

Surface Mount Fuse with Clip, 11.1 x 4.2 mm, Time-Lag T, UMZ 250 = UMT 250 (Au) + UMC 250

new



IEC 60127-4 · 250VAC · 125VDC · Time-Lag T



Description

- VDE/UL Approvals UMT 250, UMT 250 (Au), UMC 250 , see variants
- High breaking capacity of 200 A @ 250 VAC (IEC)
- UL approval for 0.08 A - 4 A 277 VAC and 250 VDC

Standards

- IEC 60127-4/6
- UL 248-14 / 4248-1
- CSA C22.2 no. 248.14 / no. 4248.1

Approvals

- VDE Certificate Number: 40013121
- UL File Number: E39328

Applications

- Primary protection on SMD PCBs
- Industrial electronic


References

[Packaging Details](#)

Weblinks

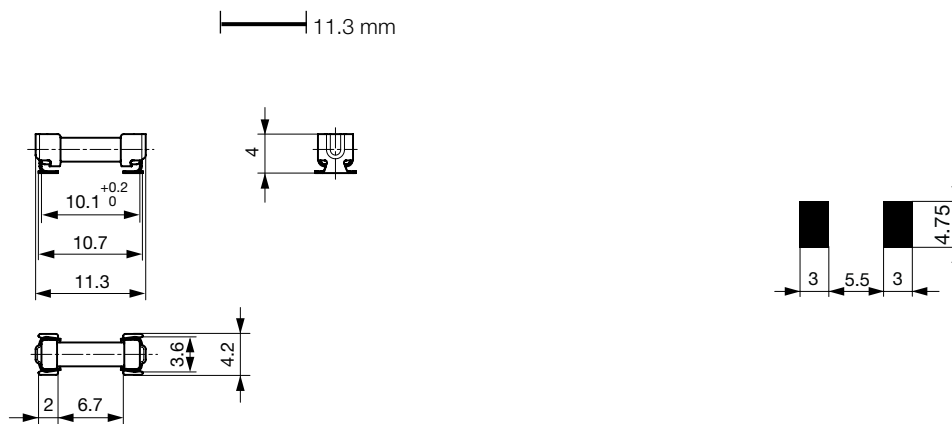
[pdf-datasheet](#), [html-datasheet](#), [General Product Information](#), [Approvals](#), [CE declaration of conformity](#), [RoHS](#), [CHINA-RoHS](#), [REACH](#), [e-Shop](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#), [Detailed request for product](#)

Technical Data

| | |
|------------------------------|---|
| Rated Voltage | 250VAC, 125VDC |
| Rated current | 0.08 - 4A |
| Breaking Capacity | 200A |
| Characteristic | Time-Lag T |
| Mounting | PCB,SMT |
| Admissible Ambient Air Temp. | -40 °C to 85 °C |
| Climatic Category | 40/085/21 acc. to IEC 60068-1 |
| Material: Housing | Ceramic |
| Material: Terminals | Gold-Plated Copper Alloy |
| Storage Conditions | 0 °C to 60 °C, max. 70% r.h. |
| Product Marking |  Current, Rated voltage, Characteristic, Breaking Capacity |

| | |
|------------------------------|--|
| Soldering Methods | Reflow |
| Solderability | 245 °C / 3 sec acc. to IEC 60068-2-58 |
| Resistance to Soldering Heat | 260 °C / 10 sec acc. to IEC 60068-2-58 |
| Life Test | MIL-STD-202, Method 108A (1000h @ 0.42*In @ 70°C) |
| 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) |
| Mechanical Shock | MIL-STD-202, Method 213B (Shock 50g, half sine wave, 11 ms) |
| Resistance to Solvents | Cleaning with common solvents |
| Flammability | min. UL 94V-1 (acc. to EIA/IS-722, Test 4.12) |

Dimension



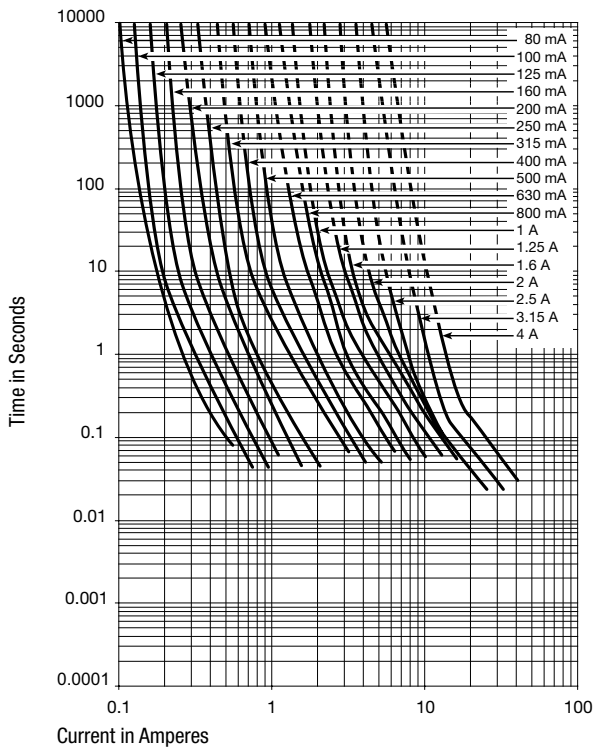
Soldering pads

Pre-Arcing Time

Rated Current In 1.25 x In min. 2.0 x In max. 10.0 x In min. 10.0 x In max.

| | | | | |
|----------------|--------|-------|-------|--------|
| 0.08 A - 4.0 A | 60 min | 120 s | 10 ms | 100 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 In typ. [mV] | Power Dissipation 1.25 In max [mW] | Melting I ² t 10.0 Intyp. [A ² s] | Order Number |
|-------------------|---------------------|---------------------|-------------------|-------------------------------|-------------------------------|------------------------------------|---|--------------|
| 0.08 | 250 | 125 | 2) | - | 1030 | - | 0.022 | 3404.2405.xx |
| 0.1 | 250 | 125 | 1) | 1300 | 850 | 200 | 0.04 | 3404.2406.xx |
| 0.125 | 250 | 125 | 1) | 1000 | 700 | 200 | 0.055 | 3404.2407.xx |
| 0.16 | 250 | 125 | 1) | 1000 | 540 | 240 | 0.057 | 3404.2408.xx |
| 0.2 | 250 | 125 | 1) | 1000 | 460 | 500 | 0.092 | 3404.2409.xx |
| 0.25 | 250 | 125 | 1) | 800 | 395 | 500 | 0.2 | 3404.2410.xx |
| 0.315 | 250 | 125 | 1) | 750 | 344 | 500 | 0.27 | 3404.2411.xx |
| 0.4 | 250 | 125 | 1) | 700 | 320 | 500 | 0.4 | 3404.2412.xx |
| 0.5 | 250 | 125 | 1) | 600 | 264 | 500 | 0.54 | 3404.2413.xx |
| 0.63 | 250 | 125 | 1) | 500 | 216 | 500 | 1.1 | 3404.2414.xx |
| 0.8 | 250 | 125 | 1) | 400 | 174 | 500 | 1.4 | 3404.2415.xx |
| 1 | 250 | 125 | 1) | 300 | 174 | 500 | 2.8 | 3404.2416.xx |
| 1.25 | 250 | 125 | 1) | 300 | 140 | 1000 | 4.5 | 3404.2417.xx |
| 1.6 | 250 | 125 | 1) | 300 | 130 | 1000 | 6.9 | 3404.2418.xx |
| 2 | 250 | 125 | 1) | 300 | 103 | 1000 | 7.3 | 3404.2419.xx |
| 2.5 | 250 | 125 | 1) | 300 | 90 | 1200 | 7.5 | 3404.2420.xx |
| 3.15 | 250 | 125 | 1) | 300 | 95 | 1500 | 14 | 3404.2421.xx |
| 4 | 250 | 125 | 1) | 300 | 83 | 2000 | 26 | 3404.2422.xx |

Most Popular:

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

- 1) IEC: 200 A @ 250 VAC, p.f. ≥ 0.95 / 100 A @ 125 VDC
- 1) UL: 200 A @ 277 VAC / 100 A @ 125 VDC / 35 A @ 250 VDC / 200 A @ 63 VAC/DC
- 2) UL: 200 A @ 277 VAC / 100 A @ 125 VDC / 35 A @ 250 VDC / 200 A @ 63 VAC/DC

Approval Overview

UMT 250 -> Fuse with tin-plated caps, Approval Status: VDE, UL LISTED, cURus, Free of CCC, PSE JET, KTL

UMT 250 (Au) -> Fuse with gold-plated caps, Approval Status: VDE Mark and cURus

UMC 250 -> Clip, Approval Status: VDE UG Mark and cURus

| Rated Current [A] | Rated Voltage [VAC] | Rated Voltage [VDC] | Breaking Capacity | Voltage Drop 1.0 In max. [mV] | Voltage Drop 1.0 In typ. [mV] | Power Dissipation 1.25 In max [mW] | Melting I ² t 10.0 Intyp. [A ² s] | Order Number |
|-------------------|---------------------|---------------------|-------------------|-------------------------------|-------------------------------|------------------------------------|---|--------------|
|-------------------|---------------------|---------------------|-------------------|-------------------------------|-------------------------------|------------------------------------|---|--------------|

UMZ 250 = UMT 250 (Au) + UMC 250

There is no approval existing for the combination fuse and clip UMZ 250, but the fuse and the clip are fully approved independently at VDE/UL. See details above.

In the reflow soldering process, the fuse must have gold-plated caps, otherwise fuse and clip would be soldered together. For fuse replacement in the field, a standard UMT 250 fuse with tin-plated caps can be used. This is not allowed for the 80 mA version. This must be replaced with an original UMZ with gold caps.

It is not allowed to replace higher rated current than 4 A in the clip.

| Packaging Unit | |
|----------------|-------------------------------------|
| .xx = .11 | Plastic Bag (100 pcs.) |
| .xx = .22 | Blister Tape 33 cm Reel (1000 pcs.) |