Thermal sensitive Fuse, SMD 1206, 32 VDC



Temperature sensitive SMD fuse

## 32 VDC · PCB, SMT

#### **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 reauirements.

## **Unique Selling Proposition**

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

#### See below:

## **Approvals and Compliances**

### **Applications**

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

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

0 11 1 14 11 1	D 4
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/JE-
	DEC 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 leeds and body)
Flammability	UL 94V-1
	(acc. to EIA/IS-722, Test 4.12)
Moisture Resistance Test	MIL-STD-202, Method 106E
	(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
<u>IEC</u>	Designed for applications acc.	IEC/UL 60950	IEC 60950-1 includes the basic requirements for the safety of information technology equipment.

## Compliances

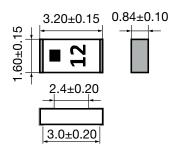
The product complies with following Guide Lines

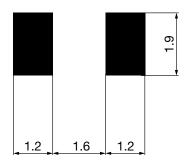
Identification	Details	Initiator	Description
RoHS	RoHS	SCHURTER AG	Directive RoHS 2011/65/EU, Amendment (EU) 2015/836
REACH	REACH	SCHURTER AG	On 1 June 2007, Regulation (EC) No 1907/2006 on the Registration, Evaluation, Authorization and Restriction of Chemicals 1 (abbreviated as "REACH") entered into force.
AEC Q200	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

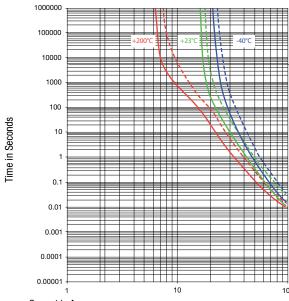




# **Pre-Arcing Time**

Rated Current In	18 A @ 240°C ±10°C max.	80 A @ 23°C min.	
12 A	170 s	10 ms	

## **Time-Current-Curves**



- Current in Amperes
- -A time-current-curve for a stand fuse would be equal even it ambient temperature is high
- -The time-current-curve for USN is shifting to the left while ambient temperature increase  $\,$

### **All Variants**

Rated current	Rated Voltage	Breaking Capacity	Voltage Drop 1.0 I <sub>n</sub> typ.	Cold Resistance typ.	Order Number
[A]	[VDC]		[mV]	$[m\Omega]$	
12	32	1)	30	2	3413.0512.11

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

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