

Surface Mount Fuse, 3.2 x 1.6 mm, Super-Quick-Acting FF, 32 VAC, 63 VDC



Exemplary part photo depending on part no.

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

See below:

[Approvals and Compliances](#)

### Description

- UL characteristic
- Low melting I<sup>2</sup>t-values, fast interruption
- Impermeable to potting compound

### Applications

- Secondary Protection DC and AC
- Circuits without inrush
- Semiconductor protection

### References

[Packaging Details](#)

### Weblinks

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

### Technical Data

Rated Voltage	32 - 125 VAC, 63 - 125 VDC
Rated current	0.375 - 4 A
Breaking Capacity	50 A
Characteristic	Super-Quick-Acting FF
Mounting	PCB, SMT
Admissible Ambient Air Temp.	-55 °C to 90 °C
Climatic Category	55/090/21 acc. to IEC 60068-1
Material: Housing	Epoxyd Glass, UL 94V-0
Material: Terminals	Copper, Ni/Au-plated
Unit Weight	0.006 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	Letter (see variants)

Soldering Methods	Reflow <a href="#">Soldering Profile</a>
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 Resistance Test	MIL-STD-202, Method 106E (50 cycles in a temp./mister chamber)
Terminal Strength	MIL-STD-202, Method 211A (Deflection of board 1 mm for 1 minute)
Case Resistance	acc. to EIA/IS-722, Test 4.7 >100 MΩ (between leads and body)
Resistance to Solvents	MIL-STD-202, Method 215A
Flammability	min. UL 94V-1 (acc. to EIA/IS-722, Test 4.12)

### Approvals and Compliances

Detailed information on product approvals, code requirements, usage instructions and detailed test conditions can be looked up in [Details about Approvals](#)

### Approvals

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

Approval Reference Type: USF 1206

Approval Logo	Certificates	Certification Body	Description
	<a href="#">UL Approvals</a>	UL	UL 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: 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 60950	IEC 60950-1 includes the basic requirements for the safety of information technology equipment.

## Compliances

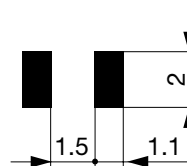
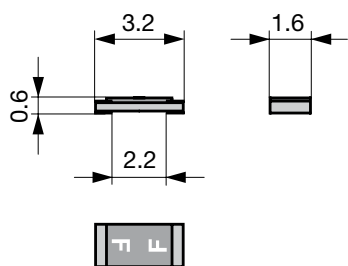
The product complies with following Guide Lines

Identification	Details	Initiator	Description
	<a href="#">CE declaration of conformity</a>	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	EU Directive RoHS 2011/65/EU
	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]

 3.2 mm

Reflow soldering pads

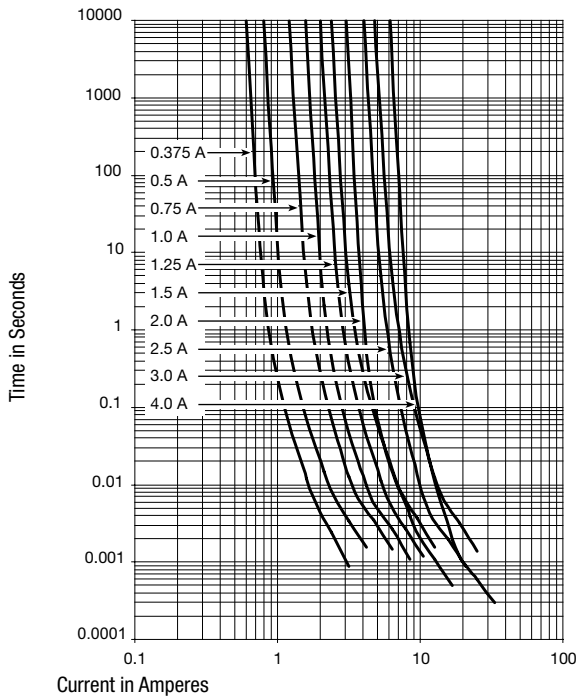


## Pre-Arcing Time


Rated Current  $I_n$     1.0 x  $I_n$  min.    2.0 x  $I_n$  max.


0.375 A - 4 A	4 h	60 s
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Time-Current-Curves



All Variants

Rated Current [A]	Rated Voltage [VAC]	Rated Voltage [VDC]	Marking	Breaking Capacity	Voltage Drop 1.0 In typ. [mV]	Cold Resistance typ. [mΩ]	Melting I <sup>2</sup> t 8.0 In typ. [A <sup>2</sup> s]		Order Number
0.375	125	125	E	1)	125	315	0.01	●	3413.0112.11
0.375	125	125	E	1)	125	315	0.01	●	3413.0112.22
0.375	125	125	E	1)	125	315	0.01	●	3413.0112.24
0.375	125	125	E	1)	125	315	0.01	●	3413.0112.26
0.5	125	125	F	1)	100	190	0.02	●	3413.0113.11
0.5	125	125	F	1)	100	190	0.02	●	3413.0113.22
0.5	125	125	F	1)	100	190	0.02	●	3413.0113.24
0.5	125	125	F	1)	100	190	0.02	●	3413.0113.26
0.75	32	63	G	2)	100	120	0.05	●	3413.0114.11
0.75	32	63	G	2)	100	120	0.05	●	3413.0114.22
0.75	32	63	G	2)	100	120	0.05	●	3413.0114.24
0.75	32	63	G	2)	100	120	0.05	●	3413.0114.26
1	32	63	H	2)	100	85	0.07	●	3413.0115.11
1	32	63	H	2)	100	85	0.07	●	3413.0115.22
1	32	63	H	2)	100	85	0.07	●	3413.0115.24
1	32	63	H	2)	100	85	0.07	●	3413.0115.26
1.25	32	63	J	2)	80	50	0.12	●	3413.0116.11
1.25	32	63	J	2)	80	50	0.12	●	3413.0116.22
1.25	32	63	J	2)	80	50	0.12	●	3413.0116.24
1.25	32	63	J	2)	80	50	0.12	●	3413.0116.26
1.5	32	63	K	2)	80	45	0.24	●	3413.0117.11
1.5	32	63	K	2)	80	45	0.24	●	3413.0117.22
1.5	32	63	K	2)	80	45	0.24	●	3413.0117.24
1.5	32	63	K	2)	80	45	0.24	●	3413.0117.26
2	32	63	N	2)	70	30	0.13	●	3413.0119.11
2	32	63	N	2)	70	30	0.13	●	3413.0119.22
2	32	63	N	2)	70	30	0.13	●	3413.0119.24
2	32	63	N	2)	70	30	0.13	●	3413.0119.26

Rated Current [A]	Rated Voltage [VAC]	Rated Voltage [VDC]	Marking	Breaking Capacity	Voltage Drop 1.0 In typ. [mV]	Cold Resistance typ. [mΩ]	Melting I <sup>2</sup> t 8.0 In typ. [A <sup>2</sup> s]		Order Number
2.5	32	63	0	2)	70	25	0.35	●	3413.0120.11
2.5	32	63	0	2)	70	25	0.35	●	3413.0120.22
2.5	32	63	0	2)	70	25	0.35	●	3413.0120.24
2.5	32	63	0	2)	70	25	0.35	●	3413.0120.26
3	32	63	P	2)	70	20	0.8	●	3413.0121.11
3	32	63	P	2)	70	20	0.8	●	3413.0121.22
3	32	63	P	2)	70	20	0.8	●	3413.0121.24
3	32	63	P	2)	70	20	0.8	●	3413.0121.26
4	32	63	S	2)	60	13	0.3	●	3413.0123.11
4	32	63	S	2)	60	13	0.3	●	3413.0123.22
4	32	63	S	2)	60	13	0.3	●	3413.0123.24
4	32	63	S	2)	60	13	0.3	●	3413.0123.26

 Most Popular.

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

1) UL: 50 A @ 125 VAC/DC

2) UL: 50 A @ 32 VAC / 50 A @ 63 VDC

1) + 2) Additional internal testing: 150 A @ 24 VAC/DC, 400 A @ 12 VDC, 600 A @ 9 VDC

### Packaging Unit

- .xx = .11 Blister Tape of 100 pcs. in Plastic Bag
- .xx = .22 Blister Tape 18 cm Reel (1000 pcs.)
- .xx = .24 Blister Tape 25.4 cm Reel (5000 pcs.)
- .xx = .26 Blister Tape 33 cm Reel (15000 pcs.)