

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

new



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

See below:

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

- Highest Breaking Capacity Rating for a 1206 on the market: 300A@125VDC

Unique Selling Proposition

- No tin whiskers, no tin dendrites
- No leaded coating (RoHS conform)
- Similar fuse qualification as in MIL-PRF 23419
- Hermetically sealed and robust construction

Applications

- Industrial grade space application
- Avionics
- Medical Equipment
- Defense

Other versions on request

- Different Up Screenings
- Extensive Test Reports
- Visual Inspection according MIL-PRF 55342

References[Packaging Details](#)**Weblinks**

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

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 |
| Max. Non-Operating Temp. | +150 °C |
| Admissible Ambient Air Temp. | -55 °C to 125 °C |
| Climatic Category | 55/125/56 acc. to IEC 60068-1 |
| Material: Housing | Ceramics |
| Material: Terminals | Gold-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 °C / 10 sec acc. to IEC 60068-2-58 Test TD, Level 1 |
| Moisture Sensitivity Level | MSL 1, J-STD-020 |
| Damp heat, steady state | IEC 60068-2-78 (40 °C, 93% RH, 56 days) |
| Moisture Resistance Test | MIL-STD-202, Method 106 (50 cycles in a temp./mister chamber) |
| Thermal Shock | IEC 60068-2-14 (200 air-to-air cycles from -55 to +150 °C) |
| Operational Life | 2000h @ 0.63 x In @ 125 °C |
| Load Humidity Test | MIL-STD-202, Method 103 0.1 x In @ 0.85 r.H. @ 85 °C |
| Vibration, High Frequency | IEC 60068-2-6 Shock 20 g, 20 min, 10-2000 Hz, 12 cyc. |
| Mechanical Shock | IEC 60068-2-27 (12 shocks, 1600 g, 0.5 ms) |
| ESD classification | JEDEC JS-001-2014, Class 1B (500 to < 1000 V) |
| Resistance to Solvents | Cleaning with common solvents |
| Terminal Strength | EIA/IS-722, Test 4.5.5 (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-A

| 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

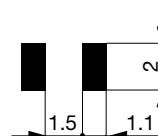
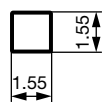
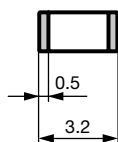
The product complies with following Guide Lines

| Identification | Details | Initiator | Description |
|--|------------|-------------|---|
|  | 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. |

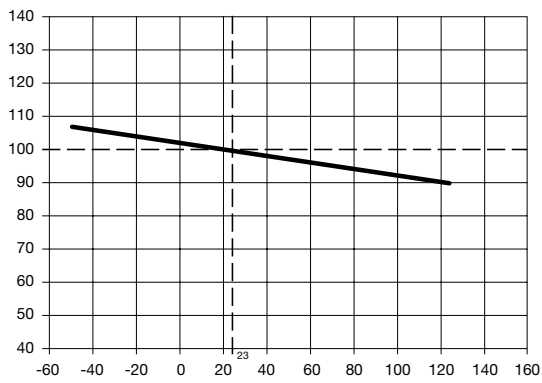
Dimension [mm]

 3.2 mm

Reflow soldering pads



Derating Curves

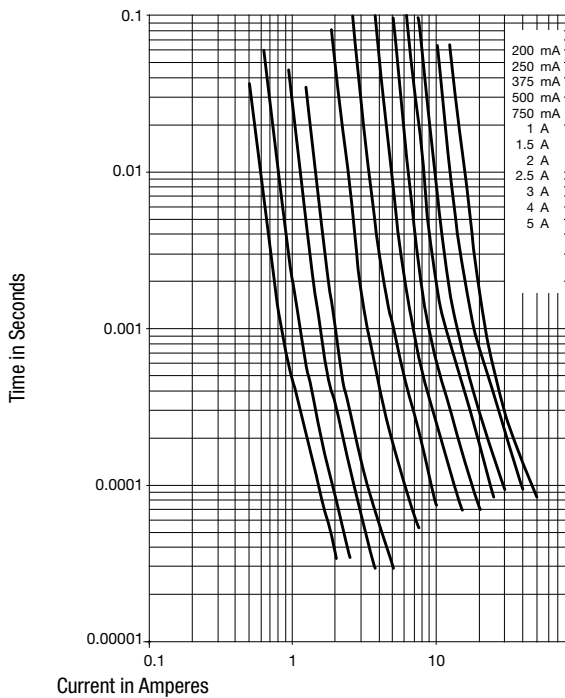


Pre-Arcing Time


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] | Melting I^2t 10.0 I_n typ. [A ² s] |  | Packaging [PCS] | Order Number |
|-------------------|---------------------|---------------------|-------------------|----------------------------------|---|--|-----------------|--------------|
| 0.2 | 125 | 125 | 1) | 220 | 0.0001 | ● | 100 | 3-103-085 |
| 0.2 | 125 | 125 | 1) | 220 | 0.0001 | ● | 750 | 3-103-086 |
| 0.2 | 125 | 125 | 1) | 220 | 0.0001 | ● | 3000 | 3-103-087 |
| 0.2 | 125 | 125 | 1) | 220 | 0.0001 | ● | 10000 | 3-103-088 |
| 0.25 | 125 | 125 | 1) | 200 | 0.00013 | ● | 100 | 3-103-089 |
| 0.25 | 125 | 125 | 1) | 200 | 0.00013 | ● | 750 | 3-103-090 |
| 0.25 | 125 | 125 | 1) | 200 | 0.00013 | ● | 3000 | 3-103-091 |
| 0.25 | 125 | 125 | 1) | 200 | 0.00013 | ● | 10000 | 3-103-092 |
| 0.375 | 125 | 125 | 1) | 150 | 0.00024 | ● | 100 | 3-103-093 |

| Rated Current [A] | Rated Voltage [VAC] | Rated Voltage [VDC] | Breaking Capacity | Voltage Drop 1.0 I _n typ. [mV] | Melting I ² t 10.0 I _n typ. [A ² s] |  | Packaging [PCS] | Order Number |
|-------------------|---------------------|---------------------|-------------------|---|--|--|-----------------|--------------|
| 0.375 | 125 | 125 | 1) | 150 | 0.00024 | ● | 750 | 3-103-094 |
| 0.375 | 125 | 125 | 1) | 150 | 0.00024 | ● | 3000 | 3-103-095 |
| 0.375 | 125 | 125 | 1) | 150 | 0.00024 | ● | 10000 | 3-103-096 |
| 0.5 | 125 | 125 | 1) | 135 | 0.0004 | ● | 100 | 3-103-097 |
| 0.5 | 125 | 125 | 1) | 135 | 0.0004 | ● | 750 | 3-103-098 |
| 0.5 | 125 | 125 | 1) | 135 | 0.0004 | ● | 3000 | 3-103-099 |
| 0.5 | 125 | 125 | 1) | 135 | 0.0004 | ● | 10000 | 3-103-100 |
| 0.75 | 125 | 125 | 1) | 95 | 0.0011 | ● | 100 | 3-103-101 |
| 0.75 | 125 | 125 | 1) | 95 | 0.0011 | ● | 750 | 3-103-102 |
| 0.75 | 125 | 125 | 1) | 95 | 0.0011 | ● | 3000 | 3-103-103 |
| 0.75 | 125 | 125 | 1) | 95 | 0.0011 | ● | 10000 | 3-103-104 |
| 1 | 125 | 125 | 1) | 105 | 0.0048 | ● | 100 | 3-103-105 |
| 1 | 125 | 125 | 1) | 105 | 0.0048 | ● | 750 | 3-103-106 |
| 1 | 125 | 125 | 1) | 105 | 0.0048 | ● | 3000 | 3-103-107 |
| 1 | 125 | 125 | 1) | 105 | 0.0048 | ● | 10000 | 3-103-108 |
| 1.5 | 125 | 125 | 1) | 95 | 0.011 | ● | 100 | 3-103-109 |
| 1.5 | 125 | 125 | 1) | 95 | 0.011 | ● | 750 | 3-103-110 |
| 1.5 | 125 | 125 | 1) | 95 | 0.011 | ● | 3000 | 3-103-111 |
| 1.5 | 125 | 125 | 1) | 95 | 0.011 | ● | 10000 | 3-103-112 |
| 2 | 125 | 125 | 1) | 95 | 0.019 | ● | 100 | 3-103-113 |
| 2 | 125 | 125 | 1) | 95 | 0.019 | ● | 750 | 3-103-114 |
| 2 | 125 | 125 | 1) | 95 | 0.019 | ● | 3000 | 3-103-115 |
| 2 | 125 | 125 | 1) | 95 | 0.019 | ● | 10000 | 3-103-116 |
| 2.5 | 125 | 125 | 1) | 90 | 0.03 | ● | 100 | 3-103-117 |
| 2.5 | 125 | 125 | 1) | 90 | 0.03 | ● | 750 | 3-103-118 |
| 2.5 | 125 | 125 | 1) | 90 | 0.03 | ● | 3000 | 3-103-119 |
| 2.5 | 125 | 125 | 1) | 90 | 0.03 | ● | 10000 | 3-103-120 |
| 3 | 125 | 125 | 1) | 90 | 0.043 | ● | 100 | 3-103-121 |
| 3 | 125 | 125 | 1) | 90 | 0.043 | ● | 750 | 3-103-122 |
| 3 | 125 | 125 | 1) | 90 | 0.043 | ● | 3000 | 3-103-123 |
| 3 | 125 | 125 | 1) | 90 | 0.043 | ● | 10000 | 3-103-124 |
| 4 | 63 | 125 | 2) | 80 | 0.09 | ● | 100 | 3-103-125 |
| 4 | 63 | 125 | 2) | 80 | 0.09 | ● | 750 | 3-103-126 |
| 4 | 63 | 125 | 2) | 80 | 0.09 | ● | 3000 | 3-103-127 |
| 4 | 63 | 125 | 2) | 80 | 0.09 | ● | 10000 | 3-103-128 |
| 5 | 32 | 125 | 3) | 80 | 0.14 | ● | 100 | 3-103-129 |
| 5 | 32 | 125 | 3) | 80 | 0.14 | ● | 750 | 3-103-130 |
| 5 | 32 | 125 | 3) | 80 | 0.14 | ● | 3000 | 3-103-131 |
| 5 | 32 | 125 | 3) | 80 | 0.14 | ● | 10000 | 3-103-132 |

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

Taped in plastic bag (100 pcs.)
Blister Tape 18 cm Reel (750 pcs.)
Blister Tape 33 cm Reel (3000 pcs.)
Blister Tape 33 cm Reel (10000 pcs.)