|  | 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 |

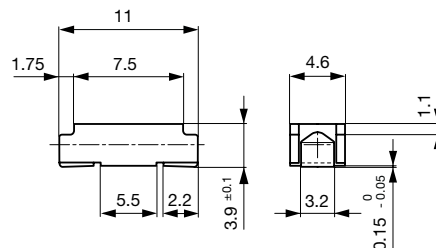
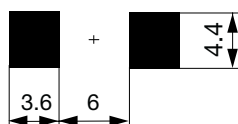
## Compliances

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.                                                  |
|  | <a href="#">RoHS</a>                           | SCHURTER AG | Directive RoHS 2011/65/EU, Amendment (EU) 2015/863                                                                                                                                                    |
|  | <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.                               |
|  |                                                | SCHURTER AG | Universal Modular Fuse meets the standard IEC 60127-4                                                                                                                                                 |

## Dimension [mm]

11 mm



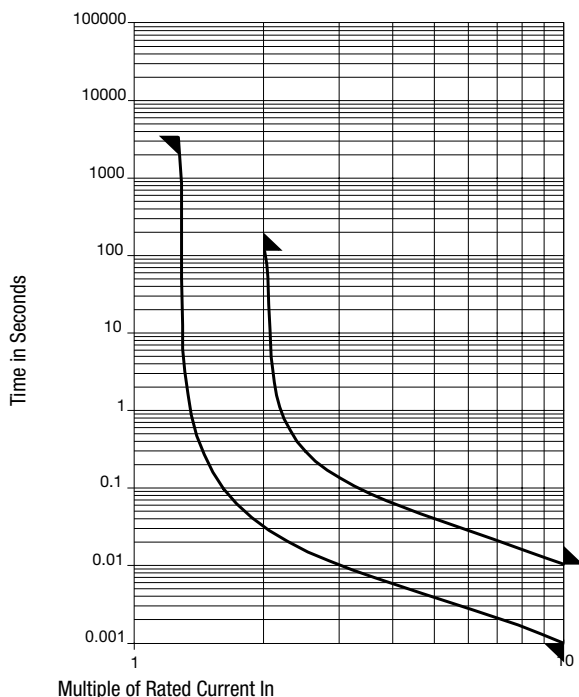
Soldering pads

## Pre-Arcing Time

Rated Current In 1.25 x In min. 2.0 x In max. 10.0 x In min. 10.0 x In max.

|              |        |       |      |       |
|--------------|--------|-------|------|-------|
| 0.25 A - 4 A | 60 min | 120 s | 1 ms | 10 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 1.25 $I_n$ typ. [mW] | Melting $I^2t$ 10.0 $I_n$ typ. [A <sup>2</sup> s] |  | Order Number |
|-------------------|---------------------|---------------------|-------------------|----------------------------------|----------------------------------|----------------------------------------|---------------------------------------------------|---------------------------------------------------------------------------------------|--------------|
| 0.25              | 250                 | 250                 | 1)                | -                                | 1100                             | 480                                    | 0.012                                             | ●                                                                                     | 3403.0010.11 |
| 0.25              | 250                 | 250                 | 1)                | -                                | 1100                             | 480                                    | 0.012                                             | ●                                                                                     | 3403.0010.24 |
| 0.315             | 250                 | 250                 | 1)                | -                                | 1000                             | 430                                    | 0.019                                             | ●                                                                                     | 3403.0011.11 |
| 0.315             | 250                 | 250                 | 1)                | -                                | 1000                             | 430                                    | 0.019                                             | ●                                                                                     | 3403.0011.24 |
| 0.4               | 250                 | 250                 | 2)                | 700                              | 230                              | 190                                    | 0.02                                              | ●                                                                                     | 3403.0012.11 |
| 0.4               | 250                 | 250                 | 2)                | 700                              | 230                              | 190                                    | 0.02                                              | ●                                                                                     | 3403.0012.24 |
| 0.5               | 250                 | 250                 | 1)                | 600                              | 190                              | 190                                    | 0.03                                              | ●                                                                                     | 3403.0013.11 |
| 0.5               | 250                 | 250                 | 1)                | 600                              | 190                              | 190                                    | 0.03                                              | ●                                                                                     | 3403.0013.24 |
| 0.63              | 250                 | 250                 | 1)                | 500                              | 170                              | 230                                    | 0.07                                              | ●                                                                                     | 3403.0014.11 |
| 0.63              | 250                 | 250                 | 1)                | 500                              | 170                              | 230                                    | 0.07                                              | ●                                                                                     | 3403.0014.24 |
| 0.8               | 250                 | 250                 | 1)                | 400                              | 200                              | 330                                    | 0.12                                              | ●                                                                                     | 3403.0015.11 |
| 0.8               | 250                 | 250                 | 1)                | 400                              | 200                              | 330                                    | 0.12                                              | ●                                                                                     | 3403.0015.24 |
| 1                 | 250                 | 250                 | 1)                | 300                              | 170                              | 390                                    | 0.23                                              | ●                                                                                     | 3403.0016.11 |
| 1                 | 250                 | 250                 | 1)                | 300                              | 170                              | 390                                    | 0.23                                              | ●                                                                                     | 3403.0016.24 |
| 1.25              | 250                 | 250                 | 1)                | 300                              | 150                              | 390                                    | 0.47                                              | ●                                                                                     | 3403.0017.11 |
| 1.25              | 250                 | 250                 | 1)                | 300                              | 150                              | 390                                    | 0.47                                              | ●                                                                                     | 3403.0017.24 |
| 1.6               | 250                 | 250                 | 1)                | 300                              | 150                              | 490                                    | 0.84                                              | ●                                                                                     | 3403.0018.11 |
| 1.6               | 250                 | 250                 | 1)                | 300                              | 150                              | 490                                    | 0.84                                              | ●                                                                                     | 3403.0018.24 |
| 2                 | 250                 | 250                 | 1)                | 300                              | 140                              | 600                                    | 1.4                                               | ●                                                                                     | 3403.0019.11 |
| 2                 | 250                 | 250                 | 1)                | 300                              | 140                              | 600                                    | 1.4                                               | ●                                                                                     | 3403.0019.24 |
| 2.5               | 250                 | 250                 | 1)                | 300                              | 130                              | 670                                    | 2.6                                               | ●                                                                                     | 3403.0020.11 |
| 2.5               | 250                 | 250                 | 1)                | 300                              | 130                              | 670                                    | 2.6                                               | ●                                                                                     | 3403.0020.24 |
| 3.15              | 250                 | 250                 | 1)                | 300                              | 130                              | 870                                    | 4.8                                               | ●                                                                                     | 3403.0021.11 |
| 3.15              | 250                 | 250                 | 1)                | 300                              | 130                              | 870                                    | 4.8                                               | ●                                                                                     | 3403.0021.24 |
| 4                 | 250                 | 250                 | 1)                | 300                              | 100                              | 950                                    | 8.6                                               | ●                                                                                     | 3403.0022.11 |
| 4                 | 250                 | 250                 | 1)                | 300                              | 100                              | 950                                    | 8.6                                               | ●                                                                                     | 3403.0022.24 |

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 1.25 I <sub>n</sub><br>typ. [mW] | Melting I <sup>2</sup> t<br>10.0 I <sub>n</sub> typ.<br>[A²s] |  | Order Number |
|------------------------|--------------------------|--------------------------|----------------------|-------------------------------------------------|-------------------------------------------------|---------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------|
|------------------------|--------------------------|--------------------------|----------------------|-------------------------------------------------|-------------------------------------------------|---------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------|

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

- 1) 100 A @ 250 VAC/DC
- 2) 100 A @ 250 VAC/DC / 50 A @ 400 VDC

|                          |           |                                                           |
|--------------------------|-----------|-----------------------------------------------------------|
| <b>Packaging Unit</b>    | .xx = .11 | 100 pcs in ESD-plastic bag                                |
| acc. IEC 60286-3 Type 2a | .xx = .24 | 2000 pcs. in tape [W: 24mm and P1: 8mm] on reel [A: 33cm] |