

Thermal sensitive Fuse, SMD 1206, 32 VDC



Temperature sensitive SMD fuse

32 VDC · PCB, SMT

See below:

[Approvals and Compliances](#)

Description

- Temperature sensitive SMD fuse
- Customer-specific pre-arcing time characteristic as a function of ambient temperature
- Ensures the complete time-current curve from 0 A to BC
- Impermeable to potting compound used to achieve hermetic seal for use in intrinsically safe applications according to ATEX and IECEx requirements.

Unique Selling Proposition

- Combines a Standard Fuse characteristic with an additional ambient temperature sensitivity
- Ceramic glass fiber inforced material
- Excellent inrush current withstand capability
- High melting I²t-values

Applications

- Secondary Protection DC and AC
- Automotive electronics
- Intrinsically safe electronics
- Battery protection
- In all electronics with temperature-critical components (eg Mosfet's)

References

Weblinks

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

Technical Data

| | |
|--------------------------|------------------------------------|
| Rated Voltage | 32VDC |
| Rated current | 12A |
| Breaking Capacity | 170A |
| Mounting | PCB,SMT |
| Admissible Ambient Temp. | -40 °C to 125 °C |
| Material: Housing | Fiber-reinforced plastic, UL 94V-0 |
| Material: Terminals | Tin-Plated Copper |
| Unit Weight | 0.01 g |
| Storage Conditions | 0 °C to 40 °C, max. 70% r.h. |
| Product Marking | Rated current |

| | |
|------------------------------|---|
| Soldering Methods | Reflow 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 |
| Case Resistance | acc. to EIA/IS-722, Test 4.7 >100 MΩ (between leads and body) |
| Flammability | 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) |
| 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.




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

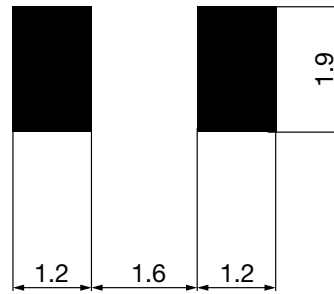
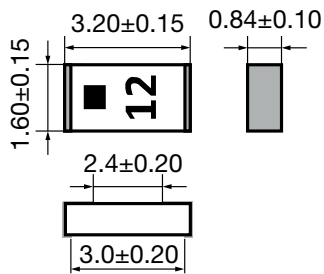
The product complies with following Guide Lines

| Identification | Details | Initiator | Description |
|--|------------|-------------|---|
|  | RoHS | SCHURTER AG | Directive RoHS 2011/65/EU, Amendment (EU) 2015/863 |
|  | 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]



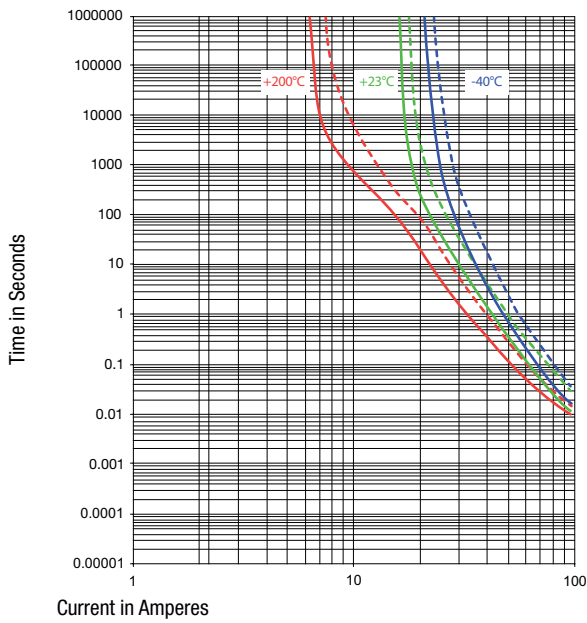
Reflow soldering pads



Pre-Arcing Time

| Rated Current In | 18 A @ 240°C ±10°C max. | 80 A @ 23°C min. |
|------------------|----------------------------|---------------------|
| 12 A | 200 s | 10 ms |

Time-Current-Curves



- A time-current-curve for a stand fuse would be equal even if ambient temperature is high
- The time-current-curve for USN is shifting to the left while ambient temperature increases

All Variants

| Rated current [A] | Rated Voltage [VDC] | Breaking Capacity | Voltage Drop 1.0 I _n typ. [mV] | Cold Resistance typ. [mΩ] | Order Number |
|----------------------|------------------------|-------------------|--|------------------------------|--------------|
| 12 | 32 | 1) | 30 | 2 | 3413.0512.11 |

1) 170 A @ 16 VDC, 80 A @ 32 VDC

■ Most Popular.

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

Packaging Unit

acc. IEC 60286-3 Type 2a

| | |
|-----------|---|
| .xx = .11 | 100 pcs. in tape in ESD-plastic bag |
| .xx = .22 | 1000 pcs. in tape [W: 8mm and P1: 4mm] on reel [A: 18cm] |
| .xx = .24 | 5000 pcs. in tape [W: 8mm and P1: 4mm] on reel [A: 33cm] |
| .xx = .26 | 15000 pcs. in tape [W: 8mm and P1: 4mm] on reel [A: 33cm] |