# MSU 250

Subminiature Fuse, 8.5 mm, Time-Lag T, Telecom, 250 VAC, 63 VDC





IEC 60127-3 · 250 VAC · Time-Lag T

## Standards
- IEC 60127-3/4
- UL 248-14
- CSA C22.2 no. 248.14
- Telcordia GR-1089
- UL 60950 / IEC 60950
- ITU-T K.20 and K.21
- TIA-968-A

## Approvals
- VDE Certificate Number: 40013529
- UL File Number: E41599
- CSA File Number: 51172

## Applications
- xDSL and ADSL linecards and modems

## References
Packaging Details
Corresponding Fuseholder FMS (250V)
Last order date: 31.12.2016
We recommend for new applications the type MST 250
MST 250 is fully compatible to MSU 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

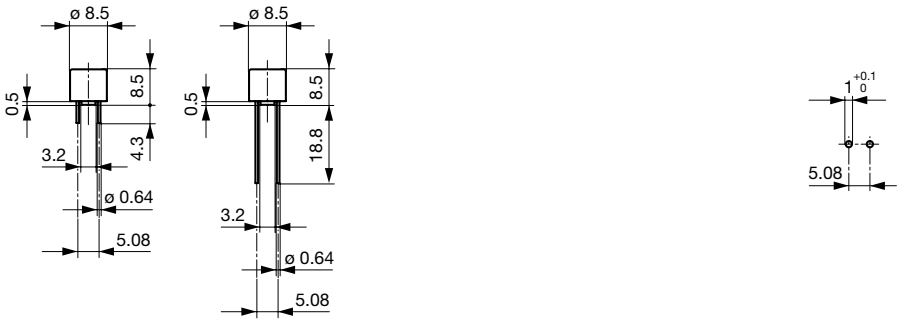
## Technical Data

| | |
|---|---|
| Rated Voltage | 250 VAC, 63 VDC |
| Rated current | 0.25 - 3.15 A |
| Breaking Capacity | 35 A - 50 A |
| Characteristic | Time-Lag T |
| Mounting | PCB,THT |
| Admissible Ambient Air Temp. | -40 °C to 85 °C |
| Climatic Category | 40/085/21 acc. to IEC 60068-1 |
| Material: Housing | Thermoplastic, UL 94V-0 |
| Material: Terminals | Tin-Plated Copper |
| Unit Weight | 0.53 g |
| Storage Conditions | 0 °C to 40 °C, max. 70% r.h. |
| Product Marking | , Type, Rated current, Rated Voltage, Characteristic, Approvals |

| | |
|---|---|
| Soldering Methods | Wave, Iron<br>Soldering Profile |
| Solderability | 235 °C / 2 sec acc. to IEC 60068-2-20, Test Ta |
| Resistance to Soldering Heat | 260 °C / 10 sec acc. to IEC 60068-2-20, Test Tb |
| Current Carrying Capacity | acc. to EIA/IS-722, Test 4.3.3 |
| Moisture Resistance Test | (acc. to EIA/IS-722, Test 4.4.3) |
| Terminal Strength | Tensile load min. 9 N<br>(acc. to EIA/IS-722, Test 4.5.1) |
| Case Resistance | acc. to EIA/IS-722, Test 4.7<br>>100 MΩ (between leeds and body) |
| Mechanical Shock | (acc. to EIA/IS-722, Test 4.9) |
| Vibration, High Frequency | Shock 20 gn, 20 min, 10-2 kHz, 12 cyc.<br>(acc. to EIA/IS-722, Test 4.10) |
| Resistance to Solvents | MIL-STD-202, Method 215A |
| Flammability | UL 94V-0<br>(acc. to EIA/IS-722, Test 4.12) |

## Dimension

8.5 mm

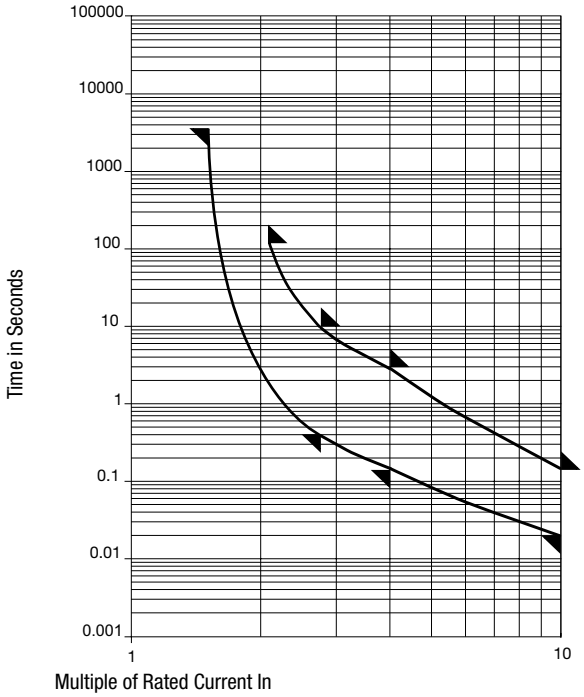



Drilling diagram

## Pre-Arcing Time

| Rated Current In | 1.5 x In min. | 2.1 x In max. | 2.75 x In min. | 2.75 x In max. | 4.0 x In min. | 4.0 x In max. | 10.0 x In min. | 10.0 x In max. |
|---|---|---|---|---|---|---|---|---|
| 0.25 A - 3.15 A | 60 min | 120 s | 400 ms | 10 s | 150 ms | 3 s | 20 ms | 150 ms |

## [Kennlinien]




## All Variants

| Rated Current [A] | Rated Voltage [VAC] | Voltage Drop 1.0 In typ. [mV] | Power Dissipation 1.5 $I_n$ typ. [mW] | Melting $I^2t$ 10.0 Intyp. [$A^2s$] | GR-1089-CORE [A] | UL60950 | ITU - Lightning Surge [A] | ITU - Power Induc- | ITU - Power Contact [A] | S | L | T | Order Number |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.25 | 250 | 120 | 80 | 0.6 | > 14.0 | | 25.3 | ● | 35.0 | ● | | | 2040.0609 |
| 0.315 | 250 | 120 | 100 | 0.8 | > 14.0 | | 29.2 | ● | 35.0 | ● | | | 2040.0610 |
| 0.4 | 250 | 110 | 100 | 1.1 | > 14.0 | | 39.5 | ● | 35.0 | ● | | | 2040.0611 |
| 0.5 | 250 | 100 | 100 | 2.5 | > 14.0 | | 57 | ● | 35.0 | ● | | | 2040.0612 |
| 0.63 | 250 | 90 | 100 | 4 | > 14.0 | | 67 | ● | 35.0 | ● | | | 2040.0613 |
| 0.8 | 250 | 80 | 200 | 8 | > 14.0 | ● | 67 | ● | 35.0 | ● | | | 2040.0614 |
| 1 | 250 | 70 | 200 | 12 | > 14.0 | ● | 67 | ● | 35.0 | ● | | | 2040.0615 |
| 1.25 | 250 | 70 | 300 | 15 | > 14.0 | ● | 67 | ● | 35.0 | ● | | | 2040.0616 |
| 1.6 | 250 | 60 | 300 | 30 | > 14.0 | ● | 67 | ● | 50.0 | ● | | | 2040.0617 |
| 2 | 250 | 60 | 300 | 34 | > 14.0 | ● | 67 | ● | 50.0 | ● | | | 2040.0618 |
| 2.5 | 250 | 50 | 400 | 55 | > 14.0 | ● | 67 | ● | 50.0 | ● | | | 2040.0619 |
| 3.15 | 250 | 50 | 500 | 76 | > 14.0 | ● | 67 | ● | 50.0 | ● | | | 2040.0620 |
| 0.25 | 250 | 120 | 80 | 0.6 | > 14.0 | | 25.3 | ● | 35.0 | | ● | | 2040.0709 |
| 0.315 | 250 | 120 | 100 | 0.8 | > 14.0 | | 29.2 | ● | 35.0 | | ● | | 2040.0710 |
| 0.4 | 250 | 110 | 100 | 1.1 | > 14.0 | | 39.5 | ● | 35.0 | | ● | | 2040.0711 |
| 0.5 | 250 | 100 | 100 | 2.5 | > 14.0 | | 57 | ● | 35.0 | | ● | | 2040.0712 |
| 0.63 | 250 | 90 | 100 | 4 | > 14.0 | | 67 | ● | 35.0 | | ● | | 2040.0713 |
| 0.8 | 250 | 80 | 200 | 8 | > 14.0 | ● | 67 | ● | 35.0 | | ● | | 2040.0714 |
| 1 | 250 | 70 | 200 | 12 | > 14.0 | ● | 67 | ● | 35.0 | | ● | | 2040.0715 |
| 1.25 | 250 | 70 | 300 | 15 | > 14.0 | ● | 67 | ● | 35.0 | | ● | | 2040.0716 |
| 1.6 | 250 | 60 | 300 | 30 | > 14.0 | ● | 67 | ● | 50.0 | | ● | | 2040.0717 |
| 2 | 250 | 60 | 300 | 34 | > 14.0 | ● | 67 | ● | 50.0 | | ● | | 2040.0718 |

| Rated Current [A] | Rated Voltage [VAC] | Voltage Drop 1.0 In typ. [mV] | Power Dissipation 1.5 $I_n$ typ. [mW] | Melting $I^2t$ 10.0 Intyp. [$A^2s$] | GR-1089-CORE [A] | UL60950 | ITU - Lightning Surge [A] | ITU - Power Induc- | ITU - Power Contact [A] | S | L | T | Order Number |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.5 | 250 | 50 | 400 | 55 | > 14.0 | ● | 67 | ● | 50.0 | | ● | | 2040.0719 |
| 3.15 | 250 | 50 | 500 | 76 | > 14.0 | ● | 67 | ● | 50.0 | | ● | | 2040.0720 |
| 0.25 | 250 | 120 | 80 | 0.6 | > 14.0 | | 25.3 | ● | 35.0 | | | ● | 2040.0809 |
| 0.315 | 250 | 120 | 100 | 0.8 | > 14.0 | | 29.2 | ● | 35.0 | | | ● | 2040.0810 |
| 0.4 | 250 | 110 | 100 | 1.1 | > 14.0 | | 39.5 | ● | 35.0 | | | ● | 2040.0811 |
| 0.5 | 250 | 100 | 100 | 2.5 | > 14.0 | | 57 | ● | 35.0 | | | ● | 2040.0812 |
| 0.63 | 250 | 90 | 100 | 4 | > 14.0 | | 67 | ● | 35.0 | | | ● | 2040.0813 |
| 0.8 | 250 | 80 | 200 | 8 | > 14.0 | ● | 67 | ● | 35.0 | | | ● | 2040.0814 |
| 1 | 250 | 70 | 200 | 12 | > 14.0 | ● | 67 | ● | 35.0 | | | ● | 2040.0815 |
| 1.25 | 250 | 70 | 300 | 15 | > 14.0 | ● | 67 | ● | 35.0 | | | ● | 2040.0816 |
| 1.6 | 250 | 60 | 300 | 30 | > 14.0 | ● | 67 | ● | 50.0 | | | ● | 2040.0817 |
| 2 | 250 | 60 | 300 | 34 | > 14.0 | ● | 67 | ● | 50.0 | | | ● | 2040.0818 |
| 2.5 | 250 | 50 | 400 | 55 | > 14.0 | ● | 67 | ● | 50.0 | | | ● | 2040.0819 |
| 3.15 | 250 | 50 | 500 | 76 | > 14.0 | ● | 67 | ● | 50.0 | | | ● | 2040.0820 |

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

IEC: 35 A @ 250 VAC

UL: 35 A @ 250 VAC / 50 A @ 63 VDC

**Packaging Unit**

S = Plastic Bag (100 pcs.)
L = Bulk (100 pcs.)
T = Taped 36 cm Reel (750 pcs.)

19.11.2016

The specifications, descriptions and illustrations indicated in this document are based on current information. All content is subject to modifications and amendments. Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability and test each product selected for their own applications.