

Surface Mount Fuse, 3 x 10.1 mm, Quick-Acting F, 250 VAC, 125 VDC

new



IEC 60127-4 · 250VAC · 125VDC · Quick-Acting F



Description

- Directly solderable on printed circuit boards
- Low melting I²t-values, fast interruption
- Compact design
- UMF (universal modular fuse)

Standards

- IEC 60127-4/2
- UL 248-14
- CSA C22.2 no. 248.14

Approvals

- Approval Reference Type: UMF 250
- VDE Certificate Number: 40027880
- UL File Number: E41599

Applications

- Primary protection on SMD PCBs
- Secondary protection on SMD PCBs
- Medical equipment
- Power supplies
- Lighting

References

[Packaging Details](#)
Fuse Kit [Fuse Kit UMF 250 / UMK 250](#)

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](#)

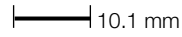
Technical Data

| | |
|------------------------------|---|
| Rated Voltage | 250VAC, 125VDC |
| Rated current | 0.5 - 10A |
| Breaking Capacity | 100A - 200A |
| Characteristic | Quick-Acting F |
| Mounting | PCB,SMT |
| Admissible Ambient Air Temp. | -55 °C to 125 °C |
| Climatic Category | 55/125/21 acc. to IEC 60068-1 |
| Material: Housing | Ceramic |
| Material: Terminals | Tin-Plated Copper Alloy |
| Unit Weight | 0.23 g |
| Storage Conditions | 0 °C to 40 °C, max. 70% r.h. |
| Product Marking | , Rated current, Rated Voltage, Characteristic, Breaking Capacity |

| | |
|------------------------------|--|
| Soldering Methods | Reflow, Wave Soldering Profile |
| Solderability | 245 °C / 3sec acc. to IEC 60068-2-58, Test Td |
| Resistance to Soldering Heat | 260 °C / 10sec acc. to IEC 60068-2-58, Test Td |
| Life Test | 1000h @ 0.60 x I _n @ 70°C (acc. to EIA/IS-722, Test 4.4.1) |
| Moisture Resistance Test | MIL-STD-202, Method 106E (acc. to EIA/IS-722, Test 4.4.3) |
| Case Resistance | >100 MΩ (between leads and body) acc. to EIA/IS-722, Test 4.7 |
| Mechanical Shock | MIL-STD-202, Method 213B (Shock 50g, half sine wave, 11 ms) |
| Resistance to Solvents | MIL-STD-202, Method 215A |
| Flammability | min. UL 94V-1 (acc. to EIA/IS-722, Test 4.12) |

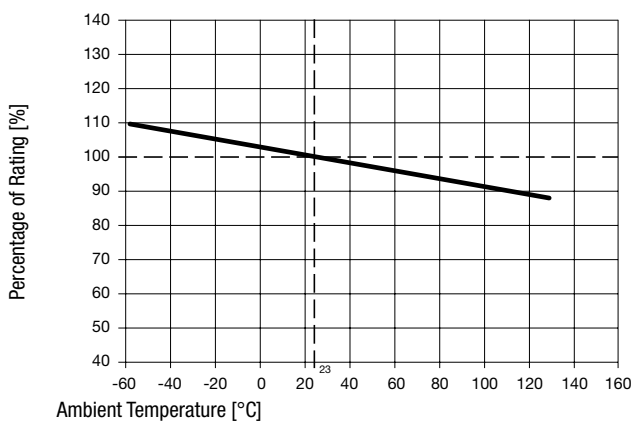
Detailed information on product approvals, code requirements, usage instructions and detailed test conditions can be looked up in [General Product Information](#)

Dimension



Soldering pads

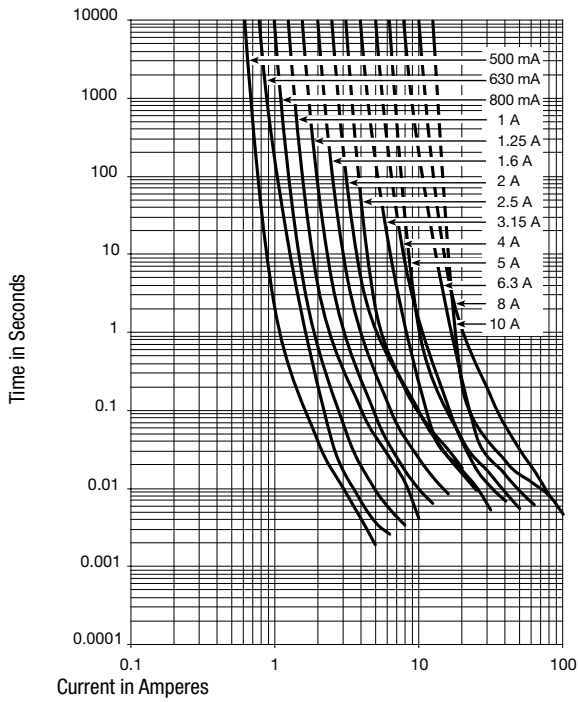
Derating Curves




Pre-Arcing Time


| Rated Current I_n | 1.0 x I_n min. | 1.25 x I_n min. | 2.0 x I_n max. | 10.0 x I_n min. | 10.0 x I_n max. |
|---------------------|------------------|-------------------|------------------|-------------------|-------------------|
| 0.5 A - 8 A | - | 60 min | 120 s | 1 ms | 10 ms |
| 10 A | 4 h | - | 120 s | 1 ms | 10 ms |

Time-Current-Curves



All Variants

| Rated Current [A] | Rated Voltage [VAC] | Rated Voltage [VDC] | Breaking Capacity | Voltage Drop 1.0 In max. [mV] | Voltage Drop 1.0 Intyp. [mV] | Power Dissipation 1.25 I _n typ. [mW] | Melting I ² t 10.0 Intyp. [A ² s] |  | Order Number |
|-------------------|---------------------|---------------------|-------------------|-------------------------------|------------------------------|---|---|---|--------------|
| 0.5 | 250 | 125 | 1) | 600 | 430 | 500 | 0.052 | ● ● | 3405.0163.11 |
| 0.5 | 250 | 125 | 1) | 600 | 430 | 500 | 0.052 | ● ● | 3405.0163.24 |
| 0.63 | 250 | 125 | 1) | 500 | 350 | 500 | 0.092 | ● ● | 3405.0164.11 |
| 0.63 | 250 | 125 | 1) | 500 | 350 | 500 | 0.092 | ● ● | 3405.0164.24 |
| 0.8 | 250 | 125 | 1) | 400 | 300 | 500 | 0.21 | ● ● | 3405.0165.11 |
| 0.8 | 250 | 125 | 1) | 400 | 300 | 500 | 0.21 | ● ● | 3405.0165.24 |
| 1 | 250 | 125 | 1) | 300 | 250 | 500 | 0.4 | ● ● | 3405.0166.11 |
| 1 | 250 | 125 | 1) | 300 | 250 | 500 | 0.4 | ● ● | 3405.0166.24 |
| 1.25 | 250 | 125 | 2) | 300 | 220 | 1000 | 1 | ● ● | 3405.0167.11 |
| 1.25 | 250 | 125 | 2) | 300 | 220 | 1000 | 1 | ● ● | 3405.0167.24 |
| 1.6 | 250 | 125 | 2) | 300 | 190 | 1000 | 2.1 | ● ● | 3405.0168.11 |
| 1.6 | 250 | 125 | 2) | 300 | 190 | 1000 | 2.1 | ● ● | 3405.0168.24 |
| 2 | 250 | 125 | 2) | 300 | 200 | 1000 | 3.26 | ● ● | 3405.0169.11 |
| 2 | 250 | 125 | 2) | 300 | 200 | 1000 | 3.26 | ● ● | 3405.0169.24 |
| 2.5 | 250 | 125 | 2) | 300 | 160 | 1200 | 4.8 | ● ● | 3405.0170.11 |
| 2.5 | 250 | 125 | 2) | 300 | 160 | 1200 | 4.8 | ● ● | 3405.0170.24 |
| 3.15 | 250 | 125 | 2) | 300 | 100 | 1500 | 5.17 | ● ● | 3405.0171.11 |
| 3.15 | 250 | 125 | 2) | 300 | 100 | 1500 | 5.17 | ● ● | 3405.0171.24 |
| 4 | 250 | 125 | 2) | 300 | 100 | 2000 | 9.4 | ● ● | 3405.0172.11 |
| 4 | 250 | 125 | 2) | 300 | 100 | 2000 | 9.4 | ● ● | 3405.0172.24 |
| 5 | 250 | 125 | 2) | 300 | 110 | 2500 | 13.57 | ● ● | 3405.0173.11 |
| 5 | 250 | 125 | 2) | 300 | 110 | 2500 | 13.57 | ● ● | 3405.0173.24 |
| 6.3 | 250 | 125 | 2) | 300 | 80 | 3000 | 23.85 | ● ● | 3405.0174.11 |
| 6.3 | 250 | 125 | 2) | 300 | 80 | 3000 | 23.85 | ● ● | 3405.0174.24 |
| 8 | 250 | 125 | 2) | 220 | 80 | 3000 | 52.58 | ● ● | 3405.0175.11 |
| 8 | 250 | 125 | 2) | 220 | 80 | 3000 | 52.58 | ● ● | 3405.0175.24 |
| 10 | 250 | 125 | 3) | 220 | 150 | 3500 | 45.8 | ● | 3405.0176.11 |
| 10 | 250 | 125 | 3) | 220 | 150 | 3500 | 45.8 | ● | 3405.0176.24 |

| Rated Current [A] | Rated Voltage [VAC] | Rated Voltage [VDC] | Breaking Capacity | Voltage Drop 1.0 I _n max. [mV] | Voltage Drop 1.0 I _n typ. [mV] | Power Dissipation 1.25 I _n typ. [mW] | Melting I ² t 10.0 Intyp. [A ² s] |  | Order Number |
|---|---------------------|---------------------|-------------------|---|---|---|---|---|--------------|
| <p>■ Most Popular.</p> <p>Availability for all products can be searched real-time:http://www.schurter.com/en/Stock-Check/Stock-Check-SCHURTER</p> <p>1) IEC: 100 A @ 250 VAC, p.f. ≥ 0.95 / 100 A @ 125 VDC, resistive</p> <p>1) UL: 200 A @ 250 VAC, p.f. ≥ 0.95 / 200 A @ 125 VDC, resistive</p> <p>2) IEC: 100 A @ 250 VAC, p.f. ≥ 0.95 / 100 A @ 125 VDC, resistive</p> <p>2) UL: 100 A @ 250 VAC, p.f. ≥ 0.95 / 100 A @ 125 VDC, resistive</p> <p>3) UL: 100 A @ 250 VAC, p.f. ≥ 0.95 / 100 A @ 125 VDC, resistive</p> | | | | | | | | | |
| <p>Packaging Unit</p> <p>.xx = .11 Plastic Bag (100 pcs.)</p> <p>.xx = .24 Blister Tape 33 cm Reel (2000 pcs.)</p> | | | | | | | | | |