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

Weblinks

pdf data sheet, html datasheet, General Product Information, Distributor-Stock-Check, Detailed request for product

Technical Data

Rated current 5 - 15 A Breaking Capacity 200 A - 1000 A Characteristic Quick-Acting F Mounting PCB,SMT Admissible Ambient Air Temp50 °C to 125 °C
Characteristic Quick-Acting F Mounting PCB,SMT
Mounting PCB,SMT
Admissible Ambient Air Temp50 °C to 125 °C
Climatic Category 55/125/56 acc. to IEC 60068-1
Material: Housing Ceramics
Material: Terminals Copper alloy, tin-plated
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
₽ VE	VDE Approvals	VDE	VDE Certificate Number: 40046597
c FL °us	UL Approvals	UL	UL File Number: E41599

Product standards

Product standards that are referenced

Organization	Design	Standard	Description
<u>IEC</u>	Designed according to	IEC 60127-7	Miniature fuses - Part 7: Miniature fuse-links for special applications
(VL)	Designed according to	UL 248-14	Low voltage fuses - Part 14: Additional fuses
GR Group	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

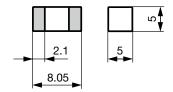
Organization	Design	Standard	Description
<u>IEC</u>	Designed for applications acc.	IEC/UL 62368-1	Audio/video, information and communication technology equipment - Part 1: Safety requirements

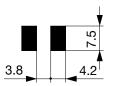
Compliances

The product complies with following Guide Lines

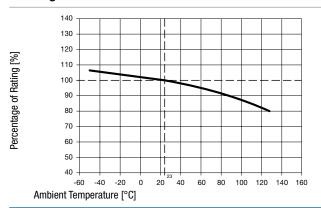
Identification	Details	Initiator	Description
C€	CE declaration of conformity	SCHURTER AG	The CE marking declares that the product complies with the applicable requirements laid down in the harmonisation of Community legislation on its affixing in accordance with EU Regulation 765/2008.
UK CA	UKCA declaration of conformity	SCHURTER AG	The UKCA marking declares that the product complies with the applicable requirements laid down in the British Amendment of Regulation (EC) 765/2008.
RoHS	RoHS	SCHURTER AG	Directive RoHS 2011/65/EU, Amendment (EU) 2015/863
50	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 🖽	Halogen Free	SCHURTER AG	SCHURTER strives to offer our customers halogen free products.
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.

Dimension [mm]





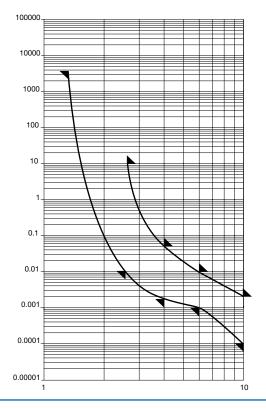
Derating Curves



Pre-Arcing Time

Rated Current In	1.25 x In min.	2.5 x In min.	2.5 x In max.	4.0 x In min.	4.0 x In max.	6.0 x In min.	6.0 x In max.	10.0 x In min.	10.0 x In 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 I²t 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

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



Rated Current [A]	Rated Voltage	Rated Voltage	Breaking	Voltage Drop	Cold Resi-	Melting I ² t	Order Number
	[VAC]	[VDC]	Capacity	1.0 I _n typ.	stance typ.	10.0 I _n typ. D^{V_E}	
				[mV]	$[m\Omega]$	[A ² s] \square	

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

Packaging Unit

acc. IEC 60286-3 Type 2a

10 pcs. in Blister Tape [W: 16mm and P1: 8mm] on Reel [A: 18cm] in ESD Plastic Bag