

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



Description

- UL characteristic
- Low melting I²t-values, fast interruption
- Impermeable to potting compound

Standards

- UL 248-14
- CSA C22.2 no. 248.14

Approvals

- Approval Reference Type: USF 1206
- UL File Number: E41599

Applications

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

References

[Packaging Details](#)

Weblinks

[pdf datasheet](#), [html-datasheet](#), [General Product Information](#), [Packaging details](#), [Approvals](#), [CE declaration of conformity](#), [RoHS](#), [CHINA-RoHS](#), [REACH](#), [Distributor-Stock-Check](#), [Detailed request for product](#)

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) |

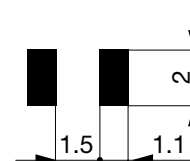
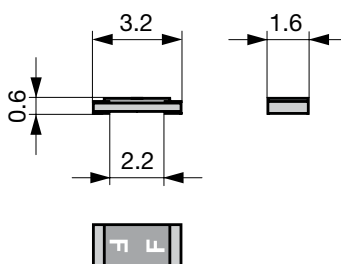
| | |
|------------------------------|---|
| Soldering Methods | Reflow Soldering Profile |
| Solderability | 245 °C / 3 sec acc. to IEC 60068-2-58, Test Td |
| Resistance to Soldering Heat | 260 +0/-5 °C / 30 sec acc. to IPC/JEDEC J-STD-020D, Level 1 |
| Moisture Resistance Test | MIL-STD-202, Method 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) |

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

Dimension

3.2 mm

Reflow soldering pads

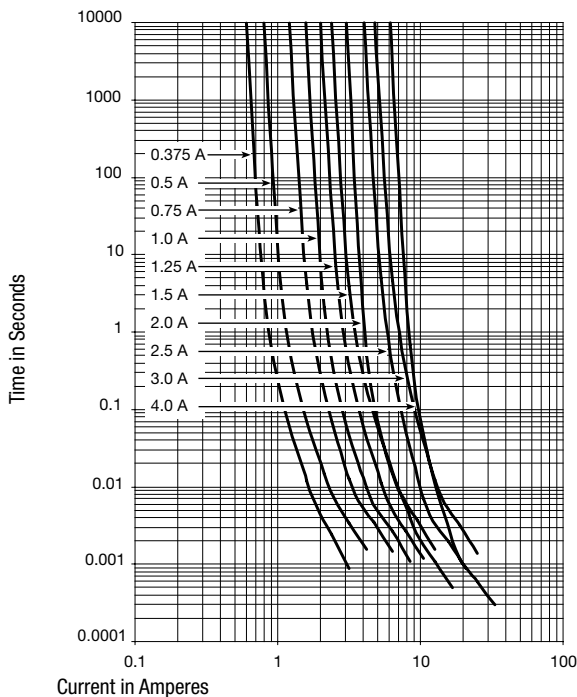


Pre-Arcing Time


Rated Current In 1.0 x In min. 2.0 x In max.


| | | |
|---------------|-----|------|
| 0.375 A - 4 A | 4 h | 60 s |
|---------------|-----|------|


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 ² t 8.0 In typ. [A ² 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 |

| 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 ² t 8.0 In typ. [A ² s] |  | Order Number |
|-------------------|---------------------|---------------------|---------|-------------------|-------------------------------|---------------------------|---|---|--------------|
| 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 |
| 2.5 | 32 | 63 | O | 2) | 70 | 25 | 0.35 | ● | 3413.0120.11 |
| 2.5 | 32 | 63 | O | 2) | 70 | 25 | 0.35 | ● | 3413.0120.22 |
| 2.5 | 32 | 63 | O | 2) | 70 | 25 | 0.35 | ● | 3413.0120.24 |
| 2.5 | 32 | 63 | O | 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:<http://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.)