UHS Fuse 50 - 100A, 32/50 VDC, 8.4 x 9.4 mm



Quick-Acting F

See below:
Approvals and Compliances

Description

- This fuse was specially developed for SELV applications with high rated currents for highest breaking capacity demands. Thanks to its design, the fuses tripping time minimizes excessive temperature dissipation at 2x rated current.

Unique Selling Proposition

- High breaking capacity up to 2000A
- Safe tripping in 10s at twice the rated current
- High range of operating temperature
- Small component height of 4.7 mm

Applications

- Automotive
- Telecom equipment
- Datacenter appliances
- Power tools

Weblinks

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

Technical Data

Rated current	50-100 A
Breaking Capacity	2000 A
Characteristic	Quick-Acting F
Mounting	PCB,SMT
PCB surface terminal temp.	-55 °C to 125 °C
Material: Housing	Polyphthalamid
Material: Terminals	Ni/Sn-Plated Copper Alloy
Unit Weight	0.53 g
Storage Conditions	0 °C to 40 °C, max. 70% r.h.
Product Marking	S, Marking, gR, Lot Code

Soldering Methods	Reflow Soldering Profile
Solderability	245 °C / 3 sec acc. to IEC 60068-2-58
Resistance to Soldering Heat	260 °C / 30 sec acc. to IPC/JEDEC J-STD-020D, Level 1

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: UHS

Approval Logo	Certificates	Certification Body	Description
c UL us	UL Approvals	UL	UR File Number: E531402

Product standards

Product standards that are referenced

Organization	Design	Standard	Description
UL	Designed according to	UL 248-13	Low voltage fuses - Part 14: Supplemental fuses
CSA Group	Designed according to	CSA C22.2 No. 248.13:22	Low voltage fuses - Part 13: Semiconductor fuses

Compliances

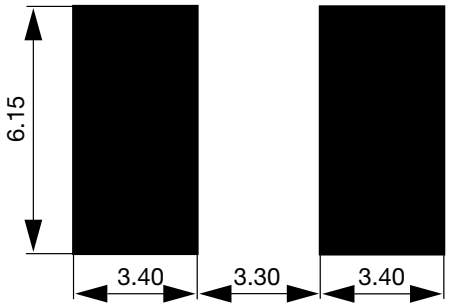
The product complies with following Guide Lines

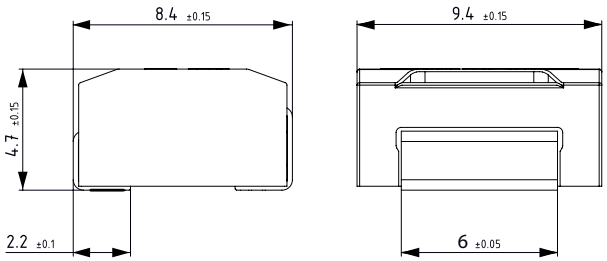
Identification	Details	Initiator	Description
CE	CE declaration of conformity	SCHURTER AG	The CE marking declares that the product complies with the applicable requirements laid down in the harmonisation of Community legislation on its affixing in accordance with EU Regulation 765/2008.
UKCA	UKCA declaration 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
China RoHS	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.
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]

8.4 mm

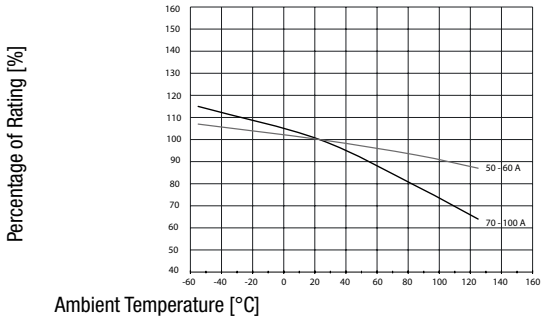
Reflow soldering pads





Derating Curves

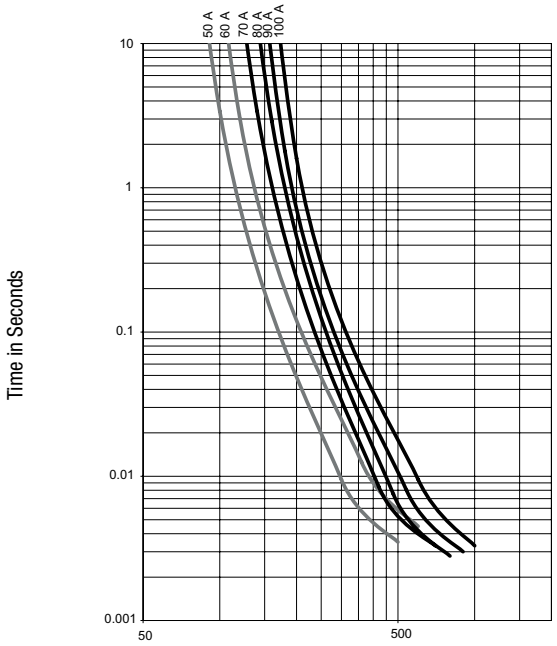
Temperature Derating



Pre-Arcing Time

Rated Current In	1.0 x In min.	2.0 x In max.	10.0 x In min.	10.0 x In max.
50 A - 100 A	4 h	10 s	1 ms	10 ms

Time-Current-Curves



All Variants

Rated Current [A]	Rated Voltage [VDC]	Marking	Breaking Capacity	Voltage Drop 1.0 I_n typ. [mV]	Cold Resistance typ. [mΩ]	Melting I^2t 10.0 I_n typ. [A^2s]	Packaging unit	Order Number
50	32	UHS 50A	1)	110	1.82	800	100	3-140-167
50	32	UHS 50A	1)	110	1.82	800	1000	3-140-168
60	32	UHS 60A	1)	115	1.5	1400	100	3-140-169
60	32	UHS 60A	1)	115	1.5	1400	1000	3-140-170
70	50	UHS 70A	2)	90	1.03	1500	100	3-140-171
70	50	UHS 70A	2)	90	1.03	1500	1000	3-140-172
80	50	UHS 80A	2)	95	0.88	1700	100	3-140-173
80	50	UHS 80A	2)	95	0.88	1700	1000	3-140-174
90	50	UHS 90A	2)	105	0.77	2300	100	3-140-175
90	50	UHS 90A	2)	105	0.77	2300	1000	3-140-176
100	50	UHS 100A	2)	110	0.71	3200	100	3-140-177
100	50	UHS 100A	2)	110	0.71	3200	1000	3-140-178

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

Breaking Capacity:

1) 1000 A @ 32 VDC, 1300 A @ 24 VDC, 1500 A @ 16 VDC

2) 600 A @ 50 VDC, 1000 A @ 32 VDC, 1300 A @ 24 VDC , 2000 A @ 16 VDC

All measurements are carried out on a test board according to IEC 60127, track width 22 mm, Cu layer 210 µm.

Packaging Unit
acc. IEC 60286-3 Type 2a

1000 pcs. in tape [W: 24mm and P1: 12mm] on reel [A: 33cm]
100 pcs. in tape [W: 24mm and P1: 16mm] in ESD plastic bag

09.08.2023

The specifications, descriptions and illustrations indicated in this document are based on current information. All content is subject to modifications and amendments. Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability and test each product selected for their own applications.