

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 reinforced 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)

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 Sensitivity Level	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

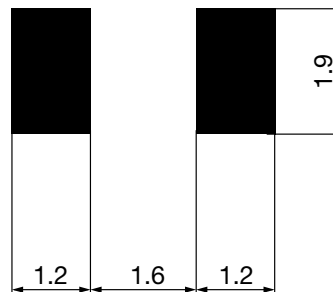
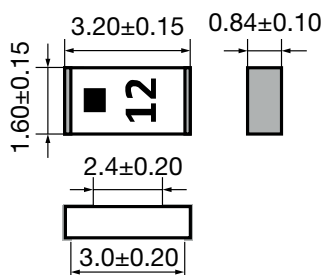
The product complies with following Guide Lines

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]

3.2 mm

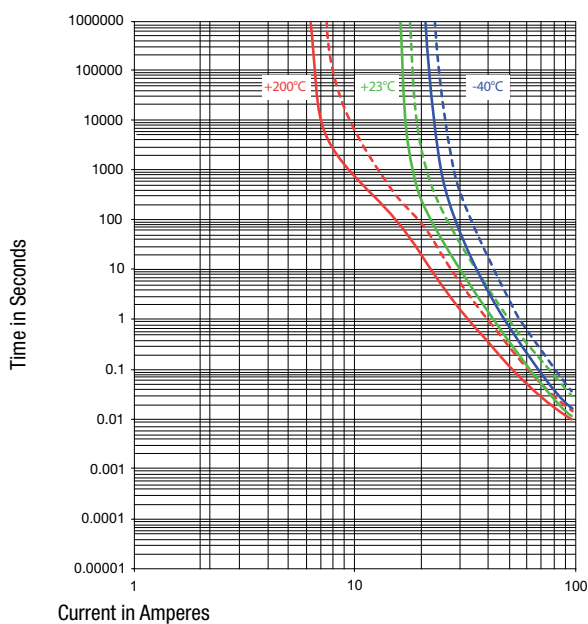
Reflow soldering pads



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

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

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]