

Solid State, Thin Film, SMD 3220 Fuse for High Current Application



IEC 60127-7 · 125 VAC · 125 VDC · Quick-Acting F

See below:

[Approvals and Compliances](#)

Description

- IEC Approved
- For high current applications
- Max. ambient temperature 125 °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

- Sealed and robust construction
- High breaking capacity up to 1000 A
- Smallest size

Applications

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

References

Alternative: Space version [HCSF](#)

Weblinks

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

Technical Data

Rated Voltage	125 VAC, 125 VDC
Rated current	5 - 15 A
Breaking Capacity	200 A - 1000 A
Characteristic	Quick-Acting F
Mounting	PCB, SMT
Admissible Ambient Air Temp.	-50 °C to 125 °C
Climatic Category	55/125/56 acc. to IEC 60068-1
Material: Housing	Ceramics
Material: Terminals	Tin-Plated Copper Alloy
Unit Weight	0.8 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	Variant Code, Certification marks

Soldering Methods	Reflow, Wave Soldering Profile
Solderability	245 °C / 3 sec acc. to IEC 60068-2-58
Resistance to Soldering Heat	260 °C / 10 sec acc. to IEC 60068-2-58, Test Td
Moisture Sensitivity Level	MSL 1, J-STD-020

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: HCF

Approval Logo	Certificates	Certification Body	Description
	VDE Approvals	VDE	VDE Certificate Number: 40046597
	UL Approvals	UL	UL File Number: E41599


Product standards

Product standards that are referenced

Organization	Design	Standard	Description
	Designed according to	IEC 60127-7	Miniature fuses - Part 7: Miniature fuse-links for special applications
	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

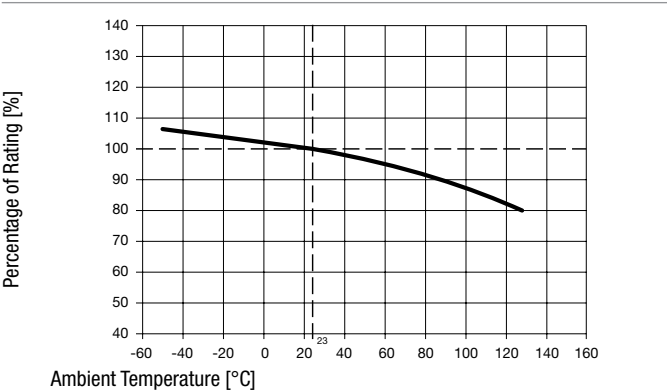
The product complies with following Guide Lines

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.
	Halogen Free	SCHURTER AG	SCHURTER strives to offer our customers halogen free products.
	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]



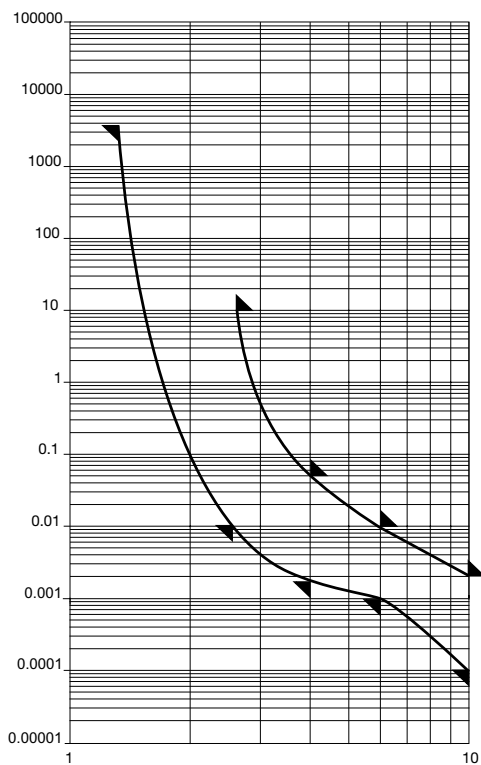
Derating Curves




Pre-Arcing Time

Rated Current I _n	1.25 x I _n min.	2.5 x I _n min.	2.5 x I _n max.	4.0 x I _n min.	4.0 x I _n max.	6.0 x I _n min.	6.0 x I _n max.	10.0 x I _n min.	10.0 x I _n max.
5 A - 15 A	> 1 h	10 ms	10 s	2 ms	50 ms	1 ms	10 ms	0.1 ms	2 ms

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. [mΩ]	Melting I ² t 10.0 I _n typ. [A²s]		Order Number
5	125	125	1)	90	14.2	1.75	● ●	3-101-056
7.5	125	125	1)	90	9.5	5.6	● ●	3-101-050
10	125	125	1)	105	8.2	11	● ●	3-101-051
15	125	125	2)	86	4.3	28	●	3-101-062

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

1) 200 A @ 125 VAC, p.f. > 0.999 / 1000 A @ 125 VDC, L/R < 1 ms

2) 200 A @ 125 VAC, p.f. > 0.999 / 500 A @ 125 VDC, L/R < 1 ms

Packaging Unit Blister Tape on 18 cm Reel in ESD Plastic Bag (300 pcs.)

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Schurter:

[3-101-056](#) [3-101-062](#) [3-101-051](#) [3-101-050](#)