

UHP SMD Fuse 100 A, 80 VDC, 11.4 x 10.2 mm

new



80VDC · 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 3000 A
- Safe tripping in 15 s at twice the rated current
- High range of operating temperature


Applications

- Automotive
- Datacenter appliances
- Telecom equipment
- Power tools

Weblinks

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

Technical Data

Rated Voltage	80VDC
Rated current	50 - 100A
Breaking Capacity	3000A
Characteristic	Quick-Acting F
Mounting	PCB,SMT
Admissible Ambient Temp.	-55 °C to 125 °C
Material: Housing	Polyphthalamid
Material: Terminals	Ni/Sn-Plated Copper Alloy
Unit Weight	1.2 g
Storage Conditions	0 °C to 40 °C, max. 70% r.h.
Storage Capability	max. 1 year, at 25 °C in original packaging
Product Marking	 , Marking, gR, Lot Code

Soldering Methods	Reflow Soldering Profile
Solderability	J-STD-002, Method B1 & Method D
Resistance to Soldering Heat	MIL-STD-202 Method 210, Condition K
Resistance to Soldering Heat	260 °C / 30 sec acc. to IPC/JEDEC J-STD-020D, Level 1
Flammability	UL 94V-0
Operational Life	MIL-STD-202, Method 108
Load Humidity Test	MIL-STD-202, Method 103
Vibration, High Frequency	MIL-STD-202, Method 204
Mechanical Shock	MIL-STD-202, Method 213 Condition C
Resistance to Solvents	MIL-STD-202, Method 215
Temperature Cycling	JESD22-A104
Board Flex	AEC-Q200-005
Terminal Strength	AEC-Q200-006

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: UHP

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








Product standards

Product standards that are referenced

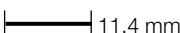
Organization	Design	Standard	Description
	Designed according to	UL 248-13	Low voltage fuses - Part 13: Semiconductor fuses
	Designed according to	CSA C22.2 No. 248.13:22	Low voltage fuses - Part 13: Semiconductor fuses

Compliances

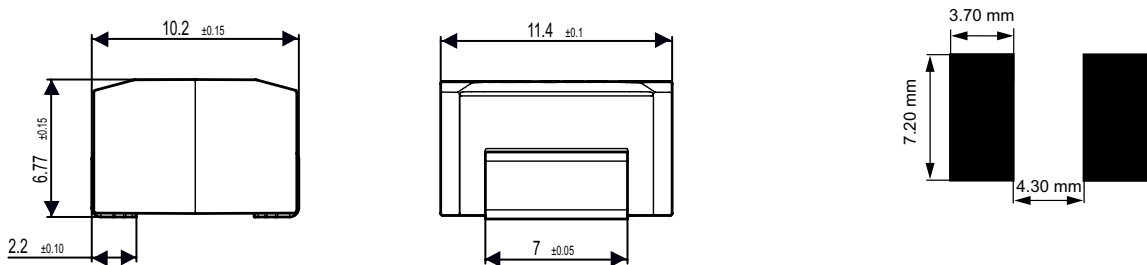
The product complies with following Guide Lines

Identification	Details	Initiator	Description
	CE 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 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	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.
	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.

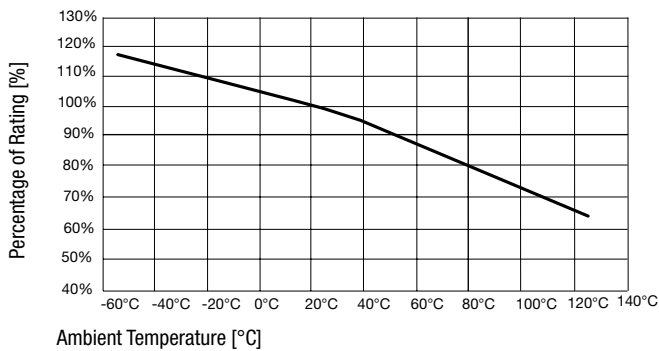
Dimension [mm]

 11.4 mm

Soldering pads



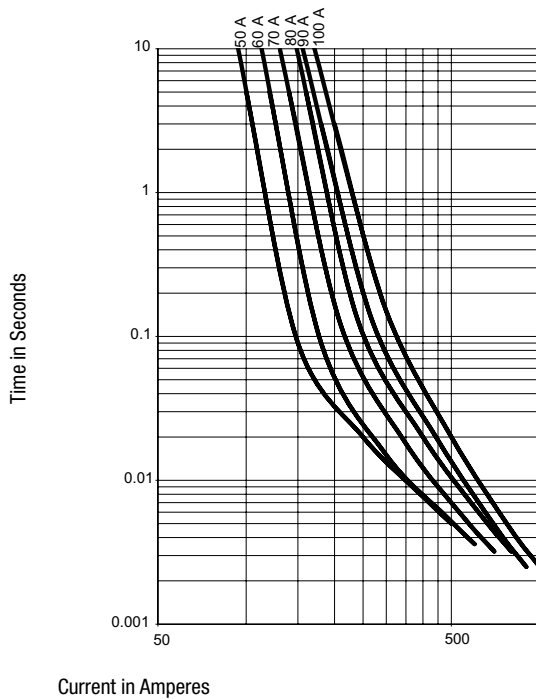
Derating Curves



Pre-Arcing Time

Rated Current I_n	1.0 x I_n min.	2.0 x I_n max.	10.0 x I_n min.	10.0 x I_n max.
50 A - 100 A	4 h	15 s	1 ms	10 ms

Time-Current-Curves



Variants

Rated Current [A]	Rated Voltage [VDC]	Marking	Breaking Capacity	Voltage Drop 1.0 I_n typ. [mV]	Cold Resistance typ. [$m\Omega$]	Melting I^2t 10.0 I_n typ. [A^2s]	Packaging unit [PCS]	Order Number
50	80	UHP 50A	1)	90	1.44	1250	100	3-139-122
50	80	UHP 50A	1)	90	1.44	1250	500	3-139-123
60	80	UHP 60A	1)	90	1.18	1350	100	3-139-124
60	80	UHP 60A	1)	90	1.18	1350	500	3-139-125
70	80	UHP 70A	1)	95	1.01	1600	100	3-139-126
70	80	UHP 70A	1)	95	1.01	1600	500	3-139-127
80	80	UHP 80A	1)	97	0.89	2100	100	3-139-128
80	80	UHP 80A	1)	97	0.89	2100	500	3-139-129
90	80	UHP 90A	1)	105	0.81	2300	100	3-139-130
90	80	UHP 90A	1)	105	0.81	2300	500	3-139-131
100	80	UHP 100A	1)	110	0.74	2800	100	3-139-132
100	80	UHP 100A	1)	110	0.74	2800	500	3-139-133

Availability for all products can be searched real-time: <https://www.schurter.com/en/info-center/support-tools/stock-check-distributors>

1) 2000 A @ 80 VDC, 3000 A @ 63 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

100 pcs. in tape [W: 24mm and P1: 16mm] in ESD plastic bag

500 pcs. in tape [W: 24mm and P1: 16mm] on reel [A: 33cm]