

Solid State, Thin Film, SMD 1206, Super-Quick-Acting FF, 125 VAC, 125 VDC, 150 °C



UL 248-14 · 125 VAC · 125 VDC · Super-Quick-Acting FF

See below:

Approvals and Compliances

Description

- Max. ambient temperature 150 °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

- Hermetically sealed and robust construction
- High breaking capacity up to 300 A
- Smallest size

Applications

- Applications where high reliability and availability is required
- 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 Voltage	32 - 125 VAC, 125 VDC
Rated current	0.2 - 5 A
Breaking Capacity	50 A
Characteristic	Super-Quick-Acting FF
Mounting	PCB, SMT
Admissible Ambient Temp.	-55 °C to 150 °C
Climatic Category	55/150/21 acc. to IEC 60068-1
Material: Housing	Ceramic
Material: Terminals	Tin-Plated Nickel
Unit Weight	0.03 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	none

Soldering Methods	Reflow, Wave 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/JEDEC J-STD-020D, Level 1
Moisture Sensitivity Level	MSL 1, J-STD-020
Flammability	min. UL 94V-1 (acc. to EIA/IS-722, Test 4.12)
Moisture Sensitivity Level	MIL-STD-202, Method 106 (50 cycles in a temp./mister chamber)
Thermal Shock	MIL-STD-202, Method 107D (200 air-to-air cycles from -55 to +125 °C)
Operational Time	MIL-STD-202, Method 108 1000h @ 0.60 x In @ 70 °C
Load Humidity Test	MIL-STD-202, Method 103 0.1 x In @ 0.85 r.H. @ 85 °C
ESD classification	JEDEC JS-001-2014, Class 1B (500 to < 1000 V)
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.

Approvals

The approval mark is used by the testing authorities to certify compliance with the safety requirements placed on electronic products.
Approval Reference Type: MGA

Approval Logo	Certificates	Certification Body	Description
	UL Approvals	UL	UR File Number: E41599

Product standards

Product standards that are referenced

Organization	Design	Standard	Description
	Designed according to	UL 248-14	Low voltage fuses - Part 14: Supplemental 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
	Suitable 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
	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.
	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.

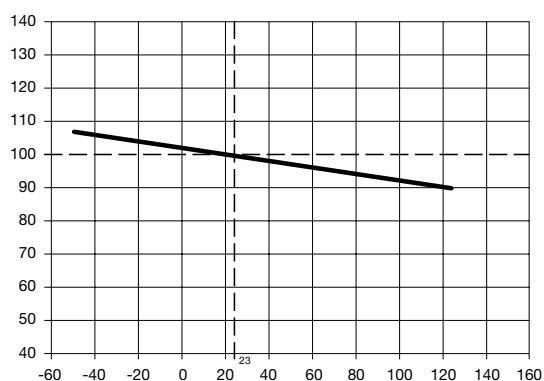
Dimension [mm]

 3.2 mm

Reflow soldering pads



Derating Curves

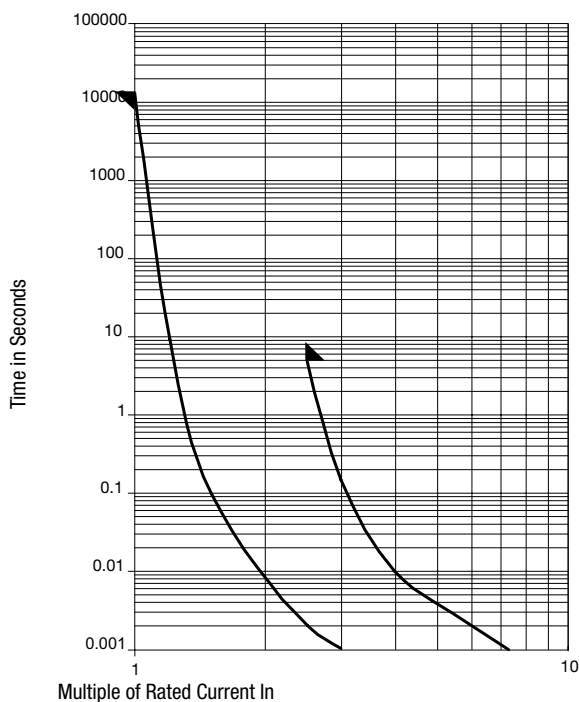


Pre-Arcing Time

Rated Current I_n 1.0 x I_n min. 2.5 x I_n max.

0.2 A - 5 A 4 h 5 s

Time-Current-Curves



Variants

Rated Current [A]	Rated Voltage [VAC]	Rated Voltage [VDC]	Breaking Capacity	Voltage Drop 1.0 I_n typ. [mV]	Cold Resistance typ. [$m\Omega$]	Melting I^2t 4.0 I_n typ. [A^2s]	 US	Order Number
0.2	125	125	1)	258	1020	0.0008	●	3410.0021.01
0.2	125	125	1)	258	1020	0.0008	●	3410.0021.02
0.2	125	125	1)	258	1020	0.0008	●	3410.0021.03
0.2	125	125	1)	258	1020	0.0008	●	3410.0021.04
0.25	125	125	1)	250	800	0.0009	●	3410.0022.01
0.25	125	125	1)	250	800	0.0009	●	3410.0022.02
0.25	125	125	1)	250	800	0.0009	●	3410.0022.03
0.25	125	125	1)	250	800	0.0009	●	3410.0022.04

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 4.0 I _n typ. [A ² s]		Order Number
0.375	125	125	1)	165	361	0.0037	●	3410.0025.01
0.375	125	125	1)	165	361	0.0037	●	3410.0025.02
0.375	125	125	1)	165	361	0.0037	●	3410.0025.03
0.375	125	125	1)	165	361	0.0037	●	3410.0025.04
0.5	125	125	1)	150	247	0.0042	●	3410.0027.01
0.5	125	125	1)	150	247	0.0042	●	3410.0027.02
0.5	125	125	1)	150	247	0.0042	●	3410.0027.03
0.5	125	125	1)	150	247	0.0042	●	3410.0027.04
0.75	125	125	1)	100	115	0.01	●	3410.0029.01
0.75	125	125	1)	100	115	0.01	●	3410.0029.02
0.75	125	125	1)	100	115	0.01	●	3410.0029.03
0.75	125	125	1)	100	115	0.01	●	3410.0029.04
1	125	125	1)	124	98.7	0.035	●	3410.0031.01
1	125	125	1)	124	98.7	0.035	●	3410.0031.02
1	125	125	1)	124	98.7	0.035	●	3410.0031.03
1	125	125	1)	124	98.7	0.035	●	3410.0031.04
1.5	125	125	1)	105	56	0.064	●	3410.0033.01
1.5	125	125	1)	105	56	0.064	●	3410.0033.02
1.5	125	125	1)	105	56	0.064	●	3410.0033.03
1.5	125	125	1)	105	56	0.064	●	3410.0033.04
2	125	125	1)	98	39	0.089	●	3410.0035.01
2	125	125	1)	98	39	0.089	●	3410.0035.02
2	125	125	1)	98	39	0.089	●	3410.0035.03
2	125	125	1)	98	39	0.089	●	3410.0035.04
2.5	125	125	1)	90	29.5	0.15	●	3410.0036.01
2.5	125	125	1)	90	29.5	0.15	●	3410.0036.02
2.5	125	125	1)	90	29.5	0.15	●	3410.0036.03
2.5	125	125	1)	90	29.5	0.15	●	3410.0036.04
3	125	125	1)	88	24.1	0.18	●	3410.0037.01
3	125	125	1)	88	24.1	0.18	●	3410.0037.02
3	125	125	1)	88	24.1	0.18	●	3410.0037.03
3	125	125	1)	88	24.1	0.18	●	3410.0037.04
4	63	125	2)	83.5	17	0.23	●	3410.0240.01
4	63	125	2)	83.5	17	0.23	●	3410.0240.02
4	63	125	2)	83.5	17	0.23	●	3410.0240.03
4	63	125	2)	83.5	17	0.23	●	3410.0240.04
5	32	125	3)	90	13.5	0.45	●	3410.0141.01
5	32	125	3)	90	13.5	0.45	●	3410.0141.02
5	32	125	3)	90	13.5	0.45	●	3410.0141.03
5	32	125	3)	90	13.5	0.45	●	3410.0141.04

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

1) 50 A @ 125 VAC / 300 A @ 125 VDC

2) 50 A @ 63 VAC / 50 A @ 125 VDC / 300 A @ 32 VDC

3) 50 A @ 32 VAC / 50 A @ 125 VDC / 300 A @ 32 VDC

Packaging Unit

acc. IEC 60286-3 Type 2a

.xx = .01

.xx = .02

.xx = .03

.xx = .04

100 pcs. in tape in ESD-plastic bag

750 pcs. in tape [W: 8mm and P1: 4mm] on reel [A: 18cm]

3000 pcs. in tape [W: 8mm and P1: 4mm] on reel [A: 33cm]

10000 pcs. in tape [W: 8mm and P1: 4mm] on reel [A: 33cm]