

Solid State, Thin Film, SMD 1206, Super-Quick-Acting FF, 125 VAC, 125 VDC, 150 °C



UL 248-14 · 125 VAC · 125 VDC · Super-Quick-Acting FF

See below:

[Approvals and Compliances](#)**Description**

- Max. ambient temperature 150 °C
- Impermeable to potting compound used to achieve hermetic seal for use in intrinsically safe applications according to ATEX and IECEx requirements.

Unique Selling Proposition

- Hermetically sealed and robust construction
- High breaking capacity up to 300 A
- Smallest size

Applications

- Applications where high reliability and availability is needed
- Medical Equipment
- Offshore
- Defense

References[Packaging Details](#)Alternative: Space version [MGA-S](#)**Weblinks**

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

Technical Data

| | |
|------------------------------|-------------------------------|
| Rated Voltage | 32 - 125 VAC, 125 VDC |
| Rated current | 0.2 - 5 A |
| Breaking Capacity | 50 A |
| Characteristic | Super-Quick-Acting FF |
| Mounting | PCB, SMT |
| Admissible Ambient Air Temp. | -55 °C to 150 °C |
| Climatic Category | 55/150/21 acc. to IEC 60068-1 |
| Material: Housing | Ceramics |
| Material: Terminals | Tin-Plated Nickel |
| Unit Weight | 0.03 g |
| Storage Conditions | 0 °C to 60 °C, max. 70% r.h. |
| Product Marking | none |

| | |
|------------------------------|---|
| Soldering Methods | Reflow, Wave Soldering Profile |
| Solderability | 245 °C / 3 sec acc. to IEC 60068-2-58, Test Td |
| Resistance to Soldering Heat | 260 +0/-5 °C / 30 sec acc. to IPC/JEDEC J-STD-020D, Level 1 |
| Moisture Sensitivity Level | MSL 1, J-STD-020 |
| Flammability | min. UL 94V-1 (acc. to EIA/IS-722, Test 4.12) |
| Moisture Resistance Test | MIL-STD-202, Method 106 (50 cycles in a temp./mister chamber) |
| Thermal Shock | MIL-STD-202, Method 107D (200 air-to-air cycles from -55 to +125 °C) |
| Operational Life | MIL-STD-202, Method 108 1000h @ 0.60 x In @ 70 °C |
| Load Humidity Test | MIL-STD-202, Method 103 0.1 x In @ 0.85 r.H. @ 85 °C |
| Resistance to Solvents | MIL-STD-202, Method 215 |
| Terminal Strength | MIL-STD-202, Method 211A (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: MGA

| Approval Logo | Certificates | Certification Body | Description |
|--|--------------|--------------------|------------------------|
|  | UL Approvals | UL | UL 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: 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

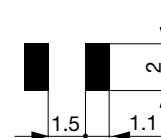
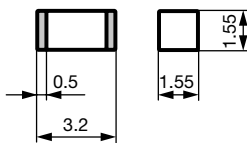
The product complies with following Guide Lines

| 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. |

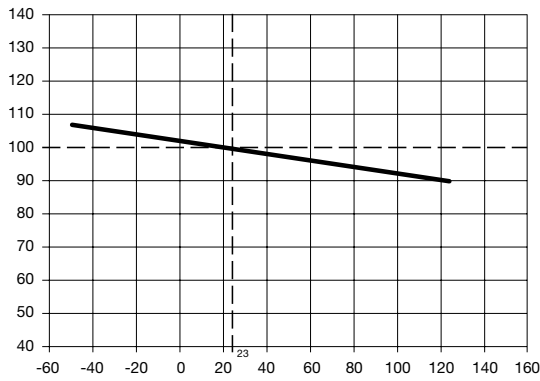
Dimension [mm]

 3.2 mm

Reflow soldering pads



Derating Curves

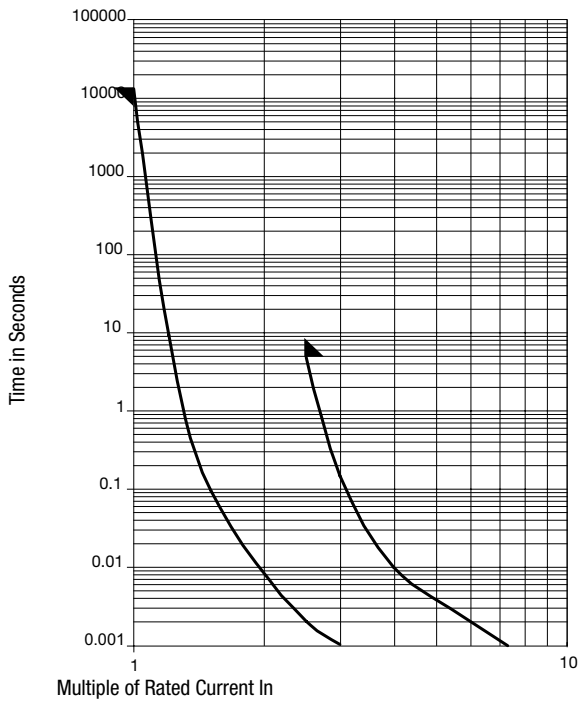


Pre-Arcing Time

Rated Current I_n 1.0 x I_n min. 2.5 x I_n max.


| | | |
|-------------|-----|-----|
| 0.2 A - 5 A | 4 h | 5 s |
|-------------|-----|-----|

Time-Current-Curves



All Variants

| Rated Current [A] | Rated Voltage [VAC] | Rated Voltage [VDC] | Breaking Capacity | Voltage Drop 1.0 I_n typ. [mV] | Cold Resistance typ. [$m\Omega$] | Melting I^2t 4.0 I_n typ. [A^2s] | c_{UL} | Order Number |
|-------------------|---------------------|---------------------|-------------------|----------------------------------|------------------------------------|--|----------|------------------------------|
| 0.2 | 125 | 125 | 1) | 258 | 1020 | 0.0008 | ● | 3410.0021.01 |
| 0.2 | 125 | 125 | 1) | 258 | 1020 | 0.0008 | ● | 3410.0021.02 |
| 0.2 | 125 | 125 | 1) | 258 | 1020 | 0.0008 | ● | 3410.0021.03 |
| 0.2 | 125 | 125 | 1) | 258 | 1020 | 0.0008 | ● | 3410.0021.04 |
| 0.25 | 125 | 125 | 1) | 250 | 800 | 0.0009 | ● | 3410.0022.01 |
| 0.25 | 125 | 125 | 1) | 250 | 800 | 0.0009 | ● | 3410.0022.02 |
| 0.25 | 125 | 125 | 1) | 250 | 800 | 0.0009 | ● | 3410.0022.03 |
| 0.25 | 125 | 125 | 1) | 250 | 800 | 0.0009 | ● | 3410.0022.04 |

| Rated Current [A] | Rated Voltage [VAC] | Rated Voltage [VDC] | Breaking Capacity | Voltage Drop 1.0 I _n typ. [mV] | Cold Resistance typ. [mΩ] | Melting I ² t 4.0 I _n typ. [A ² s] |  | Order Number |
|-------------------|---------------------|---------------------|-------------------|---|---------------------------|---|---|--------------|
| 0.375 | 125 | 125 | 1) | 165 | 361 | 0.0037 | ● | 3410.0025.01 |
| 0.375 | 125 | 125 | 1) | 165 | 361 | 0.0037 | ● | 3410.0025.02 |
| 0.375 | 125 | 125 | 1) | 165 | 361 | 0.0037 | ● | 3410.0025.03 |
| 0.375 | 125 | 125 | 1) | 165 | 361 | 0.0037 | ● | 3410.0025.04 |
| 0.5 | 125 | 125 | 1) | 150 | 247 | 0.0042 | ● | 3410.0027.01 |
| 0.5 | 125 | 125 | 1) | 150 | 247 | 0.0042 | ● | 3410.0027.02 |
| 0.5 | 125 | 125 | 1) | 150 | 247 | 0.0042 | ● | 3410.0027.03 |
| 0.5 | 125 | 125 | 1) | 150 | 247 | 0.0042 | ● | 3410.0027.04 |
| 0.75 | 125 | 125 | 1) | 100 | 115 | 0.01 | ● | 3410.0029.01 |
| 0.75 | 125 | 125 | 1) | 100 | 115 | 0.01 | ● | 3410.0029.02 |
| 0.75 | 125 | 125 | 1) | 100 | 115 | 0.01 | ● | 3410.0029.03 |
| 0.75 | 125 | 125 | 1) | 100 | 115 | 0.01 | ● | 3410.0029.04 |
| 1 | 125 | 125 | 1) | 124 | 98.7 | 0.035 | ● | 3410.0031.01 |
| 1 | 125 | 125 | 1) | 124 | 98.7 | 0.035 | ● | 3410.0031.02 |
| 1 | 125 | 125 | 1) | 124 | 98.7 | 0.035 | ● | 3410.0031.03 |
| 1 | 125 | 125 | 1) | 124 | 98.7 | 0.035 | ● | 3410.0031.04 |
| 1.5 | 125 | 125 | 1) | 105 | 56 | 0.064 | ● | 3410.0033.01 |
| 1.5 | 125 | 125 | 1) | 105 | 56 | 0.064 | ● | 3410.0033.02 |
| 1.5 | 125 | 125 | 1) | 105 | 56 | 0.064 | ● | 3410.0033.03 |
| 1.5 | 125 | 125 | 1) | 105 | 56 | 0.064 | ● | 3410.0033.04 |
| 2 | 125 | 125 | 1) | 98 | 39 | 0.089 | ● | 3410.0035.01 |
| 2 | 125 | 125 | 1) | 98 | 39 | 0.089 | ● | 3410.0035.02 |
| 2 | 125 | 125 | 1) | 98 | 39 | 0.089 | ● | 3410.0035.03 |
| 2 | 125 | 125 | 1) | 98 | 39 | 0.089 | ● | 3410.0035.04 |
| 2.5 | 125 | 125 | 1) | 90 | 29.5 | 0.15 | ● | 3410.0036.01 |
| 2.5 | 125 | 125 | 1) | 90 | 29.5 | 0.15 | ● | 3410.0036.02 |
| 2.5 | 125 | 125 | 1) | 90 | 29.5 | 0.15 | ● | 3410.0036.03 |
| 2.5 | 125 | 125 | 1) | 90 | 29.5 | 0.15 | ● | 3410.0036.04 |
| 3 | 125 | 125 | 1) | 88 | 24.1 | 0.18 | ● | 3410.0037.01 |
| 3 | 125 | 125 | 1) | 88 | 24.1 | 0.18 | ● | 3410.0037.02 |
| 3 | 125 | 125 | 1) | 88 | 24.1 | 0.18 | ● | 3410.0037.03 |
| 3 | 125 | 125 | 1) | 88 | 24.1 | 0.18 | ● | 3410.0037.04 |
| 4 | 63 | 125 | 2) | 83.5 | 17 | 0.23 | ● | 3410.0240.01 |
| 4 | 63 | 125 | 2) | 83.5 | 17 | 0.23 | ● | 3410.0240.02 |
| 4 | 63 | 125 | 2) | 83.5 | 17 | 0.23 | ● | 3410.0240.03 |
| 4 | 63 | 125 | 2) | 83.5 | 17 | 0.23 | ● | 3410.0240.04 |
| 5 | 32 | 125 | 3) | 90 | 13.5 | 0.45 | ● | 3410.0141.01 |
| 5 | 32 | 125 | 3) | 90 | 13.5 | 0.45 | ● | 3410.0141.02 |
| 5 | 32 | 125 | 3) | 90 | 13.5 | 0.45 | ● | 3410.0141.03 |
| 5 | 32 | 125 | 3) | 90 | 13.5 | 0.45 | ● | 3410.0141.04 |

■ Most Popular.

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

1) 50 A @ 125 VAC / 300 A @ 125 VDC

2) 50 A @ 63 VAC / 50 A @ 125 VDC / 300 A @ 32 VDC

3) 50 A @ 32 VAC / 50 A @ 125 VDC / 300 A @ 32 VDC

Packaging Unit

.xx = .01
.xx = .02
.xx = .03
.xx = .04

Blister Tape of 100 pcs. in Plastic Bag
Blister Tape 18 cm Reel (750 pcs.)
Blister Tape 33 cm Reel (3000 pcs.)
Blister Tape 33 cm Reel (10000 pcs.)