# USE 2410

Surface Mount Fuse, 2410, Quick-Acting F, 125 - 250 VAC, 86 - 125 VDC

new

UL 248-14 · 125 - 250 VAC · 86 - 125 VDC · Quick-Acting F

See below:
**Approvals and Compliances**

## Description

- Innovative melting wire fuse without internal solder joint, lead-free, and tested according to internal AEC-Q200 qualification. The fuse is sealed against potting compounds

## Unique Selling Proposition

- Small size (2410 footprint) for 125 VDC and up to 250 VAC rating
- High range of operating temperature (-55°C to 125°C)
- Precision acting

## Applications

- Battery driven applications
- Lighting: Ballast, LED drivers
- Medical and industrial equipment
- Power supply
- White goods

## Weblinks

pdf data sheet, html datasheet, General Product Information, Distributor-Stock-Check, Detailed request for product

## Technical Data

| | |
|---|---|
| Rated Voltage | 125 - 250 VAC, 86 - 125 VDC |
| Rated current | 0.63 - 10 A |
| Breaking Capacity | 50 A - 200 A |
| Characteristic | Quick-Acting F |
| Mounting | PCB,SMT |
| Admissible Ambient Temp. | -55 °C to 125 °C |
| Material: Housing | Fiber-reinforced plastic, UL 94V-0 |
| Material: Terminals | Copper, Ni/Au-plated |
| Unit Weight | 0.06 g |
| Storage Conditions | 0 °C to 40 °C, max. 70% r.h. |
| Product Marking | Letter (see variants) |

| | |
|---|---|
| Soldering Methods | Reflow<br>Soldering Profile |
| Solderability | JESD22-B102E, Method 1 |
| Resistance to Soldering Heat | JEDEC J-STD-020 |
| Flammability | UL 94V-1 |
| Operational Time | AEC-Q200-004<br>MIL-STD-202, Method 108 Condition D |
| External Visual | MIL-STD-883 Method 2009 |
| Physical Dimension | JESD22 Method JB-100 |
| Load Humidity Test | MIL-STD-202, Method 103 |
| Vibration, High Frequency | MIL-STD-202, Method 204 |
| Mechanical Shock | MIL-STD-202, Method 213 Condition C |
| High Temperature Exposure | MIL-STD-202, Method 108 |
| Resistance to Solvents | MIL-STD-202, Method 215 |
| Temperature Cycling | JESD22 Method JA-104 |
| Board Flex | AEC-Q200-005 |
| Terminal Strength | AEC-Q200-006 |

## 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: USE 2410

| Approval Logo | Certificates | Certification Body | Description |
|---|---|---|---|
| | VDE Approvals | VDE | VDE Certificate Number: pending |
| c UL us | UL Approvals | UL | UR File Number: E41599 |

## Product standards

Product standards that are referenced

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

## Application standards

Application standards where the product can be used

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

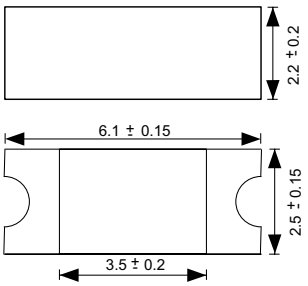
## Compliances

The product complies with following Guide Lines

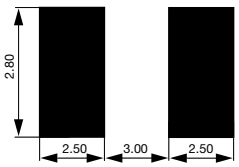
| Identification | Details | Initiator | Description |
|---|---|---|---|
| | CE declaration of conformity | SCHURTER AG | The CE marking declares that the product complies with the applicable requirements laid down in the harmonisation of Community legislation on its affixing in accordance with EU Regulation 765/2008. |
| | UKCA declaration of conformity | SCHURTER AG | The UKCA marking declares that the product complies with the applicable requirements laid down in the British Amendment of Regulation (EC) 765/2008. |
| | RoHS | SCHURTER AG | Directive RoHS 2011/65/EU, Amendment (EU) 2015/863 |
| | China RoHS | SCHURTER AG | The law SJ / T 11363-2006 (China RoHS) has been in force since 1 March 2007. It is similar to the EU directive RoHS. |
| | REACH | SCHURTER AG | On 1 June 2007, Regulation (EC) No 1907/2006 on the Registration, Evaluation, Authorization and Restriction of Chemicals 1 (abbreviated as "REACH") entered into force. |
| | Automotive | SCHURTER AG | AEC-Q200 is a test standard for passive components used in automotive applications. SCHURTER tests components according to the customer's agreement and is certified according to IATF 16949. |

## Dimension [mm]

6.1 mm

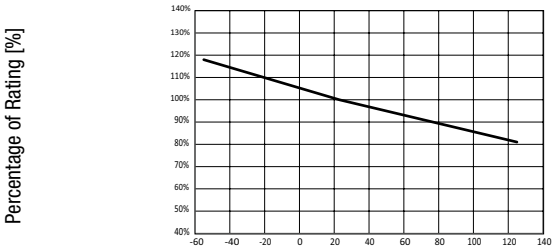



Soldering pads



## Derating Curves

Temperature Derating

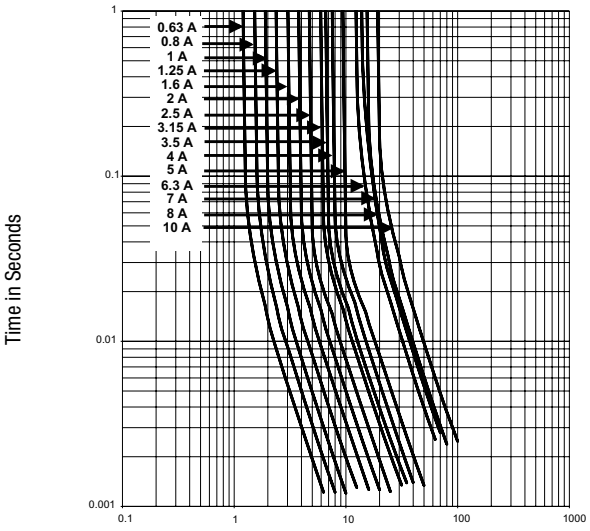



Ambient Temperature [°C]
Additional derating of 25% for continuous operation

## Pre-Arcing Time

| Rated Current In | 1.0 x In min. | 2.0 x In max. | 4.0 x In max. | 10.0 x In max. |
|---|---|---|---|---|
| 0.5 A - 10 A | 4 h | 5 s | 50 ms | 10 ms |

## Time-Current-Curves




Current in Amperes

## Variants

| Rated Current [A] | Rated Voltage [VAC] | Rated Voltage [VDC] | Marking | Breaking Capacity | Voltage Drop 1.0 $x I_n$ typ. [mV] | Cold Resistance typ. [mΩ] | Melting $I^2t$ 10.0 $I_n$ typ. [$A^2s$] | | | Packaging unit [PCS] | Order Number |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.63 | 250 | 125 | FD | 1)3)5) | 104 | 132 | 0.045 | ● | ● | 2800 | 3-148-689 |
| 0.8 | 250 | 125 | FE | 1)3)5) | 107 | 103 | 0.083 | ● | ● | 2800 | 3-148-691 |
| 1.0 | 250 | 125 | FF | 1)3)5) | 101 | 79 | 0.15 | ● | ● | 2800 | 3-148-693 |
| 1.25 | 250 | 125 | FG | 1)3)5) | 105 | 62 | 0.22 | ● | ● | 2800 | 3-148-695 |
| 1.6 | 250 | 125 | FH | 1)3)5) | 112 | 51 | 0.35 | ● | ● | 2800 | 3-148-697 |
| 2.0 | 125 | 125 | FI | 2)3)5) | 114 | 39 | 0.56 | ● | | 2800 | 3-148-699 |
| 2.5 | 125 | 125 | FJ | 2)3)5) | 116 | 32 | 0.86 | ● | | 2800 | 3-148-701 |

| Rated Current [A] | Rated Voltage [VAC] | Rated Voltage [VDC] | Marking | Breaking Capacity | Voltage Drop 1.0 $xI_n$ typ. [mV] | Cold Resistance typ. [mΩ] | Melting $I^2t$ 10.0 $I_n$ typ. [$A^2s$] | cULus VDE | Packaging unit [PCS] | Order Number |
|---|---|---|---|---|---|---|---|---|---|---|
| 3.15 | 125 | 125 | FK | 2)3)5) | 122 | 26 | 1.31 | ● | 2800 | 3-148-703 |
| 3.5 | 125 | 125 | FL | 2)3)5) | 128 | 23 | 1.59 | ● | 2800 | 3-148-705 |
| 4.0 | 125 | 125 | FM | 2)3)5) | 125 | 20 | 2.33 | ● | 2800 | 3-146-549 |
| 5.0 | 125 | 125 | FN | 2)3)5) | 139 | 16 | 3.3 | ● | 2800 | 3-148-707 |
| 6.3 | - | 125 | FO | 4)5) | 76 | 9 | 10.1 | ● | 2800 | 3-148-709 |
| 7.0 | - | 125 | FP | 4)5) | 76 | 8 | 13.7 | ● | 2800 | 3-148-711 |
| 8.0 | - | 125 | FQ | 4)5) | 84 | 8 | 15.3 | ● | 2800 | 3-148-713 |
| 10.0 | - | 125 | FR | 4) | 86 | 6 | 26.9 | ● | 2800 | 3-148-715 |

Availability for all products can be searched real-time: https://www.schurter.com/en/info-center/support-tools/stock-check-distributors

1) UL & IEC: 100 A @ 250 VAC, cos φ > 0.998

2) UL: 100 A @ 125 VAC, cos φ > 0.998

3) UL: 100 A @ 125 VDC, tau < 0.05 ms

4) UL: 50 A @ 125 VDC, tau < 0.05 ms

5) UL: 200 A @ 86 VDC , tau < 0.05 ms

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All measurements are carried out on a test board according to IEC 60127 with the following tracks:

0.50 - 5.00 A -> Track width 5 mm, Cu layer 35 µm

6.30 - 10.00 A -> Track width 7.5 mm, Cu layer 70 µm

| | | |
|---|---|---|
| **Packaging Unit**<br>acc. IEC 60286-3 Type 2a | - | 2800 pcs. in tape [W: 12 mm and P1: 8 mm] on reel [A: 33 cm] in ESD-plastic bag |

10.12.2025